

## Services

### Items Banks

The organization of the various school examinations requires the availability of instruments of evaluation respecting high quality standards. Several educational systems consider appropriate to set up banks including quality items. To guarantee the elaboration of quality items respecting standards and rigorous criteria, specialists' accompaniment in this domain constitutes a significant asset. Finally, it is advisable to note that any system of school evaluation has to evolve to adapt itself to the various transformations which undergo the educational system in general.

Certain number of educational systems thus opted to develop and to update items banks to manage better the various examinations. Micro Centre Pythagore is associated with this approach to supply technical support. The works are situated with regard to several objectives, in particular:

- Strengthen the skills of the agents asked to elaborate quality items in the various disciplines evaluated within the framework of the certification of the studies.
- Assist the services of the evaluation in the elaboration of quality items touching the various disciplines being part of the curriculum.
- Inventory the instruments of evaluation to know the characteristics and make it, so required, the integration in items banks.
- Propose technical solutions connected with the creation of items banks considered necessary, in their supply and in their optimal use.
- Assist the staff in the creation of items respecting high quality standards.
- Train the staff of evaluation of the learnings in the use of the computing tools necessary for the creation, the update and the use of the items banks.

Several activities of training have to be held within the framework of this accompaniment. The EduStat software is used for the preparation of items banks and the management of this information with the aim of developing examinations respecting the tasks that must be realized by the ministerial direction in charge.

So, the EduStat software includes options allowing to create items banks, to record the relevant information in databases and to exploit these databases to create tests. It is also possible to prepare banks of questions which will allow elaborating complementary questionnaires or questionnaires like "opinion survey".

For several years, Micro Centre Pythagore is associated with the development of such items banks or banks of questions for certain ministries of education. We can quote such accompaniments within the framework of particular projects as the international evaluations IAEP (International Assessment of Educational Progress) or at the request of certain educational systems as the basic education in Benin, in Burkina Faso and in Cameroon.

Here is the approach which can be retained for the creation and the use of banks of items or questions by means of the software EduStat.

### **Step 1 – Prepare the questions**

At first, it is necessary to create items or questions which respect the plan retained in an available table of specification. Besides the text of the question, it will have been necessary to draft, so considered relevant, the script of administration and the marking guide. It will also have been necessary to indicate, for every question, its links to the table of specification as well as possibly an indication of difficulty defined a priori by the specialist of the measure and the evaluation either calculated following a field test.

### **Step 2 – Create the database**

A limited number of items or of questions concerning the same discipline or the same subject should be grouped together to allow the creation of an EduStat database. Certain fields of information planned in such a database must be specified to allow an optimal use of this information at the time of the preparation of tests or questionnaires. It is, among others, about information concerning these aspects:

- the identification of the item or the question,
- a short description of the contents of the item or the question,

- the type of item or question (for example, multiple-choice, item on a scale, question of opinion, text describing a situation or a scenario),
- the indication of difficulty the links with the table of specification.

### **Step 3 – Capture the questions**

The first two described stages higher allowed on one hand to have a series of questions touching a given subject and on the other hand to prepare a database including all the information connected with the preparation of items banks. It is also necessary to capture texts and illustrations being part of every question for their integration in the database.

### **Step 4 – Use the items banks**

At the end of the higher described process, all the information connected with an items bank is included in an EduStat database. An option of this software allows preparing tests or questionnaires from the one or several available banks.

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