

Item 3(a) of the provisional agenda

UNESCO'S NEW ACTIVITIES ON DATA COLLECTION

Report prepared by the UNESCO Division of Statistics

Development of a new database system

1. The UNESCO Division of Statistics is currently modernizing its database system in a decentralized client/server architectural environment residing in a PC platform with the following configuration:

Operating system:	MSDOS Windows
LAN Software:	Novell Netware
Relational DBMS:	Oracle

2. The new database system has two major components: one is a working database system and the other is a dissemination database system. The former is used solely within the Division for data entry/modification, generation/calculation, and validation and is updated dynamically at any moment. The latter will be updated regularly after the validation of data in the working database and will be used for the dissemination of data to users other than the subject matter statisticians.

3. Of the three major fields of competence of UNESCO on which the Division collects statistics, i.e. education, culture and communication, and science and technology, development work started with the Education Working System, which covers more than two-thirds of the entire UNESCO statistical data volume and more than 80% of data requests from outside users.

4. The Education Working System is expected to be operational soon, while similar systems for the two remaining areas, i.e. culture and communication, and science and technology, will follow accordingly. Until migration to the new system is fully complete, data are uploaded from the new system to the mainframe system for the production of the UNESCO Statistical Yearbook.

5. At present, the LAN is accessible only to users within the Division, but it is foreseen that users from other parts of the Organization, as well as from outside, will in due course also be able to access the dissemination database.

International co-operation in education statistics

6. It is more than a decade since UNESCO joined forces with OECD and EUROSTAT to set up a common data collection programme on education matters. The reason for doing so was to ensure that all three organizations received, stocked and published the same figures on such phenomena as students, graduates, teachers, expenditure, etc. through the application of the same criteria, concepts, definitions and classifications. Another reason, probably even more important for this joint venture, was to release national data providers from the burden of reporting more or less the same information to different organizations separately.

7. The data collection instrument agreed upon was an improved, i.e. more detailed, version of the UNESCO questionnaires covering respectively:

- pre-primary, primary and secondary education
- higher education
- education finance and expenditure

8. While copies of the same questionnaire were despatched by UNESCO on behalf of the three organizations, the replies were sent to each of them individually. Although such organizations received exactly the same information, more often than not the statistics finally published by them were different. This was attributed to the fact that not every organization exercised the same rigour when it came to checking the coherence and consistency of the data reported.

9. This problem should, at least in theory, no longer arise in the future, since the three organizations have signed a protocol for the UOE data collection which stipulates that:

- the three agencies co-ordinate the preparation of the data collection instrument (which is no longer a paper questionnaire, but a diskette) together with the elaboration of definitions, explanations and instructions;
- a timetable for the surveys is established with the agreement of data providers;
- OECD, on behalf of the three organizations, despatches the above-mentioned material to data providers;
- upon completion, data providers return one copy of the data collection diskette to OECD and another copy to EUROSTAT;

- data verification steps will be undertaken jointly by OECD and UNESCO and separately by EUROSTAT;
- all communication with data providers regarding conflicting data will be exchanged with the other organizations;
- UNESCO and OECD will establish a joint international education database which will be publicly released bi-annually and aligned to that of EUROSTAT at suitable intervals.

10. The three organizations will attempt similar agreements for the preparation and exchange of meta-data.

11. The first full-scale surveys using electronic questionnaires have revealed a number of problems, most of which are related to conceptual issues. This is especially true of those on finance and expenditure, despite detailed and exhaustive instruction material.

12. It will certainly be some time before the new system is operating smoothly and to the satisfaction of all. What definitely facilitates things is the almost permanent contact between data providers and the three organizations. Technical group meetings are held twice a year, the first to discuss the forthcoming survey and the second to allow for the analysis and correct interpretation of its results. It is only through this permanent dialogue with the data providers that a good degree of international comparability of education statistics can be achieved.

