

Ministry of National Education, Sports, and Youth

Center for Educational Research and Development

World Bank

General Education Project

Component 3 Quality

Sub-component 3.3

Examination and Evaluation

Revised Project Documents

Examination and Evaluation

Prepared by David Carroll, Consultant, Nov. 1998
Revised and modified by George Zarour, Consultant, Ap. 1999

April, 1999

EXAMINATION

MODIFIED PROJECT DOCUMENT ON EXAMINATIONS AND EVALUATION

Attached is the modified Examinations Project Document. It is based mainly on David Carroll's consultation reports of December 1998 which are available in PEG's Office in Sin El-Fil. The Examination Reform Project Document by David Carroll includes many activities [3.1(1, 2.2 and 4)] that fall largely under the prerogatives of CERD. The same applies to sections under 3.2 Proposed Scenario. These -- along with relevant sections in Carroll's "A Brief Survey" which in Annex 4 proposes a mission statement, staffing, functions/duties of professional staff, and initial work plan -- can be used as starting points or inputs as CERD conceives and develops its proposed Evaluation Unit and develops its mandate and strategy.

For external study visits as well as international consultants, efforts should be made to secure support from selected countries with expertise in the respective field. Any savings in project costs that are made through such bilateral or international assistance can potentially be diverted to other activities in consultation with the World Bank Task Manager.

1. BACKGROUND

1.1 The Public Examinations

There are currently two main public examinations in general education -- the Intermediate Certificate (Brevet) at the end of Class 9, and the Baccalaureat at the end of Class 12. In addition, there is a "Preparatory" (Tamheedi) examination, held at the end of Class 11, which has to be sat in order to enter the 12th Class Baccalaureat, but need not be passed. Grades on the "preparatory" examination are added to the general total for the Baccalaureat. It has been recently (March 1999) reported that this preparatory examination has been cancelled. Both examinations have a clear selection function. A pass in the Brevet is required for admission to secondary education. A pass in the Baccalaureat is required for admission to higher education; but universities make their own selection from amongst the qualified candidates.

Responsibility for the official examinations is divided between the Directorate General of National Education (DGNE) within the Ministry of National Education, Youth and Sports (MENJS) which is responsible for the actual examination process, and CERD which is responsible for setting the system and developing models. An Examination Commission chaired by the General Director of National Education is responsible for paper setting and scoring. Subject committees are established to set individual papers. The Department of Examinations within MENJS is responsible for the administration of the examinations. The administrative system of the official examinations is described in Annex 1 of D. Carroll's "A BRIEF SURVEY".

Overall, security and administration appear to be good. Paper setting and printing take place during the 24 hours preceding the actual sitting of the examination (although setters freely acknowledge that they in fact assemble the paper from previously prepared questions). During that time, no member of the committee responsible for setting the paper leaves the room set aside for that purpose within the Ministry buildings. Typesetting is done by computer, and duplication by photocopier.

This system is dependable and visibly secure; but it is doubtful whether it can be adapted to the requirements of constructing skills-based examination papers to detailed specifications. Such papers require a large amount of resource material, which will make the task of typesetting and printing much more difficult and time-consuming. Assembling such a paper is also a much more complex task, which would be very difficult to complete within the course of one evening.

Each subject committee also produces a marking scheme. Each paper is scored independently by two markers. Where there is a discrepancy of one or two marks (out of twenty), the higher mark is allowed. If the discrepancy exceeds two marks, the auditor for the subject determines the score for the paper. The identity of the candidates is concealed from the markers. Mark sheets are produced manually. Registration data are entered in the CERD computer, which is used to print mark sheet blanks with candidate

data. The certificates are printed by computer, but the computer is not otherwise used. This system works effectively with simple examination scores. It could be adapted to include school-based assessment (i.e., by entering the scores with or after the registration data, and printing them with the other information on the mark sheets); it would not be able to provide the information to monitor the standard of schools' marking adequately.

There are pervasive concerns about the content of the examinations, and the availability of guidance materials. The specifications currently used do not define the content or skills to be assessed. The content of the papers is in effect therefore left to the setting or subject committee. There are reports that examination papers tend to emphasize lower-level cognitive skills, and also concentrate on a relatively small part of the total syllabus. Since instructional practices are to an extent geared to the requirements of the official examinations, the character of the official examinations will tend to affect the work not only of the examination classes (9th and 12th) themselves, but also to a diminishing extent of the preceding classes.

1.1 School Assessment

All student evaluation, other than official examinations, is the responsibility of the schools. Under the Ministry's "internal system" (al-nizam al-dakhili), schools are required to hold tests at least monthly in each subject, and to hold half-yearly and end-of-year examinations. The "internal system" also lays down how the marks for the three types of test will be averaged to produce a final score for the student, and the criteria for failure, and hence repetition. The "internal system" does not however define the content of the tests and examinations. The school is responsible for this, following the instructional materials.

1.2 Implications of the New Curricula

Public examinations and school assessment need to evolve to be aligned with the requirements of the new curricula and teaching/learning methodologies. The first cohort of students will sit for the official examinations based on the new curricula in 2001. There is general acceptance that significant changes in the content and format of the examination papers will be needed, but models for these have still to be developed.

The ad hoc Evaluation Committee at CERD was busy in the development of new techniques and materials for school assessment during 1998. A periodic report form has been developed, allowing teachers to record progress during the entire grade, against the major competencies and their major constituent elements. This will facilitate the process of determining what remedial attention is required, and indeed whether it should be whole-class or limited to some students. This new system of evaluation involves a radical change of approach for teachers, who are not accustomed to monitoring students' progress against specific objectives. Teachers and administrators need lots of training and assistance for the system to work smoothly. Where promotion decisions are required, the council of teachers will use a summary form, the school evaluation record, in which the teachers report against the competencies only.

In addition to setting the strategy for the development of the national system of assessment, and preparing the specifications and models, CERD should monitor the quality of the actual examinations, and the extent to which they follow the models and are within the capacities of the students. This will require an annual review of the official examinations, consisting of a content analysis of the question papers, a question analysis of a sample of answer books, and an analysis of the overall statistical properties of the examination. The outcome of the review, and recommendations for the following year's papers, should be reported to the Examination Commission headed by the Director General of National Education in time to influence subsequent examinations.

With respect to aligning the new official examinations to the new curricula, a strong foundation has been laid for one aspect of the required reform of formal examinations through the development of grids of competencies and capacities. The next step will be the introduction of new types of questions in the formal examinations to assess the new skills in the new curricula. This needs to be done in the final examinations in 2001, to parallel the introduction of new curricula and textbooks in the examination classes. The current competencies can be adapted to the needs of summative assessment. This will involve developing broader "abilities", each subsuming a number of the competencies used in schools' evaluation.

Detailed examination specification grids will be required to ensure better-balanced coverage of the curriculum objectives in future examinations. Specification documents, however, will not be enough in themselves. Teachers and question setters need guidance documents, to ensure that they interpret the specifications appropriately. An example of such a guidance document is given in Annex 2 of David Carroll's report: Examination and Evaluation -- A Brief Survey. They will also need training in setting the new types of questions. This training should concentrate on developing skills, and take place by the summer of 2000. An outline of a training program of this kind is given in Annex 3 of D. Carroll's report cited above.

In order to support introduction of new questions, CERD will need to prepare:

- New specification documents outlining the abilities to be assessed, and how they relate to the curriculum objectives;
- Exemplar questions assessing the various abilities;
- Teacher's guides to setting questions to assess the various abilities; and
- Training materials in question setting.

The Evaluation Project Document stresses the need of securing qualified staff within (or under contract with) CERD to take the responsibility of developing and assuring quality of the official examinations. An Evaluation Unit is being proposed to develop new systems and models for student assessment among other functions. Similarly, capacity needs to be built in DGNE for developing the official examinations and aligning them with the requirements of the new curricula. In addition, the Ministry's Department of Examinations will need upgrading to cope with the new examination papers and the introduction of school-based assessment. This may involve new procedures for setting

and printing papers, and new system for capturing data and monitoring the relationship between the school's assessments and the official examination results. As innovations are piloted, their implications for the Department of Examinations should be reviewed, and appropriate measures taken to assure development of the necessary administrative capacity. MENJS has embarked on an ambitious program of reform of curriculum, instructional materials and teaching methodology. New curricula, textbooks and in-service training programs for teachers are being introduced. The first sets of textbooks have been introduced in 1998-99 in the schools, and the remainder will be introduced progressively over the two academic years 1999-2001.

Unless there is reform of the public examinations, the delivery of the curriculum will continue to be traditional, and the reform will be severely handicapped. A long-term reform strategy is needed, to ensure that the system of student evaluation not only reflects and supports the immediate objectives of the reform, but also continues to promote constructive change. New types of examination questions better reflecting the new curriculum objectives need to be developed urgently, so that when the first students to be taught according to the new curriculum reach the terminal examination stage in 2001, they are assessed according to the principles of the reform. Thereafter, it is important to develop new approaches to assessment that will promote further development of teaching methods consistent with the underlying philosophy of the new curriculum.

Responsibility within MENJS for student evaluation is divided. The CERD is responsible for setting the system, and producing specifications and models. The DGEN is responsible for implementation. Subject Committees set examination papers under the overall leadership of DGNE Examination Commission chaired by the Director-General. The MENJS Department of Examinations is responsible for examination administration, marking and results processing.

It is generally accepted that there is a need to build institutional capacity in student evaluation, for both development and implementation. Strengthening implementation capacity is relatively straightforward. At present, however, there is no consensus about how, or where, development capacity should be built. This may be contingent in part to decisions related to the proposed reorganization of MENJS.

2. OBJECTIVES

The primary goal of the Sub-Component is to develop stable capacity for design and delivery of high-quality student assessment appropriate to national educational goals.

The specific objectives of this Sub-Component are to build capacity to:

- 2.1 prepare long-term strategic plans for the development of the official examinations, to enable them to respond to new imperatives;
- 2.2 apply the new specifications and exemplars for the official examinations, to ensure that they reflect changes in the curriculum goals; and
- 2.3 administer the official examinations in accordance with the new demands placed on

the system by examination reform.

3. ACTIVITIES

3.1 Official Examinations- The current DGEN Examinations Commission will become the coordinating agency for individual subject teams. It is proposed that a representative of the Department of Examinations and one member of each subject team will sit on the Examinations Commission. Key members of the Commission will participate in a study tour to investigate examination reform strategies internationally, after which the Commission will prepare a draft strategic plan for setting exam papers, and orienting the Examination Subject Committees in specification design and question setting.

The specific activities to develop and introduce new question types are:

- 3.1.1 Develop descriptions of abilities and exemplar questions from curricula, new examination specifications and model examination papers by March 2000.
- 3.1.2 Undertake consultation with stakeholders and modify draft materials in May-June 2000.
- 3.1.3 Develop and pilot guidance materials on question setting and question paper assembly, and information materials for schools, teachers and general public in July-September 2000.
- 3.1.4 Train question setters and coordinators in September-October 2000.
- 3.1.5 Disseminate guidance and information materials in November 2000.

CERD's Evaluation Unit will prepare draft examination specifications and model examination papers for both Brevet and Baccalaureat examinations. These will incorporate questions designed to assess understanding and the higher abilities taught through the new curricula. They will take into consideration the viewpoints of stakeholders about their introduction, and pilot the new types of examination questions in schools, in cooperation with DGNE. They will also develop and pilot guidance materials on question setting and question paper assembly, and information materials for general public. It is advocated that this work be completed by September 2000. The teams will orient a pool of DGNE question setters and pedagogical counselors who, in turn, will orient/train subject coordinators from the secondary schools in question setting and revision, and question paper assembly into detailed specifications. The coordinators will then train the subject teachers in the schools. The first examinations containing the new question types will be taken in the summer of 2001, to synchronize with the first cohort to complete the new curriculum in each stage. In addition to training in Lebanon and overseas, the project will support this activity with international consultancy and national consultancy as needed.

3.2 Administration of Official Examinations- The project will assist the MENJS Department of Official Examinations to strengthen the administration of the

official examinations, in order to enable it to respond to the demands of changes in the model of examination. During the 1999-2000 academic year, a two-week international study tour will orient five senior staff of MENJS Department of Official Examinations and/or DGNE Examinations Commission to developments in examination administration internationally. The MENJS Department of Official Examinations (with CERD's collaboration) will then identify the required changes in paper setting and printing to support introduction of new question types requiring resource material and graphics. These will be introduced beginning with the 2001 examinations, and the project will provide DTP equipment and training in DTP to support this, as well as training in question setting and review and question paper assembly for potential members of MENJS question paper setting teams. If developments in the system justify, the project will support upgrading of the examination administration system by providing OMR scanner equipment, further computer equipment, and training in OMR/ICR applications during the academic year 2001-02. This equipment can also be used in SBA activities.

The specific project activities in developing examination administration are:

- 3.2.1 Orient key staff of MENJS Department of Official Examinations and DGNE Examinations Commission to developments in examination administration (2 week international study visits(s) for 5 persons. (Year 2000)
- 3.2.2 MENJS Department of Official Examinations (with collaboration from CERD) studies required changes in paper setting and printing to support introduction of new question types. Introduce new type of Desk Top Publishing (DTP) and graphics. Project provides DTP equipment and training. (Years 2000-2001)
- 3.2.3 MENJS Department of Official Examinations studies with (CERD collaboration) changes in examination administration required for local moderation and national monitoring. Examination administration system is upgraded accordingly. Project provides OMR scanner equipment, computer equipment and training. (Years 2001-2002)

3.3 School-Based Assessment (SBA)- This topic constitutes a significant aspect of the reports of David Carroll. It develops into the introduction of school-based assessment in Brevet by the year 2003. Assisting schools and teachers in evaluating their students in the primary grades where facilitated promotion was introduced in the reform is an understandable target. Other objectives need to be clarified and agreed by all concerned and pursued accordingly. Developing models for assessment of skills and competencies based on the objectives of the new curricula, and disseminating these to teachers should be weighed among the priorities. On the other hand, devising methods to introduce school-based assessment as part of official examinations is a policy question that needs to be addressed and agreed prior to commitment and investment. As the system evolves, it may be prudent to explore ways of assessing at schools skills related to science laboratory, technology, computer and communication.

CERD's ad hoc Evaluation Committee has developed a system of formative assessment,

particularly intended for use in the first six classes, and was engaged in identifying the main competencies for all subjects and classes, as a basis for new assessment models. Thus it is advocated that, at this stage, the activities related to SBA be restricted to continuation, refinement and expansion of the activities carried out by the ad hoc Evaluation Committee at CERD during 1998. These include delineation of major competencies and their major constituent elements for each subject and class. They also include development of grids of competencies and capacities as a basis for developing models or exemplars of questions for the new curricula and examinations -- school-based and official. It is advisable that the activity be carried out jointly by subject teams linked to both DGEN Examinations Commission and CERD's proposed Evaluation Unit.

4. INPUTS

4.1 Consultancy (person days)

Year	2000	2001	2002	2003	2004
National	100	100	60	40	40
International	40	40	40	20	10

4.2 Overseas Training and Study Visits

No. of Persons	No. of Weeks	Year	Objective
5	3	2000	Orient GDNE Examinations Commission Members to developments in student Evaluation internationally.
5	2	2000	Orient MENJS Examination Administrators To developments in examination administration.
3	12	2000	Train key resource persons from DGEN And CERD in formative classroom assessment.
10	4	2000	Orient Subject Committee members to Specification design and methods of Assessing higher abilities (CERD & DGEN).

4.3 In-Country Training Programs: The number of persons and days of training is a rough estimate and should be specified later according to the emerging plans and needs. Distance learning methods, once functional, can be used in these training programs.

No. of Persons	No. of Days	Year	Objective
105	5	2000	Train subject teams in specification design, identifying abilities, principles of question setting.
30	10	2000	Train subject teams in principles of formative classroom assessment.
200	5	2001	Training for question setters and Coordinators in setting higher abilities questions.
60	5	2001	Train subject teams in school-based Assessment of integrative skills.
6	10	2001	Train key staff of MENJS Department of Official Examinations in DTP.
40	5	2002	Train pilot group of teachers in formative classroom assessment using locally produced materials.
4	10	2002	Train key staff of MENJS Department of Official Examinations in OMR scanner applications.
180	5	2002	Train a pilot group of teachers in School-based assessment of Integrative abilities.
100	5	2002	Train coordinators in formative classroom assessment.
180	5	2003	Train administrators, pedagogical counselors & coordinators in moderating and monitoring school-based assessment.

4.4 Hardware and Software

Hardware and software to be purchased in 2000:

Hardware: 6 high-end personal computers w/modems and network cards
 2 laser printers, 1 wide-carriage dot-matrix printer
 2 flat-bed scanners
 2 mass storage devices (e.g., rewritable CD-ROM drive)

Software: 6 copies - MS Windows 98 (Arabic)
 6 copies - MS Office Professional (Arabic)
 6 copies - Anti-virus software
 1 copy - SPSS PC
 Allowance for specialized software

Hardware to be purchased in 2001:

Hardware: 4 high-end personal computers w/ modems and network cards

1 laser printer

2 OMR scanners

Software: 4 copies - MS Windows 98 (Arabic) or equivalent

4 copies - MS Office Professional (Arabic)

4 copies - Anti-virus software

Allowance for specialized software

4.5 Studies

Responsibility	Year	Objective
CERD	2001	Explore technical options for moderating the content and standards of SBS and prepare outline proposals.
CERD	2001	Explore options for statistical monitoring of schools' assessment standards and prepare outline proposals.

4.6 Local Costs

	2000	2001	2002	2003	2004
Examinations Commission & Evaluation Unit and/or Contractors (p.m.)	30	30	30	30	30
Other staff (p.m.)	6	6	6	6	6
Committees (p.m.)	200	150	100	40	10
Computing and clerical (p.m.)	10	12	14	6	4
Travel Allowances (\$)	2000	2000	2000	2000	2000
Materials (\$)	12000	8000	13000	11000	2000

5. OUTPUTS

Output	Indicators
Examination system reformed to better align it with the goals of the educational reform	Brevet and Baccalaureat question papers in 10 subjects containing at least 20% of higher abilities accepted by the DGEN Examination Commission by 2001.
Examination administration developed to meet the needs of examination reform	Question paper setters for official examinations trained in setting higher abilities questions by 2001. Examination papers printed containing graphics and other resource material by 2001.

	Marks for school-based assessment captured using OMR technology by 2003.
Formative classroom assessment introduced	Use of classroom assessment by teachers in selected subjects attained in at least 50 schools.

6. SCHEDULE: an Indicative Implementation Schedule for Developing Student Evaluation

Year	Developing Public Examinations (DGEN & CERD)	Developing Examination Administration	Supportive Formative Assessment
2000	Re-establish Evaluation Committee (or Evaluation Unit) & Revitalize Exam Commission; orient members. Establish and train subject teams. Develop abilities, exemplar questions, exam specs and model papers. Develop teachers' guides and information materials for general public.	Orient key Department of Official Examinations staff to developments in exam administration. Department of Official Examinations follow up developments in models for public examinations and study changes in paper setting and printing required by introduction of new question types.	Identify and train coordinators and tams in selected subjects for formative assessment. Develop, pilot and revise exemplar assessment materials and remedial activities for units in textbooks.
2001	Train question setters, coordinators. Coordinators train teachers. First new exams, June 2001. Formulate policy and objectives in SBA. Select subjects for SBA piloting. Train subject teams in SBA. Develop and pilot trail SBA materials. Develop draft guidance and	Department of Official Examinations introduces new methods of DTP and graphics to support new papers. Project provides DTP equipment and training.	Develop, pilot and revise exemplar assessment materials and remedial activities of units in textbooks. Develop and draft guidance and training materials.

	training materials in SBA. Study options for moderating SBA and for statistical monitoring of schools' assessment standards.		
2002	Train 180 new teachers and pilot new assessment materials through them. Disseminate approach through subject teams and resource persons. Pilot proposed SBA systems and prepare guidelines for central or local moderation system and quality control guidelines for statistical monitoring. Develop and pilot strategies for responding to anomalies identified.	Department of Official Examinations (DOE) studies changes in exam administration required for local moderation and national monitoring. DOE upgrades examination administration system to support required changes. Project provides OMR scanner equipment, computer equipment and training.	Induct new teachers using draft guides and training materials. Revise and print the materials. Newly-inducted teachers produce and pilot additional exemplar units. Develop and pilot dissemination methodology. Disseminate nationally.
2003	Train administrators, pedagogic counselors, and coordinators in SBA. Undertake national information campaign.		

7. MODALITIES OF EXECUTION

Executing agencies: CERD will be responsible for implementation of those elements of the project that relate to the development of systems and models, and the carrying out of studies, as follows:

- The Evaluation Unit, working through subject committees, will produce assessment specifications, exemplar questions and model examination papers, teachers' guides and training workshop materials.
- The Evaluation Unit, in collaboration with the Research and Statistics Units, will carry out or sub-contract studies of the technical options for moderating and monitoring schools' assessment.
- The MENJS Directorate-General of National Education will be responsible for

implementation, as follows:

- The Examinations Commission will arrange and coordinate the training of question setters, and the development of setting procedures to adapt to the changes in examination content.
- The Department of Official Examinations (DOE) will be responsible for developing the typesetting and printing of the examinations, and also the capturing of marks and results of school-based assessment, if policy is adopted.
- The six Regional Educational Directorates working under guidance of both the DGNE and CERD will be responsible for supporting local in-service training of teachers, and the implementation and local moderation of school-based assessment.

Project coordination: Overall coordination will be carried out through the PMU. The CERD Evaluation Unit will coordinate activities implemented through the CERD, and the MENJS Examinations Commission will coordinate activities implemented through the MENJS.

8. Measures Required for Project Execution

Reference was made in the Evaluation Project Document for the need to establish strong capabilities in CERD in the field of evaluation. Subject sub-committees will also need to be established and trained. In addition, strengthening implementation to meet the new demands of the changes in examination content will require that the GDEN Examinations Commission take an expanded role, becoming active in quality review and professional development. It will also require that the Department of Official Examinations take a development role, as well as an implementing rôle. This will require the department head to coordinate with the CERD over changes in examination structure and content, and establish a committee to plan for and oversee implementation of the required changes in the system of examination administration. The proposed reorganization of MENJS has implications, which will affect how the changes in functions will take place.

9. ESTIMATED COSTS

Cost estimates by category and year for the life of the project (refer to the annex for more details).

Type	2000	2001	2002	2003	2004	Total
National Consultancy	15,000	15,000	9,000	6,000	6,000	51,600
International Consultancy	39,200	39,200	39,200	18,60	11,400	147,600
Overseas Training and Study Visits	117,400	-	-	-	-	117,400
In-Country Training	16,500	27,200	32,000	18,000	-	93,700

Hardware & Software						
Equipment and Material	31,800	21,800	-	-	-	53,600
Studies	-	-	60,000	-	-	60,000
TOTAL	219,900	103,200	140,200	42,600	17,400	523,300

10. INDICATORS

Indicator	Means of Verification
At least 4 members of each CERD subject development team trained in specification design, setting questions to assess higher objectives, and assembling question papers by June 2000.	Project progress reports. Disbursement reports. Training Evaluation reports. Muhafazat reports on local training.
At least 4 members of each CERD subject development team in 4 selected subjects trained in school-based assessment of integrative tasks.	"
Teachers and counselors trained in formative classroom assessment by June 2001.	"
5 senior staff of the MENJS Department of Official Examinations oriented to developments in examination administration by June 2001.	"
10 staff of the MENJS Department of Official Examinations trained in DTP by June 2001.	"
10 staff of the MENJS Department of Official Examinations trained in OMR applications by June 2002.	"
10 MENJS question setters in each of the examined subjects and coordinators trained in question setting and review, and question paper assembly, by August 2000.	"
180 further teachers trained in school-based assessment by September 2001.	"
Coordinators train an indefinite number of teachers in question setting, question paper assembly, school-based assessment of integrative skills and formative classroom assessment, beginning September 2000.	"
60 teachers trained in formative classroom assessment by 2002.	"

10.1 Products

Indicator	Means of Verification
Descriptions of new abilities to be assessed in public examination, exemplar questions, new examination specifications and model examination Papers by March 2000.	Project progress reports. Disbursement reports. External qualitative evaluations. Feedback gathered by Evaluation Unit from local coordinators, teachers, pedagogical counselors, and inspectorate.
Teachers' guides on question setting and question per assembly, and information materials for general public prepared by September 2000, and disseminated.	"
Models for school-based assessment of integrative skills in four subjects by April 2001.	"
Teachers' guides to SBA and training workshop materials by May 2001.	"
New system of paper setting and printing using DTP and graphics by June 2001.	"
Examination administration upgraded to support local moderation and national monitoring using OMR and other computer applications by June 2002.	"
Exemplar formative classroom assessment materials and remedial activities in selected subjects by June 2001.	"
Teachers' guide to formative classroom assessment and training workshop materials by June 2002.	"

11. CONDITIONS, RISKS, ASSUMPTIONS AND SUSTAINABILITY

11.1 Conditions Necessary for Project Implementation

- Government contribution to local costs of activities accepted.
- Increase in staff levels of CERD Department concerned with subject teams, in addition to establishment of Evaluation Unit.

11.2 Risk Analysis

Risk	Rating	Minimization Measure
Resources for local costs of activities are not forthcoming.	Moderate	MENJS to commit contribution to local cost of project; project to include allowance for local costs.
Resources for ongoing activities are not forthcoming after project ends.	Low/Moderate	Recurring finance of examinations is guaranteed. Discuss budget for development at mod-term review.
Excessive use of temporary and part-time expertise limits impact on institution building.	Moderate	Increase no. of CERD permanent staff related to evaluation. Maximize their role in activities and committees.
New examination formats resisted by teachers, students, and parents.	Moderate	Consult stakeholders during development. Information campaign, in-service training.
SBA is not taken seriously by teachers, students, and parents.	Low	Information; monitoring and moderation; in-service training.
New examinations fail to achieve acceptable standards of quality.	Low	Quality review; monitoring and moderation; in-service training.

11.3 Likely Sustainability

New models will have been developed by the CERD, and capacity for implementation within DGEN built. Continued implementation is not problematic, because the recurrent costs of official examinations are paid from the state budget. Once the increased cost of the papers has been accepted into the budget, it will continue to be met.

Development capacity is more problematic. The CERD does not at present have stable capacity in student evaluation. The sub-project is therefore structured both to require as few permanent staff as possible and to encourage strategic thinking, and the preparation and implementation of a long-term development plan for public examinations. However, implementation by ad-hoc committees does not build strong institutional memory, or stable development capacity. Therefore, long-term sustainability of development requires that CERD increase its permanent staff, both by increasing numbers of subject specialist staff within the Départements du Conseil Académique, and by creating an Evaluation Unit linked to them.

EVALUATION

MODIFIED PROJECT DOCUMENT ON THE EVALUATION UNIT

1. BACKGROUND

The General Directorate of National Education (GDNE) has embarked on an ambitious development program to overcome the impact on educational quality of sixteen years of war. New curricula, textbooks and in-service training programs for teachers are being introduced. The first sets of textbooks have been introduced in 1998-99, and the remainder will be introduced progressively over the two academic years 1999-2001.

Within MENJS, the CERD is responsible for setting the strategy for developing education, and preparing new curricula, textbooks training programs and assessment models. The CERD staffing structure suffered during the war. As a result, ad-hoc commissions operating under the CERD umbrella carried out the bulk of the development work.

With the introduction of the new materials in the schools, CERD needs to monitor the reform in order to reveal any problems identified in implementation, and identify weaknesses in the strategy or materials to be addressed in a second phase of reform. CERD also needs to monitor the quality of implementation in general, in order to fulfill its core mission. The CERD Evaluation Unit does not at present have the capacity to do the required monitoring and evaluation. It has only one staff member. However, CERD is committed to developing a strong, independent Evaluation Unit.

Additional staff needed for the CERD Evaluation Unit cannot be supplied from within the system owing to the high demand for existing qualified personnel. Therefore, CERD needs to hire a nucleus of staff specialized in evaluation and measurement, and to develop the professional capacity of other staff on the job, as needed.

2. OBJECTIVES

The primary goal of this Sub-Component is to build up the capacity of CERD to undertake evaluation activities related to the major aspects of the reform and continuing beyond the reform, in addition to enhance its contributions to the GDNE as called upon by its mandate.

The specific objectives of this Sub-Component are:

2.1 to support establishment of a stable CERD evaluation capacity by recruiting and training key staff members;

2.2 to assist CERD to develop a comprehensive evaluation strategy to meet the needs of the education system; and

2.3 to introduce a system of annual quality review of official examinations.

INSTITUTIONAL CAPACITY: CERD will pursue institutionalizing its evaluation capacity by establishing an Evaluation Unit headed by a specialist in the field and reporting to the President of CERD. A mission statement for the Evaluation Unit will be prepared as well as job descriptions, and CERD will determine the staffing and delineate the activities of the Unit.

MAJOR FUNCTIONS/ACTIVITIES IN EDUCATION EVALUATION

I. Evaluation of the implementation of the reform

- i) Evaluation of curricula
- ii) Evaluation of textbooks
- iii) Evaluation of instructional materials
- iv) Evaluation of teacher training (including distance learning)
- v) Evaluation of examinations
 - a. Official examinations [Brevet (renamed Basic Education Certificate) and Baccalaureat]
 - b. School examinations (including oral and written tests, students projects, other)
- vi) National assessment (need to establish clear objectives for these assessments).

II. Continuous evaluation of educational processes
(would include most of the items under 4.1 above, to extend beyond the years of the reform and/or the project).

III. Preparation of tools for dissemination by GDNE pertaining to

- i) competencies per grade and subject
- ii) typology (samples or exemplars) of test/exam questions.

3. ACTIVITIES

In establishing the Evaluation Unit, it is important to ensure through recruitment or training that latest developments and practices in examinations are secured, particularly regarding quality/review/quality assurance, and item response theory. Capabilities in social research methods and impact evaluation are also important for the envisaged

evaluation activities and these can be within the Evaluation Unit or in another unit of CERD.

CERD will also establish a database of examination papers and practices, as a baseline against which progress during the project can be measured. Beginning with the year 2000 examinations, copies of specifications, papers, marking schemes, analytical reports and detailed information about procedures used for paper setting, moderation, typesetting and printing, marking, data entry, scores processing, results publication will be gathered. During the final year of the project, a detailed comparison will be made between the examination papers and procedures for the year 2000, and those for the year 2003.

The CERD Examination Development Committees in the various subjects will carry out the gathering of subject-specific materials. Consultants as needed would assist with identifying the required information, structuring the database to allow for easy access, and establishing procedures for regular data gathering.

The Evaluation Unit will also establish a regular quality review of the two main official examinations, beginning with the examinations in the year 2001 in cooperation with the GDNE. The CERD Examination Development Committees in the various subjects will undertake content review of examination papers against specifications and manual question analysis of a sample of worked answer books. There will be an analysis of the statistical properties of the examination that may affect efficiency or equity. An annual report with recommendations for the following year's examination papers will be prepared, and submitted to the GDNE Examining Committee. The Evaluation Unit should be involved in regular quality and should develop capacity for the purpose.

The Evaluation Unit will also undertake sample-based national assessment of student achievement in four subjects (Arabic, mathematics, science, French or English) in grades 3 and 6. The primary purpose of this activity is to provide quality assurance information to GDNE and other stakeholders. In particular, it will assure stakeholders that standards are being maintained nationally in the first six grades, following the introduction of automatic and facilitated promotion. The secondary purpose is to gather "diagnostic" information, about which objectives are being achieved or not achieved. The first tests will be administered in 2002 and the administration will be repeated in 2004.

Following securing the required expertise in the Evaluation Unit, subject teams will develop attainment targets and items during the 2000-01 academic year. These items will be piloted during the 2000-01 academic year, calibrated using one-parameter Item Response Theory (IRT), and banked. Among the issues to be resolved is the development of item banks, their purpose, and manner in which they will be developed and utilized.

As the mission of the Evaluation Unit is being developed, it is recommended that consideration be given to incorporating the following activities. During the 1999-2000 academic year, stakeholders' views on critical areas for investigation will be gathered;

classroom observation schedules, questionnaires for teachers, principals and parents, and structured interview schedules for teachers and principals will be developed and piloted. Data will be gathered during 2000-01 in grades 1, 4, 7 and 10, 2001-02 in grades 2, 5, 8 and 11, and 2002-03 in grades 3, 6, 9 and 12. Evaluative reports will be prepared, incorporating data from the quality review of official examinations and sample survey of student achievement as they become available. Annual reports will be prepared during the three academic years 2000-03, and a final report during the 2003-04 academic year.

4. INPUTS

Local Costs. CERD will contribute to the costs of the activities under the project through the staff of the Evaluation Unit and other staff who are involved, compensation for committees, computing and clerical, materials, communication and travel allowances. The costs will have to be estimated as the work for the various activities is detailed over the life of the project.

5. OUTPUTS

Output	Measurable Indicatorsevaluatging
1. A functioning Evaluation Unit within CERD, with mission statement, strategic plan, job descriptions and qualified, trained staff	<p>1.1 Four permanent staff appointed by 2001, specialized in the field selected to complement each other.</p> <p>1.2 Mission statement, strategic plan, job descriptions for E. Unit staff prepared by 2000</p> <p>1.3 Activities in strategic plan budgeted for beginning in 2000</p>
2. Systems for evaluating the implementation of the major aspects of the reform established and functioning	<p>2.1 Annual quality review of Brevet and Bac. Examinations carried out and reported; evaluation of curricula, textbooks, instructional materials, and teacher training carried out and analyzed with recommendations for improvement as implementation continues.</p> <p>2.2 National assessment of student achievement at grades 3 and 6 carried out by 2002, and repeated by 2004</p>
3. Monitoring and evaluation systems for national education developed and implemented	<p>3.1 A functional system for gathering feedback from a variety of stakeholders</p> <p>3.2 Exams database established by 2001, used for evaluating developments in examination system by 2004</p> <p>3.3 Comprehensive impact evaluation planned, carried out, reported by 2004</p>

6. Implementation Schedule

Activities	Year 1	Year2	Year 3	Year 4	Year 5
1. Creation of Evaluation Unit	•				
1.1 Permanent staff appointed		•			
2. Development of exams database	•	•	•	•	•
3. Quality review		•	•	•	•
4. Sample based national assessment			•		•
5. Development of attainment targets/item	•				
6. Annual reports	•	•	•	•	•
7. Comprehensive impact evaluation report					•

7. INSTITUTIONAL FRAMEWORK

7.1 Present Institutional Framework

CERD has an Evaluation Unit within its Bureau de Recherche. This has only one permanent staff member, the unit head. In addition, there is a seven-member *ad-hoc* Evaluation Commission which has to this point primarily been concerned with student evaluation at the school level in conjunction with the DGNE.

7.2 Measures Required for Project Execution

The CERD will need to establish an Evaluation Unit with a sufficient number of staff to enable the unit to carry out its functions. It is envisaged that the staff of the unit will consist of a unit head, and several specialists including a field research coordinator and researchers. It may be advisable to have key members of the Unit as regular staff and others on contract basis in order to adapt commitment to the work load. In addition, there should be clerical staff, computer operators, and general support staff, plus about ten computers and associated software and equipment. In the interim period and as an Evaluation Unit is being established, action needs to be taken to appoint staff on a contract basis to start functioning especially in key areas which have to be evaluated as implementation is in progress.

A sufficient budget will also be needed to cover the program of evaluation activities to be undertaken by the Unit during the project period. As the project is being implemented, the budget of the Evaluation Unit (especially for its continuous activities) has to be enhanced to sustain the costs of the activities by the end of the project. Thus, by the mid-term review, firm plans should have been made for sustainable funding for the Evaluation Unit.

8. ESTIMATED COSTS

Cost estimates by category and year for the life of the project (refer to the annex for more details).

Categories of Expenses	Year 2000	2001	2002	2003	2004	Total
Evaluation of Curricula	19,500	19,500	19,500	50,000	-	108,500
Evaluation of Textbooks	76,000	78,000	78,000	-	-	232,000
Eval. Of Instructional Materials	19,000	19,500	19,500	-	-	58,000
Evaluation of Teacher Training & Distance Training	19,000	29,250	29,250	-	-	77,500
Evaluation of Official Exams	19,500	37,500	19,500	19,500	19,500	115,500
Evaluation of School Exams	23,900	37,500	19,500	19,500	19,500	119,900
National Assessment		20,000	80,000	20,000	80,000	200,000
Equipment & Software	16,750	13,400			-	30,150
Supplies	10,000	20,000	10,000	5,000	20,000	65,000
TOTAL	203,650	274,650	275,250	114,000	139,000	1,006,550

9. INDICATORS

9.1 Staff Appointed and Trained

Indicator	Means of Verification
1 CERD staff member trin analysis of examinations by June 2001.	Project progress reports Disbursement reports Course evaluation reports Muhafazat reports on local training
4 CERD permanent staff (at least 3 from Evaluation Unit) trained in designing, managing and implementing sample-based national assessment by June 2002.	
Subject Committee members trained in criterion-referenced item writing by June 2003.	

9.2 Products

Indicator	Means of Verification
Baseline of current examinations practice established by June 2000.	Project progress reports Disbursement reports
First analytical report on examinations including statistical review, content/skills review and question analysis, with recommendations submitted to examinations committee produced by January 2001, and annually thereafter.	External qualitative evaluations Feedback gathered by Evaluation Unit from local coordinators, teachers, pedagogic counselors, inspectorate.
Item banks in 5 subjects (mathematics, Arabic, science, French o& English) consisting of at least 500 items covering all major attainment targets in grades 1-6 prepared by June 2001, and further developed thereafter.	
Sample-based national assessment in 4 subjects (Arabic, mathematics, science, French or English) carried out by June 2002, reported by December 2002, and repeated by June 2004.	
Evaluative reports prepared on the reform as a whole and specifically the curricula, textbooks, instructional materials, teacher training, teaching methodology and student assessment instruments developed. Reports on grades 1, 4, 7 and 10 will be produced by June 2001, on grades 2, 5, 8 and 11 by June 2002 and on grades 3, 6, 9 and 12 by June 2003. A final report will be produced by June 2004.	

10. CONDITIONS, RISKS, ASSUMPTIONS AND SUSTAINABILITY

10.1 Conditions Necessary for Project Implementation

- CERD Evaluation Unit created and staff appointed by June 2000. Permanent staff appointed by June 2001.
- Government contribution to local costs of activities defined before project effectiveness.

10.2 Risk Analysis

Risk	Rating	Minimization Measure
Evaluation Unit does not become an established CERD Unit or Department	Moderate	An interim arrangement will be established. MENJS/CERD to move towards establishing Unit without delay.
Resources for local costs of activities are not forthcoming	Moderate	MENJS to commit contribution to local costs of project; project to include allowance for local costs
Resources for ongoing activities are not forthcoming after project ends	Moderate	Discuss long-term budget at mid-term review; link further activities to long-term financing
Excessive use of temporary and part-time expertise limits impact on institution building	Moderate	Increase no. of CERD permanent staff. Maximize their role in activities and committees
New evaluation criteria are not applied consistently	Moderate	Quality review; in-service training
Impact evaluation and quality review of examinations not responded to centrally	Moderate	Follow up response at mid-term review stage

10.3 Likely Sustainability

The sub-project will deliver comprehensive capacity building, and an initial program of activities relevant to the intended role of the Unit. Long-term sustainability will depend on three main factors:

- institutionalization of the Evaluation Unit within CERD, with permanent staff;
- an adequate budget for activities; and
- development of a mission statement, strategic plan and job descriptions for the Unit.

ANNEX

**COST ESTIMATES FOR
THE EXAMINATION AND EVALUATION PROJECTS**

Sub-component 3.3 Examination and Evaluation

Detailed costs

USD

	Unité	Quantités					Total	Coûts de Base ('000)					Total	
		2000	2001	2002	2003	2004		2000	2001	2002	2003	2004		
I. Coûts d'investissement														
A. Exams														
1. Assistance Technique														
a. Consultants nationaux														
b. Consultants internationaux														
Honoraires														
Frais de voyage														
Per diem														
Sous Total Consultants internationaux		100	100	60	40	40	340	150	15.00	15.00	9.00	6.00	6.00	51.00
Sous Total Assistance Technique		40	40	40	20	10	150	500	20.00	20.00	20.00	10.00	5.00	75.00
2. Voyages d'études et formation à l'étranger		4	4	4	2	2	16	2,000	8.00	8.00	8.00	4.00	4.00	32.00
a. GDNE Examinations Commission		56	56	56	23	12	203	200	11.20	11.20	11.20	4.60	2.40	40.60
Frais billets d'avion pour 5 personnes									39.20	39.20	39.20	18.60	11.40	147.60
Per diem /a									54.20	54.20	48.20	24.60	17.40	198.60
Sous Total GDNE Examinations Commission		5	-	-	-	-	5	2,000	10.00	-	-	-	-	10.00
b. MENJS Examination		21	-	-	-	-	21	200/par jour	21.00	-	-	-	-	21.00
Frais billets d'avion pour 5 personnes									31.00	-	-	-	-	31.00
Per diem /b									10.00	-	-	-	-	10.00
Sous Total MENJS Examination		5	-	-	-	-	5	2,000	10.00	-	-	-	-	10.00
c. Formation du Pers. du DGEN et CERD /c		14	-	-	-	-	14	200/par jour	14.00	-	-	-	-	14.00
Formation classroom assessment									24.00	-	-	-	-	24.00
Specification design and methods		3	-	-	-	-	3	4,800	14.40	-	-	-	-	14.40
Sous Total Formation du Pers. du DGEN et CERD		10	-	-	-	-	10	4,800	48.00	-	-	-	-	48.00
Sous Total Voyages d'études et formation à l'étranger									62.40	-	-	-	-	62.40
3. Programmes de formation locale /d									117.40	-	-	-	-	117.40
Specification design, identifying abilities, principles of question setting		105	-	-	-	-	105	100	10.50	-	-	-	-	10.50
Formative classroom assessment		30	-	-	-	-	30	200	6.00	-	-	-	-	6.00
Question setters and coordinators in setting higher abilities questions		-	200	-	-	-	200	100	-	20.00	-	-	-	20.00
School based assessment and integrative skills		-	60	-	-	-	60	100	-	6.00	-	-	-	6.00
Official Exams in DTP		-	6	-	-	-	6	200	-	1.20	-	-	-	1.20
Pilot group of teachers in formative classroom assessment		-	40	-	-	-	40	100	-	4.00	-	-	-	4.00
Official Examinations in OMR scanner applications		-	180	-	-	-	180	100	-	18.00	-	-	-	18.00
Coordinators in formative classroom assessment		-	100	-	-	-	100	100	-	10.00	-	-	-	10.00
Admin, ped counselors & coordinators in moderating and monitoring school-based assessment		-	-	-	180	-	180	100	-	-	18.00	-	-	18.00
Sous Total Programmes de formation locale									16.50	27.20	32.00	18.00	-	93.70
4. Etudes									-	-	30.00	-	-	30.00
Explore techn options for moderating the content and standards of SBS and prepare outline proposa														
Forfait														

General Education Project

3. Comités	500	100.00	75.00	50.00	20.00	5.00	250.00
4. Tâches administratives	600	6.00	7.20	8.40	3.60	2.40	27.60
5. Allocation de voyage		2.00	2.00	2.00	2.00	2.00	10.00
6. Consommables		12.00	8.00	13.00	11.00	2.00	46.00
Sous Total Exams		<u>174.00</u>	<u>146.20</u>	<u>127.40</u>	<u>90.60</u>	<u>65.40</u>	<u>603.60</u>
B. Evaluation							
1. Consommables		10.00	20.00	10.00	5.00	20.00	65.00
Total Coûts Récurrents		<u>184.00</u>	<u>166.20</u>	<u>137.40</u>	<u>95.60</u>	<u>85.40</u>	<u>668.60</u>
Total		<u>597.05</u>	<u>524.05</u>	<u>542.75</u>	<u>247.30</u>	<u>221.80</u>	<u>2,132.95</u>

- la séjour de 3 semaines environ
- lb séjour de 2 semaines environ
- lc coût de la formation par participant estimé à \$12,000 pour une durée de 2.5 mois
- ld \$20 par personne par jour
- le évaluation des nouveaux programmes
- lf évaluation des manuels scolaires
- lg évaluation des matériels pédagogiques
- lh évaluation de la formation des maîtres et formation à distance
- li évaluation des examens officiels
- lj évaluation des examens au niveau de l'école
- lk 40 subject team members x 10 days - per diem only (rate to be verified)
- li sample based national assessment
- lm 5 experts de l'unité d'évaluation x 10 days - per diem only (rate to be verified)
- ln pc + imprimante + UPS + logiciels

Sub-component 3.3 Examination and Evaluation

Detailed costs
USD

	Dépenses par Bailleurs de Fond ('000)																		
	Le Gouvernement					BIRD													
	2000	2001	2002	2003	2004	Total	2000	2001	2002	2003	2004	Total							
Totaux Y Compris Imprévus ('000)	2000	2001	2002	2003	2004	Total	2000	2001	2002	2003	2004	Total							
I. Coûts d'investissement	16.28	16.66	10.22	6.97	7.13	57.27	-	-	-	-	-	16.28	16.66	10.22	6.97	7.13	57.27		
A. Examens	21.71	22.21	22.72	11.62	5.94	84.21	-	0.00	0.00	-	-	0.00	21.71	22.21	22.72	11.62	5.94	84.21	
1. Assistance Technique	8.68	8.88	9.09	4.65	4.76	36.06	-	0.00	0.00	-	0.00	0.00	8.68	8.88	9.09	4.65	4.76	36.06	
a. Consultants nationaux	12.16	12.44	12.72	5.35	2.85	45.52	-	0.00	0.00	-	-	0.00	12.16	12.44	12.72	5.35	2.85	45.52	
b. Consultants internationaux	42.55	43.53	44.53	21.62	13.55	165.79	-	0.00	0.00	-	0.00	0.00	42.55	43.53	44.53	21.62	13.55	165.79	
Honoraires	58.84	60.19	54.76	28.59	20.69	223.07	-	0.00	0.00	-	0.00	0.00	58.84	60.19	54.76	28.59	20.69	223.07	
Frais de voyage																			
Per diem																			
Sous Total Consultants internationaux																			
Sous Total Assistance Technique																			
2. Voyages d'études et formation à l'étranger																			
a. GDNE Examinations Commission	10.86	-	-	-	-	10.86	-	-	-	-	-	-	10.86	-	-	-	-	-	10.86
Frais billets d'avion pour 5 personnes	22.80	-	-	-	-	22.80	-	-	-	-	-	-	22.80	-	-	-	-	-	22.80
Per diem /a	33.65	-	-	-	-	33.65	-	-	-	-	-	-	33.65	-	-	-	-	-	33.65
Sous Total GDNE Examinations Commission																			
b. MENJS Examination	10.86	-	-	-	-	10.86	-	-	-	-	-	-	10.86	-	-	-	-	-	10.86
Frais billets d'avion pour 5 personnes	15.20	-	-	-	-	15.20	-	-	-	-	-	-	15.20	-	-	-	-	-	15.20
Per diem /b	26.05	-	-	-	-	26.05	-	-	-	-	-	-	26.05	-	-	-	-	-	26.05
Sous Total MENJS Examination																			
c. Formation du Pers. du DGEN et CERD /c	15.63	-	-	-	-	15.63	0.00	-	-	-	-	0.00	15.63	-	-	-	-	-	15.63
Formation classroom assessment	52.11	-	-	-	-	52.11	0.00	-	-	-	-	0.00	52.11	-	-	-	-	-	52.11
Specification design and methods	67.74	-	-	-	-	67.74	0.00	-	-	-	-	0.00	67.74	-	-	-	-	-	67.74
Sous Total Formation du Pers. du DGEN et CERD	127.45	-	-	-	-	127.45	0.00	-	-	-	-	0.00	127.45	-	-	-	-	-	127.45
Sous Total Voyages d'études et formation à l'étranger																			
3. Programmes de formation locale /d	11.40	-	-	-	-	11.40	5.70	-	-	-	-	5.70	5.70	-	-	-	-	-	5.70
Specification design, identifying abilities, principles of ques	6.51	-	-	-	-	6.51	3.26	-	-	-	-	3.26	3.26	-	-	-	-	-	3.26
Formative classroom assessment	-	22.21	-	-	-	22.21	-	11.11	-	-	-	11.11	-	11.11	-	-	-	-	11.11
Question setters and coordinators in setting higher abilities	-	6.66	-	-	-	6.66	-	3.33	-	-	-	3.33	-	3.33	-	-	-	-	3.33
School based assessment and integrative skills	-	1.33	-	-	-	1.33	-	0.67	-	-	-	0.67	-	0.67	-	-	-	-	0.67
Official Exams in DTP	-	-	4.54	-	-	4.54	-	2.27	-	-	-	2.27	-	2.27	-	-	-	-	2.27
Pilot group of teachers in formative classroom assessment	-	20.45	-	-	-	20.45	-	10.22	-	-	-	10.22	-	10.22	-	-	-	-	10.22
Official Examinations in OMR scanner applications	-	11.36	-	-	-	11.36	-	5.68	-	-	-	5.68	-	5.68	-	-	-	-	5.68
Coordinators in formative classroom assessment	-	-	20.92	-	-	20.92	-	10.46	-	-	-	10.46	-	10.46	-	-	-	-	10.46
Admin, ped counselors & coordinators in moderating and monito	17.91	30.21	36.35	20.92	-	105.39	8.96	15.10	18.18	10.46	-	52.70	8.96	15.10	18.18	10.46	-	-	52.70
Sous Total Programmes de formation locale																			
4. Etudes	-	-	34.08	-	-	34.08	-	-	0.00	-	-	0.00	-	-	-	-	-	-	34.08
Explore techn options for moderating the content and standards																			

General Education Project

Statistical monitoring	-	34.08	-	34.08	-	0.00	-	34.08	-	34.08	-	34.08	-	34.08
PCs	14.98	10.22	-	25.20	3.00	2.04	-	5.04	11.98	8.17	-	20.16	-	20.16
Imprimantes Laser	1.30	0.67	-	1.97	0.26	0.13	-	0.39	1.04	0.53	-	1.58	-	1.58
Imprimantes matricielles	0.87	-	-	0.87	0.17	-	-	0.17	0.69	-	-	0.69	-	0.69
Scanneurs	2.17	2.22	-	4.39	0.43	0.44	-	0.88	1.74	1.78	-	3.51	-	3.51
Storage device	4.34	-	-	4.34	0.87	-	-	0.87	3.47	-	-	3.47	-	3.47
Logiciels	10.86	11.11	-	21.96	2.17	2.22	-	4.39	8.68	8.88	-	17.57	-	17.57
Sous Total Etudes	34.52	24.21	68.16	126.90	6.90	4.84	0.00	11.75	27.62	19.37	68.16	115.15	-	115.15
Sous Total Exams	238.72	114.61	159.28	49.51	20.69	15.86	19.95	18.18	10.46	0.00	64.44	222.86	94.66	141.10
B. Evaluation														
1. Nouveaux programmes /e														
Consultants nationaux	16.28	21.66	22.15	43.58	-	-	-	-	16.28	21.66	22.15	43.58	-	103.68
Consultants internationaux	4.34	-	14.53	18.87	-	-	-	-	4.34	-	-	14.53	-	18.87
Sous Total Nouveaux programmes	20.63	21.66	22.15	58.11	-	-	-	-	20.63	21.66	22.15	58.11	-	122.55
2. Manuels scolaires /f														
Consultants nationaux	65.13	86.62	88.62	240.37	-	-	-	-	65.13	86.62	88.62	240.37	-	240.37
Consultants internationaux	17.37	-	-	17.37	-	-	-	-	17.37	-	-	17.37	-	17.37
Sous Total Manuels scolaires	82.50	86.62	88.62	257.74	-	-	-	-	82.50	86.62	88.62	257.74	-	257.74
3. Matériels pédagogiques /g														
Consultants nationaux	16.28	21.66	22.15	60.09	-	-	-	-	16.28	21.66	22.15	60.09	-	60.09
Consultants internationaux	4.34	-	-	4.34	-	-	-	-	4.34	-	-	4.34	-	4.34
Sous Total Matériels pédagogiques	20.63	21.66	22.15	64.44	-	-	-	-	20.63	21.66	22.15	64.44	-	64.44
4. Formation des maitres /h														
Consultants nationaux	16.28	32.48	33.23	82.00	-	-	-	-	16.28	32.48	33.23	82.00	-	82.00
Consultants internationaux	4.34	-	-	4.34	-	-	-	-	4.34	-	-	4.34	-	4.34
Sous Total Formation des maitres	20.63	32.48	33.23	86.34	-	-	-	-	20.63	32.48	33.23	86.34	-	86.34
5. Exams officiels /i														
Consultants internationaux	-	19.99	-	19.99	-	-	-	-	-	19.99	-	19.99	-	19.99
Consultants nationaux	21.17	21.66	22.15	22.66	23.18	110.83	-	-	21.17	21.66	22.15	22.66	23.18	110.83
Sous Total Exams officiels	21.17	41.65	22.15	22.66	23.18	130.82	-	-	21.17	41.65	22.15	22.66	23.18	130.82
6. Exams en classe /j														
Consultants internationaux	-	19.99	-	19.99	-	-	-	-	-	19.99	-	19.99	-	19.99
Consultants nationaux	21.17	21.66	22.15	22.66	23.18	110.83	-	-	21.17	21.66	22.15	22.66	23.18	110.83
Sous Total Exams en classe	21.17	41.65	22.15	22.66	23.18	130.82	-	-	21.17	41.65	22.15	22.66	23.18	130.82
7. National Assessment - Sample based /k														
Formation locale /k	25.95	41.65	22.15	22.66	23.18	135.59	4.78	-	4.78	21.17	41.65	22.15	22.66	23.18
Sous Total xams en classe	25.95	41.65	22.15	22.66	23.18	135.59	4.78	-	4.78	21.17	41.65	22.15	22.66	23.18
7. National Assessment - Sample based /l														
Consultants internationaux	-	22.21	-	23.78	45.99	-	0.00	-	0.00	-	22.21	-	23.78	45.99
Consultants nationaux	-	-	90.15	23.36	71.34	184.85	-	-	-	-	-	90.15	23.36	71.34
Formation locale /m	-	0.62	-	0.62	-	-	0.62	-	0.62	-	-	-	-	-
Sous Total ational Assessment - Sample based	18.18	14.88	-	23.36	95.11	231.46	-	0.00	0.62	-	22.21	90.15	23.36	95.11
8. Equipements informatiques /n														
Equipements informatiques /n	209.68	282.80	301.23	126.80	141.48	1,062.00	8.41	2.98	0.62	-	12.01	201.27	279.83	300.61
Sous Total Evaluation	448.40	397.41	460.51	176.31	162.17	1,644.80	24.27	22.92	18.80	10.46	0.00	76.46	424.12	374.49
Total Coûts d'investissement	1,568.35	1,049.99	1,414.48	126.80	141.48	1,062.00	8.41	2.98	0.62	-	12.01	201.27	279.83	300.61
II. Coûts Récurrents														
A. Exams														
1. Examinations Commission & Evaluation Unit	48.85	49.98	51.12	52.30	53.50	255.75	48.65	49.98	51.12	52.30	53.50	255.75	-	-
2. Personnel	9.77	10.00	10.22	10.46	10.70	51.15	9.77	10.00	10.22	10.46	10.70	51.15	-	-

General Education Project

3. Comités	108.56	83.29	56.80	23.24	5.94	277.84	108.56	83.29	56.80	23.24	5.94	277.84
4. Tâches administratives	6.51	8.00	9.54	4.18	2.85	31.09	6.51	8.00	9.54	4.18	2.85	31.09
5. Allocation de voyage	2.17	2.22	2.27	2.32	2.38	11.37	2.17	2.22	2.27	2.32	2.38	11.37
6. Consommables	13.03	8.88	14.77	12.78	2.38	51.84	13.03	8.88	14.77	12.78	2.38	51.84
Sous Total Examens	188.89	162.36	144.74	105.30	77.76	679.05	188.89	162.36	144.74	105.30	77.76	679.05
B. Evaluation												
1. Consommables	10.86	22.21	11.36	5.81	23.78	74.02	10.86	22.21	11.36	5.81	23.78	74.02
Total Coûts Récurrents	199.75	184.57	156.10	111.11	101.53	753.06	199.75	184.57	156.10	111.11	101.53	753.06
Total	648.14	581.99	616.61	287.42	263.70	2,397.87	224.02	207.50	174.90	121.57	101.53	829.52
							441.71	374.49	424.12	374.49	441.71	1,568.35

Annex - Assumptions about costs used in project preparation
(Slightly modified from D. Carroll's Assumptions in Annex 5 of Original Prodoc)

Cost Assumptions have been further modified by Ms. C. Wong at the Bank to conform with unit costs in other project components. Refer to Excel Sheets from Christine for budget details of this component. Once finalized, they can be used to fill the Estimated Costs Table.

Note: assume 22 working days per month

1. Cost of CERD full-time staff

Administrative staff range from LL500,000 to LL1,500,000 monthly
Allow LL900,000 as an average, or \$600
Academic staff range from LL1,500,000 to LL3,000,000 monthly
Allow LL2,250,000 as an average, or \$1,500

2. Cost of CERD contract staff

Based on qualifications and experience
Allow LL2,250,000 monthly as an average, or \$1,500

3. Cost of Commission/Committee member

Based on qualifications and experience; assume a daily rate of \$70
Assume 7 days' work per month
Allow LL750,000 monthly as an average, or \$500

4. Cost of in-service training

Average cost of trainer per day LL250,000; divided by 25 trainees = LL10,000
Displacement fee per trainee/day LL10,000
Allowance for materials, *diyafa* etc. LL10,000 per trainee per day

Average cost per trainee per day: LL30,000, or \$20

5. Cost of training overseas

Overseas training programs - average duration 2.5 months @ \$12,000 each person
Overseas study tours average duration 3 weeks @ \$7,000 each person

6. **Cost of equipment**

Allow: \$2,000 per computer/person
\$1,000 per document scanner, printer etc.
\$2,000 per institution/department for UPS
\$20,000 for OMR/ICR technology for Department of Official Examinations
\$10,000 for OMR/ICR technology for CERD
\$10,000 per institution for software

7. **Cost of studies**

Responsible Researcher for Study: \$6000

Studies - each additional equivalent of 1.5 persons x 4 months @ \$1,500 each = \$9,000
Allowance for part-timers, 10 persons by 1 month = \$8,000
Allowance for data entry, processing and analysis \$5,000
Allowance for materials \$2,000
Assume a flat rate per study of \$30,000

8. **Consultant Costs**

International: \$500 per working day plus \$175 per day in-country. \$4,000 air fare for each twenty days in country, or fraction thereof

National: \$150 per day