UNESCO INSTITUTE FOR STATISTICS (UIS)

Paper for Inter-agency meeting on statistical co-ordination, September 2002

1. The UNESCO Institute for Statistics (UIS) was established in November 1999 in order to foster a culture of evidence-based policy both nationally and internationally through the collection and use of high quality, timely data in education, science and technology, culture and communication. The remit of the UIS is to provide statistical information on education, science, culture and communication to inform decision-making in Member States and international organisations, and to facilitate democratic debate in UNESCO’s areas of competence. The UIS conducts its work in the following four main action areas:
   (a) the collection, validation and timely dissemination of policy-relevant cross-national statistics, indicators and related documentation;
   (b) the development of methodology to underpin the collection and estimation of reliable data which can be compared cross-nationally;
   (c) providing support for building the statistical and analytical capacities of Member States; and
   (d) the analysis and interpretation of cross-national data.

2. In accordance with its Statutes, the UIS not only serves the needs of the Member States and UNESCO, but should also be responsive, depending on additional finances, to the needs of other users in national and international organisations. To this end, the UIS has established relationships with a range of national, subregional and regional institutions and international organisations within and outside the United Nations system.

The Relocation to Montreal

3. There is no doubt that the move to Montreal in Canada has had a significant impact on the work of the Institute. A major focus of the UIS activities over the last two years has been the planning and co-ordination of this move. Given that only six
established staff moved from Paris, significant resources had to be devoted to the lengthy and time-consuming process of recruiting 36 new staff. New staff started to join the UIS as from 4 September 2001.

4. In many ways this last year, with the relocation and the resultant substantial change of staff, has marked a new start for the UIS. However, the loss of institutional memory has inevitably affected the work programme. So too has the complete change of I.T. system, exacerbated by the fact that no Professional I.T. staff moved from Paris to Montreal and that the custom-made software had been inadequately documented in the past. Over the last year, numerous agencies and specialists have been supplied with data on an individual basis, but this is time-consuming and not sustainable in the longer term. Thus the UIS recognises that, as a priority, resources must now be devoted to the design of data access systems which cater for a wide range of users.

**Education data**

a) Education Survey

5. A new education survey was implemented by the newly established Institute. The first round was conducted in 2000 and a number of publications ensued. The data collection and editing for Survey 2001 were completed by 30 June 2002. Questionnaires for Survey 2002, for data pertaining to the school year 2000/01, were distributed in March 2002. The survey teams are making major strides in catching up the lost time, and it is expected that by the end of 2002 both the data from 1999/2000 and the data from 2000/2001 will have been processed. This will allow Survey 2003 to be sent out in January 2003, some two months earlier than in 2002 and the UIS is examining ways in which the timeliness of data can be further improved in the future. To provide electronic access to a wider range of data the UIS is currently redesigning its website.

b) Workshops to strengthen partnerships in education statistics

6. A third series of ten workshops gathering over 200 experts on education statistics from Ministries of Education all over the world began in March. The workshops, financed by the UIS and organised in cooperation with local partners, are an essential part of the collection of global statistics for the monitoring of the state of education in the world, including the progress towards the goals of Education for All.

7. The first two series of workshops (held in 2000 and 2001) established networks of national statisticians, reviewed international classifications and definitions required for cross-national datasets and set initial goals for the production and dissemination of education data and indicators. These two series of workshops were particularly valuable in increasing response rates not only to the survey but also to the data items within the survey. For example, the first education survey implemented by the UIS received responses from 167 countries whereas the last survey conducted by the previous UNESCO Division of Statistics had received only 97.

8. The challenge of the current series of workshops is to assess the quality of the data and indicators received from countries in the first UIS surveys and to work with national statisticians to plan and build capacity for the development and improvement of core national data. The workshops, whose participants are statisticians and planners
from Education Ministries all over the world, have the overall aim of improving the quality, timeliness and international comparability of education statistics. They have also proved to be an excellent medium for discussing regional concerns, and working together to produce regional publications.

9. During each workshop, one day has been devoted to planning for monitoring of Education for All (EFA). EFA Coordinators have sat down with the statisticians and planners from their own countries to discuss policy and the consequent data needs in monitoring education goals in EFA national action plans. The workshops represent an important conduit by which international proposals for indicators and measures of EFA progress can be discussed with national statisticians and EFA Coordinators before they are adopted in the global EFA monitoring process.

10. The Institute has encouraged the participation of other organisations in the workshop programme. For example, the World Bank, the Summit of the Americas Indicators Project and Caribbean Regional Educational Management Information System participated in the Caribbean workshop. UNICEF, IIEP and the Open Society Institute participated in the Central Asia workshop. The workshop in Bucharest is organised and administered jointly with EUROSTAT, to be joined this year by the European Training Foundation. EUROSTAT and UIS cooperate on the collection and processing of basic education data from the European countries.

11. The UIS participates in workshops organised by the OECD for its Member States for several reasons: the collection of basic educational data is a joint activity; to keep informed of major initiatives in the field of educational statistics such as measuring student achievement, school functioning, transitions into the labour force; and to examine their potential application to non-OECD Member States.

c) World Education Indicators Project (WEI)

12. The UIS has played an increasingly active role in the joint UIS/OECD World Education Indicators project. During the most recent National Coordinators’ meeting hosted by Argentina in March 2002, representatives from WEI countries discussed past and future activities, including the new WEI analytical publication. They also reviewed the final reports of the eleven site visits held for the Finance Comparability Study between September 2001 and January 2002 which have improved the quality of the finance data and the understanding of finance mechanisms for education by both OECD and UIS staff.

13. The third joint UIS/OECD WEI report to be released in October 2002 analyses comparative indicators and national policies related to human capital and economic growth as well as public and private roles in educational provision. It also provides an update of WEI core education indicators.

14. National coordinators have noted the increased attention being paid towards education quality which has led to stronger demands from policymakers for information collected directly from schools, especially about learning and teaching conditions. School surveys are increasingly used in WEI countries as a method for obtaining timely information about how schools work. The UIS is compiling information on policy priorities and existing school-based data collection in the twenty
WEI participating countries. These results will help countries to evaluate the feasibility of a proposed school survey that would yield comparable results across systems. The UIS will host a meeting of WEI national coordinators in Montreal in late September to reach consensus on the policy issues to be addressed and the methods that will be used in the study.

15. In conformity with the conditions of the funding provided by the World Bank (which largely underwrites the WEI programme), an evaluation was conducted by an independent consultant. This evaluation was extremely thorough and is proving very helpful in guiding future work.

d) Latin America and the Caribbean

16. The Institute is cooperating with the Summit of the Americas Indicators Project (PRIE) and UNESCO Offices in Chile and Jamaica to build statistical capacity in countries in the region. In addition, the Institute provides data and indicators to PRIE for their reports to Ministers of Education.

17. The capacity building programme to date has included on-site consultations by international experts in five Caribbean countries for the purpose of assisting local statisticians evaluate data sources, providing guidance on the use of statistics and indicators to satisfy national and international information needs and identifying data gaps and formulating plans to eliminate them. Similar site visits have been requested by most of the remaining countries in the region and they are scheduled for completion by the end of 2002. The programme has included a training module for regional statisticians so that future technical assistance in the education statistics field can be accommodated within the region.

18. The UIS has also supported the PRIE project in a successful application for DGF funds from the World Bank for the project in 2002 and 2003. In addition the UIS has provided funds under contract to the UNESCO Sub-regional Office in Kingston, Jamaica for capacity building. The UIS is very grateful to the US National Centre for Education Statistics for their contribution of statistical expertise to this work.

19. The UIS was represented at a workshop organised by the UNESCO Santiago office in Brazil in July on the “Use of Knowledge and Information to Improve Decision-Making in Education”. The unique combination of participants at this meeting (representatives of all levels involved in educational policy: school directors, researchers, evaluators, statisticians and policy planners) resulted in very insightful discussions about the production and use of educational information. The UIS benefited by gaining a better understanding of the dynamics behind the production and use of educational data and of the necessity to target statistical capacity building efforts.

e) EFA consultation

20. A priority has been the establishment of strong consultative foundations to ensure that the Institute will be able to fulfil the important role of the EFA (Education for All) Observatory entrusted to it in Dakar. An expert group convened by the UIS in June 2001 reviewed the 18 indicators developed for the 2000 assessment in order to make recommendations concerning those to be retained, those to be modified and those to be dropped and to address the need to develop new indicators. A report produced by
the UIS accepts the expert group recommendations to retain the pre-existing Jomtien indicators and considers proposals for further indicators development in ‘new’ areas of the Dakar goals such as ‘life skills’. The report (available on the UIS web site) has been circulated to EFA co-ordinators and other interested parties, and was used as the basis for discussions at the annual workshops.

21. Preparation for the second annual monitoring report for EFA has been a major task for the UIS. A first draft of the UIS contribution to the report, including analysis of global progress towards each of the six EFA goals, was sent to Paris in July to inform the discussions of the EFA Working Group and is now being redrafted.

**f) Literacy statistics**

22. Based on the latest literacy statistics from national population censuses, an update of UNESCO literacy estimates and projections was completed in February 2002. These have been released on the UIS website, and provided to the World Bank, UNDP, UN Statistics Division and other relevant agencies for dissemination in the forthcoming World Development Report, Human Development Report, UN Statistical Yearbook. The UIS is incorporating these data in the EFA Monitoring Report 2002 and in a new edition of the Compendium of statistics on illiteracy.

23. In collaboration with the Adult and Non-formal Education group at the World Bank, consideration is being given to the development of a robust and easy-to-apply literacy assessment methodology and the establishment of good practice in order to improve the quality of information on literacy. Funding support is needed for developing and pilot testing a methodology that can be easily adapted and implemented cost-effectively in less developed countries.

**g) Use of household surveys**

24. As part of ongoing cooperation with USAID, UNICEF and FASAF (Research Network on Family and Schooling in Africa), the English version of a Guide to the analysis of education data from demographic censuses and surveys has been prepared. It will be widely disseminated in order to promote the systematic analysis and use of household survey data on education and literacy. The next stage will include developing guidelines for the better use of household surveys to collect information on education, culture, communication, science and technology.

25. UIS staff have been actively involved with partners, such as USAID/Macro International, UNICEF and the World Bank in promoting the use of better quality education indicators derived from household surveys. UIS has taken part in two meetings in 2002 to examine the advantages and limitations of survey data and the potential for analytical work across institutions. Two working papers will be released in late 2002, one on progress towards international education goals in 16 countries using cross-sectional surveys over time; and another on issues related to the measurement and interpretation of education indicators based on survey data.

**h) Statistical Capacity Building**

26. The demands for assistance in building statistical capacity are immense and without significant additional resources, the UIS can only have a limited impact. Actions are required to put in place a team to develop a capacity building strategy, to
connect the strategy to those of partner agencies, and to organise its implementation. The UIS envisages that developments to this aspect of its work programme will be made in close co-operation with the UNESCO Regional Offices and with other international and regional agencies.

27. In addition to the regional workshops, UIS is supporting sub-regional programmes in the Arab States and Latin America and the Caribbean to develop education indicators and to incorporate educational management information systems. Direct technical advisory services are being provided to Nigeria in the ongoing Baseline2002 education survey and modernisation of the Education Data Bank.

28. The Association for the development of education in Africa Steering Committee met in March and endorsed the NESIS (National Education Statistical Information Systems) work programme for the next three years. During 2002 NESIS has held several capacity building workshops. A new module is being developed to help national statisticians work with the press, and the non-formal education working group has made good progress. In addition to the support for capacity building efforts in Latin America and the Caribbean noted above, the UIS has also obtained DGF funds from the World Bank for capacity building activities of UNESCO Regional Offices in Chile and in Beirut.

i) Distribution of literacy skills among youth in non-OECD countries

29. Following the completion of the OECD Programme for International Student Assessment (PISA) which involved most OECD Member Countries and whose results were released in December 2001, 12 non-member countries of OECD fielded the PISA instrument in 2002. The survey is designed to assess the literacy performance of 15-year-olds, and collect information on a host of individual, home and school factors that can affect the acquisition of literacy skills. The results of PISA 2002 will be examined in a joint UIS/OECD report.

30. UIS hosted a workshop for PISA national coordinators and data analysts from participating countries in February in Vienna to collect their views on national and regional reporting and discuss the possible content of the report. The report will be released in June 2003.

j) Building capacity in analysing complex survey data

31. Planning has begun for two training workshops to be held by the UIS, one in November 2002 and the other in March 2003, for four Latin American countries — Argentina, Chile, Mexico and Peru — that participated in PISA. The goal of the workshops is to train the analysts from these countries in using advanced statistical methods to analyse their national PISA data on issues of high policy priority. The participating countries have agreed to commit staff time and resources to ensure the release of the national reports.

k) Developing Non-formal Education Management Information Systems

32. Responding to the need for information on educational activities which take place outside the formal school system, the UIS is cooperating with the UNESCO Basic Education Division, the Asia-Pacific Cultural Centre for UNESCO (ACCU) of Japan, and selected Member States in launching pilot projects to establish management
information systems for non-formal education and to field-test concepts, methodologies and software applications for the collection, processing, analysis and dissemination of information on non-formal education.

33. Pilot projects are being implemented in Tanzania, Cambodia, and India to organise NFE monitoring teams, to adapt preliminary model instruments and databases to national needs and situations, and to begin collecting and processing NFE data. Besides providing feedback for use by the UIS in improving the applicability of the international methodology and tools for monitoring non-formal education, these pilot projects will help to build NFE monitoring capacities and systems within the pilot countries. With this dual objective in mind, additional countries might be included in the pilot if there are adequate national commitments and donor funding.

l) Early Childhood Education and Care indicators

34. In order to monitor progress towards the Education for All (EFA) goal of 'expanding and improving comprehensive early childhood care and education especially for the most vulnerable and disadvantaged children', the UIS is collaborating with the UNESCO Basic Education Division and other relevant agencies in developing and field-testing innovative approaches and methodologies for the collection of data on early childhood care and education, and for the production of policy-relevant indicators. Five countries (Cambodia, Viet Nam, Kazakhstan, Kyrgyzstan and Tajikistan) have agreed to implement pilot projects aimed at collecting data on different aspects of early childhood education and care. The resultant methodologies will be field-tested in additional countries and developed into guidelines for wide dissemination. The pilot project in Cambodia has started, but funding for the other pilot countries has yet to be found.

m) Developing comparable indicators on teachers and the teaching force

35. This study will improve comparative indicators about teacher training and qualifications. It will project the number of qualified teachers needed to meet development goals for primary enrolments and to extend learning opportunities at the secondary level; and will survey policy problems and innovations related to teacher deployment. A comparative database is being compiled describing national training and qualification standards and the general characteristics of national teaching forces, based on responses to a UIS “quick” survey. This will provide a global picture to aid the interpretation of existing data and to improve comparable indicators. Initial results will be released in three research briefs as part of World Teachers Day on 5 October 2002. UIS staff have taken part in meetings related to teacher indicators held by the OECD and the World Confederation of Teachers in preparation for this work.

n) Cross-national assessments of knowledge and skills

36. Some of the world's leading experts on international student assessment attended a meeting convened by the UIS in Montreal in May 2002. The aim was to open a dialogue among the different regional and international assessment initiatives and to look at ways to assist countries in deciding between assessment approaches and the associated human and financial resource implications. A report of the meeting will be issued in the near future and discussions held on follow-up activities.
37. The UIS is currently commissioning a series of studies on international assessment results, focusing on middle and low-income countries and on a range of issues (e.g. gender differences, impact of social background on achievement). The results will be published in 2003.

CULTURE & COMMUNICATION

a) A new programme for culture and communication

38. The current culture statistics programme covers the areas of book production, libraries, museums, the press and films & cinema. The UIS is undertaking a comprehensive inventory and evaluation of the present cultural statistics programme and worldwide consultation to feed into a new programme for 2003/4. Several meetings have been held with the users and producers of cultural data to gather their data priorities and to seek collaboration for UIS work.

39. As input to the development of the programme, the UIS is jointly coordinating a three-day symposium with Québec's Observatoire de la culture et des communications in October 2002. The purpose is to identify cultural policies which might be informed by relevant cross-national data, in order to help establish priority areas for the Institute's culture statistics programme. About eighty researchers and policy-makers from academia, other international organisations and national agencies will present papers on a range of aspects of cultural policy and give their views on possible future data collection.

b) Measuring cultural practices and consumption

40. Jointly with UNESCO's Culture Sector and sponsored by the International Fund for Cultural Practices of the Ford Foundation, the UIS is involved in the development of a sample survey on cultural practices and consumption to be launched in several Member States. The UIS is collaborating in the methodological work, including questionnaire and survey design, indicator development and analysis of results. The development is taking place throughout 2002, with a launch of the survey in 2003.

c) Developing new communication statistics programmes

41. The UIS is also carrying out a fundamental review of statistics in communication, by examining existing indicators and the development of new ones. The UIS team members are currently involved in three main activities:

(i) Collaboration with CIDA, ORBICOM and other groups involved in the Digital Divide Index Project in the proposal of a framework and the definition of a set of broad and comprehensive indicators which attempt to measure the divide;


(iii) Collaboration with the Communication and Information Sector in Project B@bel, to investigate the issue of language use on the internet;
SCIENCE AND TECHNOLOGY

42. A fundamental review of science and technology statistics and indicators was initiated by the UIS in close co-operation with the UNESCO Division of Science Analysis and Policy and the Regional Office for Science and Technology in Latin America and the Caribbean. The review aims to help UNESCO identify the priority policy information needs in science and technology for different parts of the world. An additional focus is to define a strategy to improve the availability and quality of science and technology statistics especially in developing countries. The overall goal is to set standards in order to improve the policy relevance of science and technology statistical systems. An Expert Meeting in Science and Technology (S&T) statistics was held in Montreal in April 2002, to discuss developments taking place across the world in S&T and the possible statistical requirements to track these changes. International partners, including representatives from both the OECD and EUROSTAT played an active role in the meeting.

43. A consultative document, drafted by the UIS to guide the discussions, was debated and subsequently revised for circulation to elicit the views of national policy makers and researchers concerning the changing environment in science and the consequent data needs. The UIS has designed the strategy and the survey instruments for this consultation which began in August 2002. A second meeting will be held probably early in 2003, in order to help the UIS develop a data collection strategy for science in the light of feedback. Meetings might also be held with science statisticians in different countries to discuss the translation of policy into data needs and the implementation of data strategies but such meetings are dependent upon the availability of funds.

44. The world and regional estimates of Research and Development personnel and expenditure have been updated and incorporated in a new version of 'The State of Science and Technology in the World' which will be posted on the website of the Science Sector of UNESCO. The UIS participated in the NESTI (National Coordinators on Science and Technology Indicators) meeting organised by OECD in June 2002, and gave a presentation regarding the international review of science and technology statistics. Discussions were held with the counterpart officers in OECD and EUROSTAT regarding further cooperation in this review and in the collection and sharing of science statistics.