



# Fulfilling the Promise of EFA

Building Decision-Makers' Ability To Effectively Use  
Education System Data to Improve Performance

Ed Kissam and Jo Ann Intili JBS International, Inc.

# EFA Framework-- A Tool for Monitoring Global Progress in Education

- The Education for All initiative was agreed upon at Jomtien 1990 as global initiative managed by UNESCO—with the EFA framework as an integral tool for managing the global multi-lateral initiative
- The initial framework was oriented toward “monitoring” but with useful design features for formative and impact-oriented evaluation
- EFA objectives were adjusted and 2010 Millenium Development Goals established in Dakar 2000 and subsequently was used as primary reference framework for EFA-FTI funding
- Key 2001 EFA Expert Group recommendations related to lack of EFA indicators of education quality, more emphasis on lifelong learning, and relevance of education to social context
- Paris Declaration on Aid Effectiveness (2005) and Accra Action Agenda (2008) shifted emphasis from donor to multi-lateral use of insights from monitoring and strengthened commitments to capacity-building in developing countries

# The Education for All Framework: Sound Design, High Hopes, Real Promise...

- A “balanced” matrix with multiple indicators— of access and participation, quality and equity, management (SIAP/ADB 2007)
- GER and NER—examples of access indicators, apparent and net intake rate, examples of useful sub-indicators
- Gender ratio as cross-cutting, “diagnostic” indicator of equity, subsequently exploration (e.g. EPDC, WB) of other dimensions of equity, e.g. rural/urban, ethnicity, socioeconomic status
- Inclusion of crucial measures of system performance—survival rates by grade, repetition rate, “transition rates”
- Focused indicators of inputs—public expenditures by grade, pupil/teacher ratio
- Standard analyses for comparisons to international benchmarks and trend analysis
- Enhancements by EPDC for strategic projections taking into account demographic dynamics and use of HH surveys for contextual data

# And a Tenuous Reality.....

- EFA indicators of education quality are inadequate—although recent research is clear that years of schooling is poorly correlated with poverty reduction, that learning outcomes count (especially in 21st century global economy)
- Bilateral and multi-lateral funding is driven by a narrow sub-set of national-level indicators (mostly access, mostly primary-level) and donor priorities (e.g. gender equity but almost never equity for ethnic minorities)—no surprise that EFA is seen as a funding not a diagnostic/action tool.
- Due to “external” focus, focused “actionable” analyses of EFA data (e.g. at provincial/district or school level) are non-existent or secondary, also there is little sub-group analysis (e.g. outcomes for 4th–6th grade girls, language minorities, small schools vs. large schools)
- Despite multi-lateral commitments, very limited investment in building developing countries’ organizational capacity to systematically collect education data, manage, and analyze it.

# As Well As Tenuous Foundations...

- Although UNESCO/UIS envisioned an intensive program of in-country capacity-building and developed a sound strategic approach, but needs assessment has been funded in only a few countries (e.g. Vietnam, Ghana, Uganda) and T/A intermittent
- Training and capacity-building follow-through has, at best, only reached central education administration—especially in data management, quality assurance, and analysis. Few EMIS audits
- Perceived (or real) pressures for “good results” have led to deliberate falsification in some cases while limited resources have led to arbitrary “guesstimates” by reporting units
- Regime change as well as inattention to contextual factors (e.g. drought), leads to data gaps or anomalies (e.g. Sri Lanka, Afghanistan, Pakistan)
- Internal conflict results in missing and/or inconsistent data (e.g. Afghanistan, Sri Lanka) or decentralized education structure leads to inconsistent data definitions (e.g. Pakistan)

# And Pervasive Data/Analysis Problems...

- Bureaucratic decisions have distorted data (e.g. Afghanistan's 1M+ students "attending" school but never present in class, current agrir teachers classified as "pre-service" not in-service)
- Poor data checking (e.g. 19,999 girls enrolled in a single school in Zabul Province, Afghanistan), lack of data-checking procedures such as cross-tabs, inattention to ratios (e.g. pupil/teacher), inattention to mean vs. distribution
- Flawed or missing contextual data (e.g. Afghanistan population projections based on 1979 census), typically missing data for computing input indicators (e.g. PCXE--% distribution of public current expenditure on education by level)
- Special initiatives seldom evaluated and, if so, evaluation design is usually oriented primarily to defined project objectives, marginally relevant and/or inconsistent with EFA or "bean counting", i.e. tracking activities with little attention to outputs or outcomes
- Focus on formal, not informal education systems, making data on adult literacy and participation questionable and undermining principles of learning across the lifespan

# Is EFA Worth It?

- Maybe—but only if challenges are recognized, acknowledged, and addressed. The current risk of spurious conclusions is very high and progress in building local capacity and utilization of EFA data minimal
- Challenge #1—Data on system performance must be analyzed in order to be useful and analyses must provide visible basis and benefits for action. Analysis must be timely; and local authorities must understand and be prepared to make appropriate use of findings.
- Challenge #2—System performance data must be reliable. Bad data, bad analyses (especially re trends) lead to bad strategy and management.
- Challenge #3—EMIS must include relevant and reliable information on student learning outcomes. These must be presented in intelligible format if “market forces” and social networks are to be mobilized.
- Challenge #4—EMIS must be fine-grained enough to provide basis for engaging local stakeholders. Presentation must include comparisons of local performance to benchmarks.
- Challenge #5—EFA must be supplemented with information on nature of intervention as a basis for evaluation to contribute to progress

# A Prime Imperative: Move To Build Local Collaboration

- A broader vision of “data” including EMIS indicators built on student, parent, teacher, and community observation and opinion will strengthen commitment to securing “hard” data and provide a means of “triangulation” for quality assurance/audit
- Encouraging curiosity, engaging stakeholders (school managers, teachers) in question-posing, can decrease perceived “burden” of data collection
- Inviting questioning, discussion, and “questioning authority” strengthens capacity to use analyses in decisions, increase data quality assurance, and serve as the basis for engaging local stakeholders
- However, the full benefits of local engagement require substantial de-centralization and T/A— so local stakeholders have at least limited scope of authority to actually take initiative and do something to address issues.
- At the same time, EMIS yields less than optimal returns unless national decision-makers also pose questions where sound analyses can help guide strategy and management –to decrease disparities and build on instances of local success.

# Challenge #1 – Data Analysis

- Standardized reporting formats w/ breakouts of key performance indicators at provincial and district levels
- Standardized analyses of trends in key indicators including scatter plot and “best fit” line for regional/national analyses
- Standardized x-tabs of system performance in serving sub-populations of learners (beyond gender analyses)—urban/rural, language minority/majority, rich/poor (if contextual data is available)
- Targeted analyses—e.g. profile of students who drop out of school, linear vs. non-linear patterns of dropout
- Benchmarking analyses to provide a framework for performance expectations (e.g. range of pupil/teacher ratios, range of gender equity, transition from primary to secondary)
- Short-form “report card” with quick turnaround and subsequent in-depth analysis including caveats

# Challenge #1 – Examples of Initiatives

- “What could be done” training for local, district, provincial managers based on “what if” scenarios—e.g. decreasing “school survival” rates, decreasing transition from primary to secondary, low performance of rural schools - visualizing the potential benefits of using the analyses.
- Delivery of data extracts to provincial, district, local education entities and provision of basic computer training (e.g. Excel) to permit preparation of customized exploratory graphs, charts
- Follow-up with demonstration funding to implement good ideas and showcase results for different stakeholders and their concerns.
- Basic math remedial training to improve understanding of %’s, ratios, computed variables—as part of teacher and/or school manager training
- Basic training in “quantitative literacy”—understanding bar, line graphs, pie charts, tables with cross-tabulations. Possible train-the-trainer initiatives to familiarize community leaders/stakeholders

# Challenge #2—Reliability of Data and Analysis

- Standardized routines for data-cleaning—including review for outliers, cross-tabulation, distribution of values
- Review of disaggregated data—not simply national dataset but, also, by jurisdiction (province, district) to identify outliers
- Programs to audit data collection/submission (for administrative reports and/or surveys)
- Training and training support materials to address definitional issues inevitably encountered in administrative reporting
- Local dissemination of analyses/findings and public comment –both to build accountability (among report-preparers or surveyers) and to flag salient patterns—as potentially spurious or as bona fide issue to address (e.g. increased 1st grade enrollment, decreased primary-secondary transition)
- Critical examination of salient patterns (in both cross-sectional analyses and trend data) and estimation of error flags for reported/computed values—e.g. likelihood that Afghanistan’s alleged post-2003 increase in student enrollment is artificial

# Challenge #2— Our Afghanistan Initiatives

- Naumann/MoE Planning Dept. Internal “triangulation” of impact insecurity on school functioning in 4 southern provinces of Afghanistan (2007) based on 3 separate reporting streams (school survey, book distribution, administrative reports)
- Major disparities: schools in operation ≠ schools reporting teacher/student data, schools in operation ≠ open+closed schools. For example, schools actually operating were 51–69% of total depending on data source.
- Williams et al (2006)– Cross-tabulation of size of schools and teacher educational qualifications by range of grades taught at school as basis for planning in-service teacher training ( teacher “skills gap” much less severe than evident in national-level data)
- Naumann and Kissam (2006)—Analysis of patterns and causes of school dropout by grade and gender as basis for projecting need for adult/continuing education and/or school administrative reform. Additional analyses by Mansoori 2008, and MoE 2008
- Development of school survey training design and materials

# Challenge #3 Relevant Information on Student Learning Outcomes

- TIMSS and PISA have worked collaboratively with national stakeholders toward making testing cross-culturally fair—but very few developing countries participated.
- The UIS development of UNESCO’s Literacy Assessment and Monitoring Program (LAMP) is strategically and conceptually sound but not yet deployed. It has the potential of providing relevant information on lifelong learning initiatives.
- Our impression is that the curricula in most developing countries is terribly outdated (content which was “modern” circa 1955). Consequently there is a virtually unbridgeable gap between curriculum-referenced and criterion-referenced assessment.
- Should learning outcomes be referenced to the “skills learners need” (along the lines of SCANS, Equipped for the Future, OECD, the 21st Century Job Skills Partnership) or to antiquated curriculum content? Curriculum-referenced student assessment is probably inevitable—but marginally useful as guidance for strategic planning
- Meanwhile, locally-based non-formal assessment strategies (although imperfect) may be the most useful approach

# Challenge #3—Pilot and Possible Initiatives

- Grade 1–6 student assessment instrumentation (e.g. ALLS) primarily curriculum-referenced with supplemental assessment of key competencies not in curriculum (e.g. composition skills, word problems) yielding guidance in managing Afghanistan’s accelerated learning program—e.g. Student (and teacher) understanding relation of fractions and percentages
- Students’ own reports of skills developed and deployment of classroom-based learning—feasible and useful as tools for formative evaluation—especially when incorporating information on classroom experiences (i.e. the intervention)
- Community involvement and input to generate assessment strategies to address student learning related to issues of local concern not addressed in standard testing (e.g. student social/civic skills, practical deployment of foundation skills (e.g. mathematics in small local businesses or agricultural production); strategic planning.
- In-service training to teachers in assessing their own efforts based on observations of student behavior and eliciting feedback—possibly with school community peer observation a la WASC also

## Challenge #4–Fine–Grained EMIS

- EMIS must provide adequate detail for action—based on a broad education system logic model identifying anticipated failure modes or problems and “pressure points” for corrective action
- Assuming there is authority for decentralized management initiatives, analyses congruent with jurisdiction structure—province, district, school cluster or individual school
- In Afghanistan, for example, detail needed for 35 provinces, 440 districts, not for individual elementary schools (85% with 15 teachers or less), but perhaps for many secondary schools (65% with 25 or more teachers)
- EMIS configured to generate data to permit testing of hypotheses re school improvement strategy, e.g. attendance data if testing relationship between non-attendance and failure or drop-out, class size and individual student outcome measures if exploring class size or teacher preparation as factors in educational success
- Individual student records with core dataset of demographic/socioeconomic variable if exploring issues of equity

## Challenge #4— Beyond the EFA Basics: In-Depth Analyses and Supplemental Research

- Articulation of over-arching M&E strategy based on prior review of education system performance patterns. For example, EPDC analyses show family economic status is a particularly strong determinant of not being in school in the poorest countries (e.g. Ethiopia, Nigeria) and that urban/rural differences are also crucial (e.g. in Bolivia and Burkina Faso)
- Targeted evaluation initiatives to gain a full understanding of factors underlying priority education problems (e.g. low-performing schools in indigenous areas of Mexico)
- Investment in full-fledged evaluation of pilot and demonstration projects—combined formative/summative evaluation designs permitting both mid-course correction and overall assessment of cost/benefit ratio
- EMIS designed to support strategic utilization of longitudinal research generating data for pathway analysis approach of cumulative benefit of schooling and pathways to success or failure
- All evaluation initiatives to build on EFA analytic framework as core dataset

# Challenge #5 Fleshing out the Skeletal EFA: Data on Education Process

- The EFA framework is currently a sketch of a black box—data on inputs, data on outputs, the inner workings of the black box inscrutable
- Currently, EFA includes no or little information on classroom activities, the “engine” of student learning or attendance
- Without information on student experiences, satisfaction, and aspirations, the key developing country issue of student persistence, i.e. “school survival” is bound to remain a mystery
- Currently, little attention to “environmental variables”, i.e. social, economic, political context of schooling, but robust findings from research on complex dynamics of school attendance, societal norms, and private and public returns on educational investment (e.g. Kingdon and Soderbaum 2008— research in Pakistan)
- No attention to the critical issue of skills deployment—how well schools prepare students to use the “foundation skills” learned in the formal education system in the workplace, managing their lives, in civic affairs, thus no valid estimates of ROI

# Challenge #5—Few Examples of Proactive Efforts

- The tyranny of tabular data—cross tabulations, regression analysis, and other EFA-related data presentations show potentially relevant patterns of education system performance but micro-level data and analyses are generally considered a luxury or “too soft/subjective”
- Based in part on intensive evaluation of Oportunidades program (including data on student attendance) Mexico will extend financial subsidies to encourage improved attendance beyond primary school
- Evaluation designs for some USAID-sponsored workforce development programs (EDC 2007) show promise for fleshing out the full picture of how education contributes to individual well-being and country development
- Funder orientation toward “bean counting” discourages efforts to go beyond the basic EFA framework. The result is ceremonial allegations of success/impact but little solid evidence.
- Funder disinterest in the challenges of replicating “promising practices” or “model programs” discourages formative evaluation although routine incorporation of EFA indicators into evaluation research could genuinely contribute to “the field”.

# Summary Conclusions

- The initial EFA vision is sound—and the EFA performance indicator framework is technically attractive and would be better if the 2001 Expert Group recommendations had been implemented
- The World Bank focused on education quality more than a decade ago—but little has been done to extend the EFA framework
- Low data quality, missing data, and lack of organizational capacity to actually base strategy on sound evaluation research threaten the cost-effectiveness and overall viability of global education strategy
- Despite the rhetorical imperatives of the Paris Declaration/Accra Action Agenda, donors have moved slowly and erratically in using EFA as a foundation for evaluation/monitoring capacity-building in developing countries and even slower in enhancing it.
- The tragedy is that data quality improvement and broader civic engagement in systematically assessing education progress are feasible and affordable—but overly centralized educational bureaucracies have, despite lip service, refused to move to implement local initiatives based on inclusive, participatory evaluation.

# Selected References

- Behrman, Jere and W.R. Jr. Kenan, “Educational Sector Study: Pro-Poor Economic Growth-Effects of Policies and Activities” prepared for USAID, January, 2005.
- Birdsall, Nancy and Milan Vaishnav, “Education and the MDGs: Realizing the Millenium Compact”, Journal of International Affairs, Vol 58, No. 2, 2005.
- Cameron, Laurie. “Methodology for Evaluating Data Quality,” EPDC Working Paper WP-07-02, Washington, D.C.: EPDC, AED, July 2005.
- Education Development Center, “Jobs for the 21st Century: Synthesis Paper”, prepared for USAID/Asia and Near East Bureau, Jobs for the 21st Century Initiative, June, 2007.
- Education Policy and Data Center, “Education Data Quality Measurement: Report from a workshop”, January, 2009.
- Education Policy and Data Center, “Policy Brief: Making Progress by Targeting Underserved Populations” accessed 2/5/09 at [www.epdc.org](http://www.epdc.org)
- Greaney, Vincent and Thomas Kellaghan, “Assessing National Achievement Levels in Education”, World Bank, 2008.
- Hanushek, E.A. and L. Wobmann, “Education Quality and Economic Growth”, The World Bank, 2007.
- Intili, Jo Ann and Ed Kissam, “Planning, monitoring, and evaluation within the Ministry of Education: Strategic considerations and organizational recommendations” , Department of Planning, Ministry of Education, Kabul Afghanistan, 2006.

## Selected References (continued)

- Jimenez, Emmanuel and H.A. Patrinos, “Can Cost–Benefit Analysis Guide Education Policy in Developing Countries?”, Policy Research Working Paper 4568, The World Bank Human Development Network Education Team, March 2008.
- Kingdon, Geeta and Mans Soderbom, “Education, Skills, and Labor Market Outcomes: Evidence from Pakistan”, Education Working Paper Series #11, The World Bank, May, 2008.
- Kissam, E. and Craig Naumann, “Analysis of 2005 Afghanistan national school survey data on student enrollment in 1383 and 1384: Strategic planning, methodological and policy implications (Technical Memorandum #1)”, Department of Planning, Ministry of Education, Government of Afghanistan, 2006.
- Partners in Education Transformation, “Transforming Education: Assessing and Teaching 21st Century Skills”, January, 2009.
- Salmi, Jamil, “Constructing Knowledge Societies: New Challenges for Education”, *Journal for International Education*, 2:1 (2006).
- UNESCO, “Education for All Year 2000 Assessment: Statistical Document”, 2000.
- UNESCO, “EFA Global Monitoring Report 2008: Education for All by 2015–Will we make it?”, 2007.

## Selected References (continued)

- UNESCO Institute of Statistics, “Education Indicators: Technical Guidelines”, (no date)
- UNESECO Institute of Statistics, “ Education for All Indicators: Expert Group Meeting”, Paris, 25–26 June 2001
- Williams, S., et al., “Education service delivery system and facilities: Ministry of Education schools in 1384 (Technical Memo #4)”. Department of Planning, Ministry of Education, Islamic Government of Afghanistan, 2006.
- Wills, Annababette, “Window on the Future: 2025–Projections of Education Attainment and Its Impact” Education and Policy Data Center, 2007
- World Bank, “A Framework for Assessing the Quality of Education Statistics”, World Bank Data Development Group and UNESCO Institute for Statistics, January, 2003.