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The sad story of UNESCO's education statistics

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1. Executive summary¹

Forty years ago UNESCO was the conduit for state-of-the-art statistical techniques. It was the world's most reliable source of cross-national education information. It attracted some of the best and brightest statisticians. Then UNESCO was a world leader. But progress on education statistics has bypassed UNESCO. Today, its technologies are antiquated; its techniques are motivated by tradition rather than response to demand or by innovation. By the standards of trade, agriculture, health and banking, and other sectors, and by the standards of other institutions in the field of education, UNESCO data must be treated with caution or worse, they must be assumed to be untrustworthy. Consequently, it is possible that the results of research on education and economic development by the World Bank, as well as the many academic institutions using UNESCO statistics, are

unreliable². The world has truly disarmed itself with respect to education statistics. This note is a personal perspective on how it happened and what is necessary to change it. It has three sections covering: (i) the origins of UNESCO's statistics function; (ii) the problems and dilemmas of the 1970s and 1980s; and (iii) the prospects for future rehabilitation.

2. Origins

Education was among the first fields classified at the International Statistics Congress in 1853 in Brussels. Afterwards, it was the subject of many reports and papers of the International Statistics Institute. However, these reports remained ad hoc summaries of national and local publications compiled by individual scholars. Unlike labor, education was not included in the League of Nations. The first attempts to cooperate internationally in education were sponsored by the International Bureau of Education (IBE) established in 1929. Among its first members were Ecuador, Egypt, Spain, Czechoslovakia, Poland, the Canton of

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¹ I would like to express my appreciation for the many in depth conversations on UNESCO problems with staff at all levels, both senior and technical. In particular, I would like to express my appreciation to Jacques Hallak, Colin Power, Françoise Reviere, Geraldo Nascimento, John Smyth, and Wadi Haddad. The problems of statistics in no way reflect badly on the dedication of UNESCO staff.

² Standards for reliability and validity have been raised in the 25 countries which belong to the OECD and are therefore more trustworthy. On the other hand, the standards have not been raised in many of the non-OECD countries. The fact that there is no trustworthy standard of quality control within many non-OECD countries raises questions about all non-OECD education statistics.

Geneva, and the Institute of Education Sciences at the University of Geneva.

The first surveys of education covered pedagogy in normal schools, school self-management, and the influence of books on children's behavior³. Twenty-six countries responded to the IBE survey in 1929⁴. In 1932 the IBE published a report entitled 'The Organization and Public Instruction in 53 Countries', with a chapter on each country including a listing of major institutions. Countries were encouraged to bring their annual reports on education problems and prospects to an annual conference. Thirty-five countries responded to the invitation, the results of which provided information for the First International Yearbook of Education published in 1935 (Smyth, 1996, p. 2).

No attempt was made to summarize education statistics in any of the survey publications. In fact, a debate apparently ensued on the IBE Governing Board between Jean Piaget and M. Dottrens over the degree to which data from different countries could be compared. The former argued that education was culturally specific and though one could count schools and teachers using each country's definition, one could not adequately incorporate the differences between one country and another in a single comparative table.

However, in 1937, the first comparative tables appeared covering the number of primary and secondary schools, students, and teachers. This was the first official display of comparative education statistics, and represents the world's first successful attempt to overcome the natural reluctance to compromise on each nation's different definition of a 'school', a 'teacher' and a 'pupil'.

Following World War II hope for peace and international cooperation was very strong. UNESCO's original terms of reference reflect the hope of this era. The United States submitted to the UNESCO preparatory commission a proposal to establish an international statistical service on edu-

cation. The proposal was adopted at the first session of the General Conference and became a UNESCO program right at the beginning. The UNESCO statistical function had two basic purposes. One was to help set standards, including a minimum set of definitions, classifications, and tabulations of statistics on education and illiteracy. Among the first products of this very complex and politically difficult function were the first recommendations for the international standardization of educational statistics in 1958.

The second purpose was to collect and analyze data on education and publish the results openly and widely around the world. The terms of reference for this function were nested in the Universal Declaration of Human Rights, adopted by the United Nations in 1948. The first World Survey noted that:

For a full understanding of the goals humanity has set itself one needs to place beside the Universal Declaration a 'situation-report' on the present state of educational affairs—the purpose being constructive, to reveal the size of the task ahead, and not simply to reflect negatively on how far reality falls short of the ideal (UNESCO, 1955, p. 13).

This altruistic motivation behind innovation in education statistics helped to establish UNESCO as the premier education statistics institution in the 1950s and kept it at a peak of leadership in the arena well into the 1960s. As early as 1951 the 'Experts Committee' had proposed definitions for: compulsory school age population, school age population, government-financed school, government-aided school, independent school, school, class, grade, student, and teacher. Considerable progress was made in defining the distinctions between general and vocational education, first level (nursery) and (second level) elementary, third level (secondary), and fourth level (higher) education. By any measure, these agreements were a considerable achievement.

Problems remained in spite of these achievements, but many of the problems were described openly in UNESCO publications. For instance, no problem was more clearly recognized than the

³ This section draws largely on Smyth (1996).

⁴ These included: Argentina, Australia, Austria, Belgium, Canada, Czechoslovakia, Denmark, Egypt, Finland, France, Great Britain, Hungary, Ireland, Italy, Luxembourg, Norway, New Zealand, Palestine, Poland, Romania, South Africa, Sweden, Switzerland, United States, Uruguay, and Yugoslavia.

effort to establish a statistically acceptable method of cross-national comparability. In the 1955 World Education Survey, for instance, one finds this caution:

The table has many gaps and, even where figures are known, they are based on such varied procedures as to lack comparability. To improve the situation much more study and compilation are needed at the international level and also a great deal of concerted action by the nations to standardize their procedures (UNESCO, 1955, p. 15).

A similar problem was the measurement of adult literacy. Definitions of literacy varied widely. In some cases, literacy implied reading one specific language, but not another. In other cases, the definition was based on a ‘national’ interpretation without regard to its utility elsewhere. In still other cases, it was based upon a simple proposition, such as ‘can read’. In few cases was there a common standard for sampling, collection, and reliability.

There was apparently a considerable discussion over the measurement of enrolment. Because reliable data on the age-specific population were so irregular, and because the in-school data collection traditions were so varied, there was no reliable manner for finding out the number of children enrolled in a school by a specific age. One report noted that

The most complete measure of the education development of a country is to be found in the proportion of the child population actually attending school. This unfortunately, is rarely known; only a few countries report both current population and school attendance figures in detail by age. For the majority of countries, the nearest alternative measure that may be applied is the ratio of total school enrolment to the total child population (UNESCO, 1955, p. 16).

By 1955 great progress had been made ironing out common definitions of a school, a teacher and a pupil at both the elementary and secondary levels. Progress had been made on common definitions of vocational and general schools and government,

government-assisted, and independent schools. There was progress too on attempts to estimate the rate of enrolment and literacy. However, according to its own documentation, little progress could be reported on common standards for data collection, quality control, or data management. Nor was there much progress to report on the commitment of countries, now many newly independent countries, to invest in the improvement of their data management services. These then, set the stage for the next three decades (UNESCO, 1997).

3. Problems and dilemmas

3.1. Growth of education

At the time of UNESCO’s creation, about one child in three was enrolled in a school, but many new countries were created in the 1960s and among the first agenda items was the expansion of educational opportunity. There were 142 million students enrolled in schools in developing countries in 1960, 315 million in 1975, 621 million by 1980, and 937 million by 1990. Around the world today there are over one billion enrolled students. The number of teachers also increased from 40 million in 1980 to 51 million in 1990 (UNESCO, 1993). Currently, on any given day, approximately one out of four people in the world are attending or are teaching in a school or university. Textbooks and sales of other educational materials typically account for approximately two thirds of the profits of publishing worldwide. Education goods and services in North America alone constitute a \$200-billion/year industry, approximately a quarter of the world’s goods and services. Education and its ancillary services have grown exponentially. The problem is that the methods and techniques to measure this expansion, much less its effects, have not expanded.

In 1980 the World Bank Education Policy Paper pointed to problems of monitoring and evaluation of education trends and called for a new “strategy to formulate and implement education policy by gathering better information and by improving the institutional procedures for collecting, processing, analyzing, storing and retrieving data” (World

Bank, 1980, pp. 56–57). In 1983, the Education Department proposed an International Fund for the Improvement of Education Research (IFER). The idea for such a fund had to be abandoned, and 15 years passed before it could be revived⁵.

3.2. Problems of education statistics in low and middle income countries

In the 1980s, Latin American and African countries were preoccupied with fiscal crisis (Heyneman, 1990; Heyneman and Fuller, 1989). They watched as their ability to maintain education systems fell precipitously. Their ability to monitor their education systems fell in a parallel fashion. In some parts of Sub-Saharan Africa countries lost the ability to track enrolment, teacher salaries, and classroom materials. Counts were often less accurate in 1980 than they had been in 1960 (Heyneman, 1993a, p. 513). In 1960 the ongoing debate centered on school location planning, where new schools should be located. By 1980 the debate over new schools was less relevant, at issue was where current schools could be located (Heyneman, 1993b).

UNESCO's response to the crisis of quality in developing countries could hardly have been expected to match the challenge of the crisis at hand, but in the 1980s UNESCO was undergoing a crisis of its own. There was turmoil over alleged mismanagement, and a tendency to use UNESCO as a battleground for cold war politics. Both made achieving consensus on professional questions difficult. In the 1960s UNESCO's statistical office was able to offer country-by-country training seminars in which key officials could be brought to Paris for consultations on statistical procedures and guidelines. By the 1980s the office could barely manage the load of raw data from the explosion of member countries.

3.3. Problems of education statistics in industrialized countries

Problems of poor education measurement were hardly limited to developing countries. By 1980 few countries had access to a range of statistical measures any wider than had been developed by UNESCO in the early 1960s. In some ways this was not perceived as a problem. Political authorities sometimes treated education as a cultural not an industrial product. They looked upon the measurement of trends and progress as being relevant for industry and trade, but not education.

However, the 1980s was also an era of economic challenge in many OECD countries as older industries were threatened by foreign competition and unemployment rose. Worries about the quality of the labor force increased. Concerns were raised about economic competitiveness, but how could one answer the concerns without evidence of labor force quality? And how could one assess labor force quality without evidence of the quality of schools? It became evident in the 1980s that evidence of economic competitiveness required an answer to the question, how good are our schools?

One illustration of a country which began to recognize the weakness in its statistical base is the United States. With 50 states and territories, and 15,000 autonomous school districts, each with its own authority to set curricular standards, reward teachers, and manage facilities, there were as many statistical variations as there were educational authorities. The question of education quality could not be answered because there were few existing statistical measures to generalize across different education sub-systems. In spite of having a conservative party in the White House, with clear views on the limited role of government, there was consensus about the nation's educational statistical system. It was agreed that it should be improved and that it required a central public statistical agency to do it.

In order to debate the problem without entangling the answer in partisan politics, the National Academy of Sciences (NAS) was asked to play a role. From 1985 to the present, the NAS has played a quiet but effective part in raising the

⁵ 'Marxist academics' and at least one development assistance agency opposed the education research fund for developing countries. They argued that the fund represented the 'imperialist hegemony' of the wealthy countries and threatened the autonomy of developing countries because it proposed an international standard in education statistics.

right questions in a manner which has not threatened institutional or national autonomy.

The first report, released by the NAS in 1986, consisted of an analysis of the quality and managerial efficacy of the National Center for Educational Statistics (NCES) (Levine, 1986). The report explains why a nation—particularly a large and decentralized nation—needs to worry about its statistical system in education and what is required to successfully operate a modern education statistics system. The report characterizes the operations of NCES as wanting and its statistical measures as backward, and it proposes two important changes.

It suggests that a central agency, even in a decentralized education system, has the obligation to guarantee the quality of the statistical data which it disseminates, even if those data are collected and provided by autonomous institutions and political authorities. It holds the national agency responsible in the same way as one would for an agency representing health, trade, or employment. No longer was education information to be treated as a step-child to these other important public endeavours, rather education data were to be held to the same standards of excellence.

The NAS report also proposed that the NCES become an autonomous agency, independent of the US Department of Education, and that its director be classified as a ‘Commissioner’, similar to the Commissioner of Labor Statistics and the Surgeon General. In the US government, the virtue of a ‘Commissioner’ is that s/he is appointed for a fixed period of time and cannot be removed by either political party. A Commissioner is expected to be independent of the normal partisan fray, and to report findings without prejudice, as to their effects, directly to the public. It is clear how important it is to have an independent source of information on the nation’s health. One can think of the role of the Surgeon General in pointing to the dangers of tobacco, sexually transmitted disease and food contamination. The National Academy of Sciences conceived the functions of the Commissioner of Education Statistics in a similar vein. This image of professional rigor has helped move the importance of education statistics up the

agenda within the United States, and eventually elsewhere.

This first report, and the appointment of Emerson Elliot as commissioner, marked the beginning of a new era in two fundamental ways (Stroufe, 1995). The first was the manner in which agreement was reached to improve the statistical base. The federal government cannot order States in the United States into compliance. If states participate in an effort to improve statistical methods, they do so for their own reasons. Obtaining compliance without sanctions however, was realized by using a technique of ‘professional peer pressure’. One state would notice that its trading partners were suddenly collaborating with each other. It became only a matter of time for the collaboration to become general.

But comparison of one state or of one community with another within the United States is not sufficient to answer the question: ‘how good are our schools?’ For that, the answer had to be international. But how does one influence the demand for good data by authorities in other countries over which one has no control? The answer lay in the same technique developed earlier across the different states: by example, cooperation and professional consensus maintained not by a center, but by every cooperating participant holding each other to the new agreed standard.

To help approach this question of international statistical cooperation, the National Academy of Sciences established a Board on International Comparative Studies in Education (BICSE) in 1988. As with other NAS boards, members were drawn from universities, businesses, government, and education administration⁶. BICSE’s first

⁶ The board was originally chaired by Norman Bradburn (National Opinion Research Center and University of Chicago) and included: Joseph Alibrandi (Whittaker Corporation), Gordon Ambach (Executive Director, Council of Chief State School Officers), Roberto Fernandez (Northwestern University), James Guthrie (UC, Berkeley), Edward Haertel (Stanford), Morris Hansen (Westat), Daniel Horvitz (Research Triangle), Lyle Jones (University of North Carolina), Gaea Leinhardt (University of Pittsburgh), John Schwille (Michigan State), Floraline Stevens (LA School District), Judith Torney-Purta (University of Maryland), David Wiley (Northwestern), Richard Wolf (Columbia), and myself.

report, distributed in 1990, laid out what is called the 'Framework and Principles' (Bradburn and Gilford, 1990). The Framework consisted of a series of reasons why the United States (or any country) might wish to engage in comparative work in education, and discussed the kinds of studies which would be useful. These included the rationales for studies of academic achievement as well as a wide variety of educational questions using descriptive, qualitative, observational, as well as large-scale survey information. The fact that the list of recommended studies was so eclectic helped to overcome some of the misgivings of the academic community.

The Principles, however, were important in a more fundamental way. They consisted of a series of proposals for international standards in areas such as technical validity, research neutrality, sampling, access to schools, instrument construction and administration, analysis, reporting, and dissemination. Unlike textbook and other sources for these standards, in the case of BICSE they influenced the public agencies which financed US participation in international education activities, and hence, they influenced the institutions involved in international education research, particularly the Educational Testing Service (ETS) (in the case of IAEP), OECD, and the International Association for the Evaluation of Educational Achievement (IEA), as well as the participating countries.

The next BICSE report, published 3 years later, went well beyond the first report and outlined the necessary international structures required to put a larger and more professional agenda of studies into effect. It was called a 'Collaborative Agenda' (Gilford, 1993). Sections included problems of comparability across nations, financing requirements, and suggestions for improving the infrastructure of cross-national research. From this last part it could be inferred that the current international structure was inadequate and that it was in the national interest of many countries to improve it.

While BICSE was deliberating on the state of education statistics, the field of education statistics and international comparisons was exploding. From the first preparatory conference in 1987, the first results of the International Education Indi-

cators Project (INES) were presented in September 1991 (OECD, 1992). The number and variety of original indicators grew from 36 in 1991 to 51 indicators in 1994 (Heyneman, 1997d, p. 452). These represented ground-breaking work on common definitions and measurements of educational finance (Barro, 1995a, b, 1996, 1998), and a substantial expansion in measurements of educational processes, participation, and indicators of education research and development. The International Assessment of Educational Progress (IAEP) published its first summary findings in 1991 (ETS/IAEP, 1988) which reported on the academic achievement of 20 countries including the former Soviet Union, Slovenia, Mozambique, Jordan, and China. There was original and innovative work being created in the NCES in an effort to measure educational statistics not only across countries but across states (NCES, 1993, 1996). The purpose of this exercise was to compare the status of education in each of the 50 different states with other countries⁷. But none of these exercises was equal to the 8 year effort to organize the Third International Mathematics and Science Study (TIMSS) which emerged in 1998 as perhaps the largest survey in the history of the social sciences, and certainly the most carefully crafted international survey of academic achievement to date. The TIMSS has significantly influenced education policy and research with its academic achievement results from 45 different nations, pedagogical videotapes, case studies and curricular analyses (Heyneman, 1997c; Beaton et al., 1996).

What role did UNESCO play in these important statistical breakthroughs? There were important training and research and development efforts in the International Institute of Educational Planning, and there was a program of assistance through the National Education Statistical Information System (NESIS) financed by the Swedish International Development Assistance Agency (SIDA) beginning in October 1991. But the UNESCO role was

⁷ A week after this publication was released I offered a copy to the Minister of Education in the Russian Federation. He was delighted, and quickly wanted to know how to create a similar set of statistics for Russia, pointing out that some of the regions within Russia were as large as all of Western Europe.

marginal. Its dilemma had been put into place in 1990, as an outgrowth of the Jomtien, Thailand, Conference on Education for All. At that conference it was agreed that there would be universal access to education measured, not on the basis of school attendance, but on the basis of what children learned. There was no structure within the normal data gathering mechanisms of UNESCO to fulfil the promise of Jomtien, and those weaknesses became evident over time.

The analysis of the weaknesses of the current structures came in three stages. First was a paper commissioned by UNICEF and the Technical Department of the Europe and Central Asia Region of the World Bank for an analysis of the problems. The results of this paper were presented to a meeting of the BICSE in January 1993 and published in this journal in 1995. After a thorough review, that study had concluded that the statistics disseminated by UNESCO were too narrow, unreliable, and not easily accessible (Puryear, 1995). In part, the problem seemed to lie in the fact that the standards of quality for education had suddenly improved in many of the national and international agencies, including NCES, the French Ministry of National Education (Ministere Francais de l'Education Nationale, 1993), the Hungarian National Institute of Public Education (1997) (Monitor '95) among others, as well as OECD Indicators and IEA, but they had not improved in UNESCO.

It was taken for granted that a national agency would be responsible for assuring the internal quality control mechanisms of the sub-national agencies (within New York State for instance, or within New South Wales), unfortunately no such guarantee could be made by UNESCO. In essence there was no way to guarantee that the quality of statistics gathered in the Pakistani province of Punjab was equal to those gathered in Sind. There were no guarantees of timeliness, clarity of definition, sampling or administrative rigor. In 1998 there were still 71 countries without a measure of net enrolment, thus rendering cross-national comparisons of enrolment dubious. Moreover, definitions of literacy had shifted. While it was once acceptable to use 'completed 4 years of elementary school' as a proxy, or to ask a respondent whether s/he was literate, in the meantime, OECD countries

had developed a host of new performance-based measures of literacy with a range of scores to calibrate an individual's capability (OECD, 1995). In effect this shift in definition has rendered it impossible to compare rates of adult literacy across groups of countries, and even within non-OECD countries to compare rates of illiteracy with confidence.

Thus, by the 1990s it had become apparent that the world of education statistics was evolving into two unequal groups of countries. One group had agreed to work together to forge a common range of indicators and standards of excellence. Then there was a group of countries which, for all intents and purposes, except for special externally financed projects, had remained handicapped by the same statistical measures which had been forged by UNESCO in the late 1950s and which were now of deteriorating quality and reliability. It was also painfully evident, particularly in Latin America, Asia, Eastern Europe and Central Asia and some parts of Southern Africa which group of countries had the highest appeal in educational statistics. Countries were anxious to join the group where higher standards pertained.

The second stage of analysis came in the fall of 1994 at the invitation of UNESCO. It was clear to most observers that the system of education statistics gathering was broken. The question which remained was how to admit it within the realm of acceptable institutional protocol. In the end, BICSE was invited to study the problem on the grounds that the National Academy of Sciences was likely to be considered a more professional source than any bilateral or multilateral agency⁸. The BICSE report, released in 1995, was as much a shock to the international institution as the original report from the National Academy of Sciences report had been to the US government. It pointed out that only 1.2% of the UNESCO budget and 1.5% of the UNESCO staff were allocated to stat-

⁸ This report was supported financially by the Education Sector within UNESCO, all six regional authorities within the World Bank, by The National Science Foundation and by the US Department of Education. It marks one of the few examples in recent history of assistance from the US government to UNESCO.

istics; that the number of staff posts had fallen from 51 in 1984 to 32 in 1997⁹, that many were about to retire; and that for all intents and purposes one could contemplate moving the statistics function out of UNESCO altogether to an environment more conducive to quality and professionalism (Guthrie and Hanson, 1995).

The BICSE report concluded with a summary of the now recognized world-wide demands for better and more reliable statistical data, the principles and practices of a modern statistical agency, and a series of 'options' for the UNESCO statistical function. These options included: (a) raising its seniority within UNESCO¹⁰; (b) shifting it to the Education Sector (the main internal client); (c) placing it within an existing autonomous agency, such as IIEP; (d) forming a new autonomous statistics agency; (e) shifting it to another UN agency; or (f) inviting private vendors to supply the statistical services. The fact that the entire statistics unit involved only about 15 professionals and an annual budget of \$5 million suggested that the function could be shifted to any of the options with comparative speed and ease.

After some deliberation, UNESCO seemed to feel that the option of establishing a new and autonomous statistical institute was preferable to the others. This decision set the third stage of the process into motion.

The third stage has emerged in the context of the International Program for the Improvement of Educational Outcomes (IPIEO) sponsored in 1996 by the World Bank. This grant program has had three purposes, to assist countries hoping to partici-

pate in international education surveys through IEA, or educational indicators through OECD¹¹, and to assist UNESCO in establishing an autonomous institute of education statistics. Through the latter function an Advisory Committee was established and chaired by Wadi Haddad on behalf of the Secretary General. That committee sponsored a series of studies which led to the management principles intended to guide the operations of the new institute of statistics in the future. Those principles include: the autonomy of the director in somewhat the same manner as the Commissioner of Education Statistics within the United States; the rigor of data quality standards before dissemination; the ease of public access to data; and the intention of creating a variety of collaborative interest groups of countries with special demands for a wider variety of data as well as a higher standard of data.

4. Prospects for the future

How likely is it that the new statistics institute will fulfil the functions intended? The answer is not certain. There are several possible explanations for the inability of UNESCO to keep abreast of the changes in statistical services, and these may be relevant to determining the future of the statistics institute. One explanation is the fact that reliable

⁹ By comparison, the US Department of Education has approximately 3,000 professional staff. Of these about 235 are assigned to the research arm, the Office of Educational Research and Improvement. And of these, about 110 professionals are assigned to the National Center for Education Statistics, whose purpose is to monitor the progress and problems of the education systems across the 15,000 districts in the 50 states.

¹⁰ Education statistics in UNESCO was classified as an 'administrative function' and was managed by the same section, which manages personnel, office equipment and other administrative matters. Five years ago it was shifted to the Bureau of Programming and Evaluation. It will soon be shifted to the new International Institute of Statistics.

¹¹ A dozen non-OECD countries asked to participate in the World Bank assisted World Education Indicators Project. These included: The People's Republic of China, Malaysia, Indonesia, the Philippines, India, Pakistan, Argentina, Brazil, Chile, Jordan, Paraguay, The Russian Federation, Thailand, Uruguay. Only Pakistan was not able to complete the process in time. The other countries made sufficient effort to bring their statistics up to OECD standards, are now able to compare their education systems with many of the same education indicators of the OECD countries (OECD, 1998). The new data, and the new data standards allow for the following comparisons: net enrollments, educational expenditures, teacher salaries and incentives, intended and actual instruction time, and the allocation of managerial decision making between central ministry, district, school and classroom. The OECD education indicators now cover two thirds of the world's population. It is possible to suggest that because of this project, the state of the world's education statistics is healthier and more innovative than at any time since the 1950's.

statistics cannot be sacrificed to popular opinion. Items of the UNESCO budget are the subject of a popular vote at every General Conference; seminars may be more important to those voting. The question is whether there are foundations of the education enterprise, which should not be subject to trade-offs. Another explanation is the fact that there are wide regional differences in the demand for educational statistics. In the Latin America region, in particular, it has been clear that the demand is higher than elsewhere (McMeekin, 1998). The role of UNESCO regional offices is yet to be determined. It may be true, as in other international organizations, that conservatism and a lack of innovation in the center handicap the regional offices. Lastly there is the question of sectors within UNESCO. Today, the largest demand for statistical data originates from the Education rather than Science or Culture Sectors. The key to each of these three traditional internal problems is the inability to respond quickly and effectively to demand. That process is expected to occur with the establishment of the new institute. What is clear is that if the new institute does not rise to the challenge, there may be other institutions waiting to take UNESCO's statistical place.

5. Summary

The question of education statistics today goes well beyond the terms of reference of a single agency, or a single country. It is no longer a question of east or west, socialist or free market, rich country or poor country. These distinguishing influences have diminished over time, and fail to answer the question of what is right for the education profession at large. This new demand for increased professionalism on the part of the education sector will challenge the UN system and the staff who work in it (Heyneman, 1995, 1997a, b).

But it is also true that this new pressure to perform is constructive. The education community has bemoaned the fact that it often had lower status by comparison to other public priorities. It appears that the era of lower visibility is over and a new era has begun. What remains now is to see whether the education profession is able to fulfil the new

technical demands associated with its newly recognized importance.

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