Gauging and Promoting Progress Toward Educational Equity

Systemic Challenges and Possible Responses in Afghanistan

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Traditional Concerns in Gauging Service System Performance… and 3 others!

- Reliability and accuracy of indicators — data quality, data analysis, and interpretation

- Relevance of indicators --to different components of overall logic model and strategy

- Actionability —how can and how will analyses of system performance be used to guide decision-making and planning?

- Analytic Resolution —are indicators constructed to adequately identify specific factors which affect performance and distribution of benefits (i.e. equity)

- Dissemination and use of analyses, insights gained, sharing of information on benchmarks, performance indicators, and conclusions re promising practices

Current Deficient Planning Approach

- Overemphasis on planning processes, not action
- Focus on committee membership and processes facilitate conflict, lack of continuity, and make coordinated initiatives difficult
- Generation, review of generic strategy plans siphon precious resources of time, energy, expertise needed for implementation
- Silos for planning, strategy, administration make follow-through difficult
- Current performance analyses inadequate for developing strategy and managing implementation
- Focus on gross enrollment numbers—not patterns
- Inattention to key facets of system efficiency (e.g. teacher turnover, student dropout)
- Inattention to student outcomes as the "gold standard"
- Little consideration of uncertainties in underlying data
- Inadequate data for key analyses (e.g. subjects taught by individual teachers—needed for XTAB by age and education)

Data Sources for Assessing Education System Performance and Progress

- Baseline data from RALS and MICS (2002–2004)

- 2003 National Risk and Vulnerability Assessment (Naumann, Kirby, Kissam–-late 2005)

- 2005 National Risk and Vulnerability Assessment (MRRD—mid-2007)

- 2005 National School Survey Analyses (Williams, Kissam, Naumann, Hernandez, Husting—May 2006- February 2007)

- 2006 School Reporting Data (MoE Planning Department—January 2007)

- Contextual data from a range of studies, sources (e.g. NRVA, CSIS)

- Additional insights from case studies and/or targeted evaluation regarding specific facets of system functioning—e.g. Mansoori on dropout, Ahmadi on TEP, AREU on administrative procedures, APEP evaluation, COPE on community-based programs

Specific Data System Constraints on Analyzing Performance and Trends

- Gaps In Contextual Data–Missing population data (only modeling), no data on student home environment, local weather, donations/in-kind from community

- Gaps In Education Data–Missing data for key variables due to infrastructure gaps and security problems (e.g. >9% in Kandahar, Hilmand, Uruzgan, Zabul), flawed/fabricated data on student attendance, teacher attendance, teacher qualifications

- Survey/Census Methodology –reporting by proxies: "the official story", likely to introduce systematic bias (small, remote school data under–reported or imputed), definitional problems

- Inadequate Instrumentation –e.g. no variables for grade levels and subjects taught by teacher, # shifts taught by teacher, students transferring in, students transferring out

- Data Management, Quality Assurance –Problems with unique school identifier linking disparate data sets, non–documentation of data cleaning procedures, out–of–range values in "cleaned" datasets, logical inconsistencies, interpretation of variables

Neglected Systemic Issues

- System Efficiency—Student dropout and repetition
- Variations in System Resources and Functioning —Across 35 provinces, 400+ districts, remote rural vs. urban areas
- Indicators than Gender for Equitable Educational Opportunity- e.g. minority-language and poor students
- Visualizing Student Outcomes -Curriculum-or criterion- referenced? For national reconstruction? For continuing education or labor market? Knowledge vs. skills? Learning to learn? Communication skills?
- Teacher Preparation and Deployment- actual skills and match to teaching assignments, class size, turnover
- "Internal School Community" —functioning of schools, instructional leadership, teacher recruitment and supervision, peer support
- Local Community Participation -- in evaluating, planning, and support to education programs
- Locus of Control for Key Functions —International donors? Kabul? Provincial and district officials? Local school managers?

Key Planning Issues For Immediate Attention

- Meta-Analysis of Available Data: How many and what kinds of students are in school and what have the actual enrollment trends been from 2002-2007?

- System Efficiency-Student Dropout: What are the human and financial costs and what kinds of responses might there be?

- Local School Context-Diverse Types of Schools: What are the implications for school management, efforts to improve instructional quality, and what opportunities for cost-saving?

- Diversity in Teacher Education and Experience in Relation to Functional Competencies: Implications for planning investment in in-service training, challenges, promising approaches and opportunities for cost-saving? Implications for training and textbook design?

- Community Involvement in Education What are the determinants of community support for education, opportunities for converting social/civic capital into financial and human capital? What are the current and possible future impacts of community involvement?

Enrollment: Meta-Analysis of Available Data Should Be A High Priority

- NRVA 2005 shows primary school (net) enrollment rate of 37% while MoE 2005 data suggest a 60% rate—a discrepancy of at least 1.6 million students. Is this an artifact of school record-keeping (due to mahroom)? This must be resolved.

- There seems clearly to have been a huge enrollment increase in April, 2002 but 2004-2005 data on 1st grade enrollment suggest rate of new entrants is flattening—to about 7%/year. Diagnosis is needed. Security problems do not adequately account for trends.

- Primary school enrollment appears to have increased by 17%--From decreased dropout? Are there entrants in grades 2-6?

- Lack of language, demographic, and socioeconomic data on students in MoE dataset but combining household and community-level contextual data from NRVA would generate some insights.

- NRVA and MoE estimates of proportions of female students in primary education system are roughly comparable--34% (MoE) and 38% (NRVA) of total enrollment. Longitudinal studies are now possible so as to examine factors affecting gender ratio.

Current MoE Enrollment Data: Limitations But Also Possibilities

- Standard EFA indicators of national-level education system performance related to enrollment (NER, GER, GPR) cannot be reliably computed

- Analyses focusing on provincial and even district-level patterns would be more "diagnostic" and contribute more to strategic planning than national analyses ("think globally act locally")

- For example, the female/male student ratio varies from .83 in Badakshan to .07 in Hilmand—a very large standard deviation. Strategic attention might be given to outliers and factors which might improve performance

- District-level comparative analysis of local school enrollment patterns by grade level and teacher qualifications could guide local investments in classroom construction, teacher training

Student Dropout:
A Major Problem Ignored

- At the start of 2005, about 5 million students were enrolled in Grade 1-12 "regular" schools but 17% —850,000 students-- were categorized as missing/ not admitted to end-of-year finals (MNAFE). Most are probably school dropouts.

- Are these really dropouts? Probably—but uncertainties: % taking and passing "2nd chance exam", % transferred in or out during term, % "drop-ins", discrepancies in reported initial enrollment for year and sum of passed+failed+MNAFE

- Primary school dropout ranges from 8% (Dai Kundi) to 24% (Kunar). Gender ratio of dropout also varies by province.

- Overall dropout increases from 17% in primary grades to 20% in middle school but subsides to 16% in high school

- Cumulative student attrition (EFA-"survival rate") is difficult to calculate in Afghanistan due to 2002-2003 enrollment bulge, entrance of "overage" students in higher grades

- School survey (reporting) design needs: % not admitted vs. "missed" % transferred in or out during term, % of initial school-year tally from other school vs. continuing, demographic and socioeconomic profile for individual students to analyze dropout (and other outcomes)

Student Dropout: Framing a Response

- Because dropout is about 5 times the "fail" rate it deserves priority attention if system efficiency is a concern

- There is need for enhanced instructional support for "at risk" students

- There is high need for current and future alternative/adult learning opportunities

- A dropout recovery campaign and improved alternative learning program options for over-age youth (e.g. classes in agricultural off-season) is another strand of response

- Better analysis of reasons for student dropout would help guide response. Some can be managed, some not, quantification of each would be useful

- Ideally, analyses of school performance would be at district-level (to be "actionable") and would examine pass, fail, and MNAFE jointly (to guard against possible artifacts—e.g. 99% pass rate in Nuristan, 88% in Zabul, vs. 66% in Herat, 72% in Kabul.

Local School Context: Implications for Strengthening Local School Functioning

- Two-thirds (67%) of all schools in Afghanistan are small to mid-size (<501 students) This has implications for efficiently training school management teams and planning teacher training and sustainable peer support

- About 12% of the schools offers Grade 1-12 instruction and 9 out of 10 of these schools are large "consolidated" schools— making the demands of managing them challenging but possibilities for peer support quite promising.

- In contrast, the 85% of the Grade 1-6 only schools which are small to medium-size have urgent management training needs—but training focus might be much more basic.

- Patterns of school size and grade taught vary from district to district and province to province—suggesting the need for diverse approaches tailored to different regions
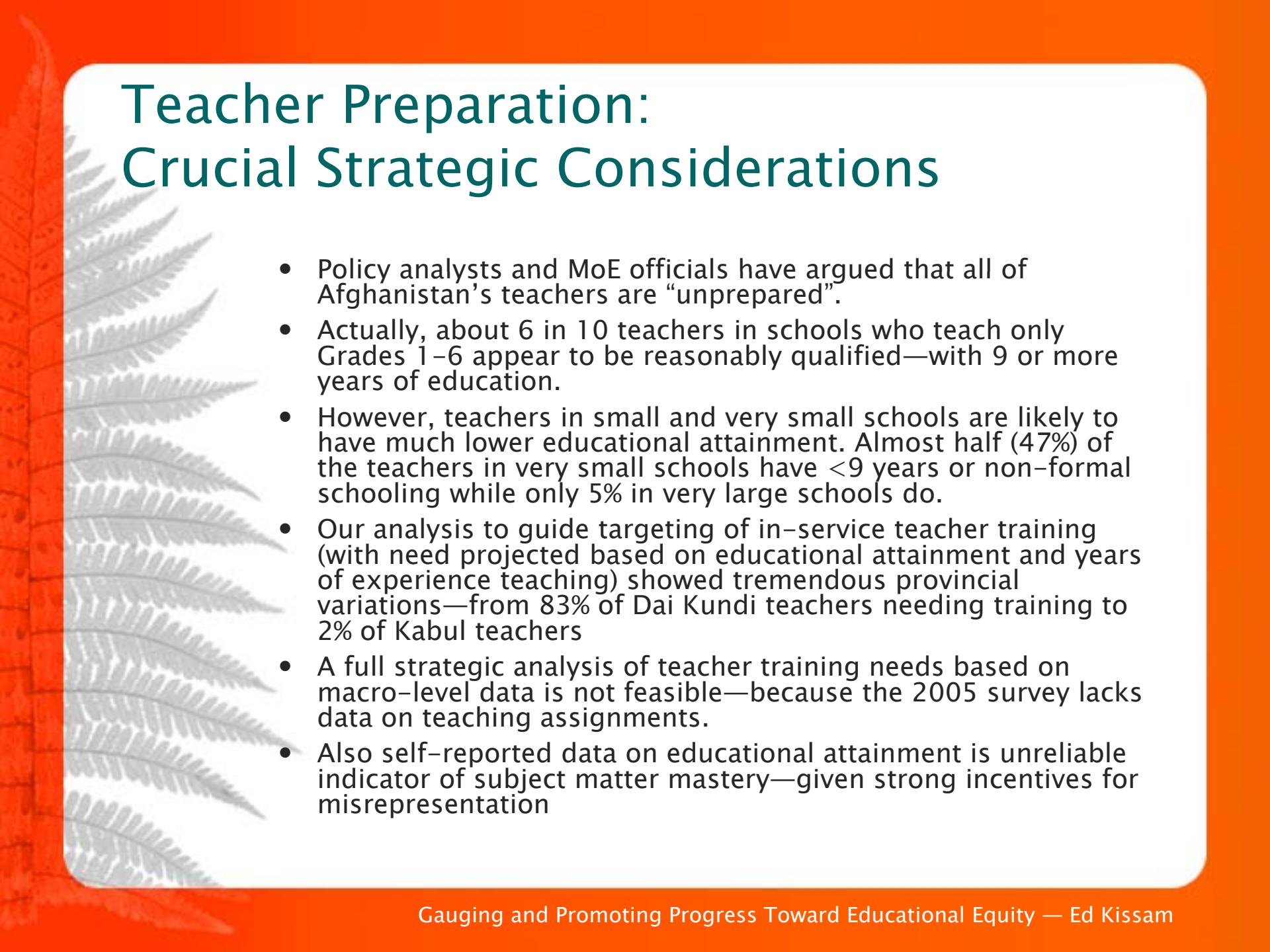
Teacher Preparation:
Crucial Strategic Considerations

- Policy analysts and MoE officials have argued that all of Afghanistan's teachers are "unprepared".

- Actually, about 6 in 10 teachers in schools who teach only Grades 1-6 appear to be reasonably qualified—with 9 or more years of education.

- However, teachers in small and very small schools are likely to have much lower educational attainment. Almost half (47%) of the teachers in very small schools have <9 years or non-formal schooling while only 5% in very large schools do.

- Our analysis to guide targeting of in-service teacher training (with need projected based on educational attainment and years of experience teaching) showed tremendous provincial variations—from 83% of Dai Kundi teachers needing training to 2% of Kabul teachers

- A full strategic analysis of teacher training needs based on macro-level data is not feasible—because the 2005 survey lacks data on teaching assignments.

- Also self-reported data on educational attainment is unreliable indicator of subject matter mastery—given strong incentives for misrepresentation

Teacher Preparation:
Practical Implications

- Given extreme diversity in teacher education/experience, a targeted local in-service training initiative follow-on to the current INSET I standardized orientation will be crucial

- Systematic and recurring assessment of teachers' competency is a crucial tool for effective in-service. Improvements in quality of instruction will only emerge when training is linked to teachers' actual learning needs (including those related to grade level and subject assignment), progress, and personal development goals.

- Developing teachers' ability to "diagnose" their own skills development needs, coupled with initial training in "learning to learn" skills and encouragement to pursue self-directed learning will be an essential component for effective initiatives to improve quality of instruction.

- Diversity also suggests a role for peer-based in service learning initiatives at local schools—since more experienced teachers can help less-qualified teachers (in specific subject areas or instructional technique).

- The model for large schools and smaller schools might be quite different—because teacher learning needs and teaching demands are partially correlated with school size

School Infrastructure and Education System Development

- Despite anecdotal accounts of school crowding requiring multiple shift operation, about two-thirds (70%) of Afghanistan's schools, operate only one shift, one quarter (26%) two shifts and only 4% operate three shifts.

- Nationally the average teacher: student ratio for 1 shift schools is not bad (1:39). However, it varies greatly by province ---from 1:26 to 1:66.

- There are, however substantial regional variations in school crowding. In Kabul, 33% of schools operate 2 shifts and 30% operate 3 shifts.

- Significant need for school construction persists—as evidenced by the fact that 28% of the nation's schools are in "temporary" facilities and 4% in rented facilities. Facility upgrades—drinking water, bathrooms, small libraries, play areas—are genuinely related to student well-being and, thus, learning.

- However, community inputs to the education system are substantial. About one-quarter of the nation's schools are housed in space provided by the local community (12% in mosques, 13% in other community-provided space)

Critical Challenge: Make Education Data Useful, Accessible and Usable

- Broader Participation in Decision-Making –Education planners and mid-level managers must be allowed to engage in data-driven decision-making to guide action (not just document creation, discussion)

- Analytic Problem-Solving-Decision-makers must learn to understand how considering the implications of patterns in data can identify problems and suggest strategic responses, but also to understand the limitations of available data

- Appropriate Analyses--Current national-level aggregate data analyses are of limited utility for guiding effective strategic responses which will be most effective if they directly address and respond to local conditions and needs.

- Breathing Life into Quantitative Data –Survey or school reporting data must be accompanied by micro-level research using qualitative methods— to interpret the patterns observed in the quantitative data analyses and to identify flaws in survey/reporting systems

- Making Data Locally Relevant--If data can be recognized as practically useful (locally as well as nationally) this may translate into improved survey design and more reliable data.

International Donors' Responsibilities

- More attention must be invested to make the EFA framework a useful tool for local and regional strategic responses—not just a source of cross-country comparisons for UN global reports

- Current attention to gender equity must be extended to other factors affecting education access and outcomes—minority language, rural residence, low family income

- More attention must be given to the specific ways in which educational outcomes can translate into economic progress, in individuals' ability to manage their lives, including lifelong learning, and improved civic life (e.g. skills thresholds? Linear or non-linear returns on investment?)

- International donors and T/A providers must themselves learn to look analytically at patterns in disaggregated data, assess the reliability of data collected and consequences of decisions made with imperfect data on a case-by-case basis

- International donors must go beyond bean-counting for reports to their superiors and themselves learn to interpret data analyses as the basis for "diagnostic" action.

National Education System Responsibilities

- Work across internal and external agency bureaucratic boundaries to focus on enhanced educational opportunities for learners and link student learning to national re-development

- Give attention to actual student learning opportunities and educational outcomes (as distinct from system inputs, throughput, and nominal outputs)

- Work diligently to open up learning opportunities for adults and school dropouts as well as school-age children, not restrict them

- Re-focus central administration role from "command and control" to responsive support to enhance local learning opportunities

- Focus remaining "command and control" efforts on crucial operational issues—e.g. assuring adequate hours of instruction per week, dropout prevention and recovery

- Deploy discretionary resources strategically to enhance quality assurance—support development of promising models and invest cautiously in strengthening weak performing areas and local schools

- Initiate, systematically assess, and replicate targeted, phased demonstration projects to test structured approaches to priority problems (e.g. dropout)

Planning:
Springboard for Strategic Action

- The MoE has the basic data collection capacity to track education system performance reasonably well.

- Survey instrumentation (or reporting requirements) must be designed to facilitate construction of "actionable" indicators to guide planners and policy-makers

- A priority at the current stage of system development should be to build the MoE Planning Department's ability to analyze and interpret data currently gathered

- Assessment of system performance must include attention to stakeholder perspectives (including students, parents, community leaders, employers, higher education institutions other Ministries—e.g. MRRD, Labor and Social Affairs, Health)

- The final two slides outline two immediate initiatives to be considered: # 1 meaningful assessment of student outcomes and #2 jump-starting local processes to enhance instruction quality

Initiative #1: Meaningfully Assess and Analyze Student Learning Outcomes

- Develop a curriculum framework which thoroughly articulates expectations/benchmarks for student knowledge and foundation skills outcomes

- Incorporate into the curriculum framework expectations re student learning outcomes for: civic, workplace, learning-to-learn, and life management competencies

- Pilot a baseline cycle of an Afghanistan Longitudinal Survey of Student Outcomes (ALSSO) for criterion-referenced assessment of typical student knowledge/skills at least at the end of Grades 3 and 6. Revise and continue annually to generate trend data.

- Assure that the ALSSO survey design elicits key contextual information needed for analyses of student outcomes— e.g. school experiences, attendance, home environment, demographic and socioeconomic characteristics, student dreams and aspirations.

- Utilize ALSSO-based analyses of student outcomes to help guide efforts to rationalize and enrich the currently disorganized curriculum (particularly in the core areas of math and language arts) and target teacher training (e.g. math and science)

Initiative #2: Nurture Local Schools To Assess And Enhance Instructional Quality

- Train and provide ongoing support for teachers in reflectively assessing their own performance as guidance for their self-directed and peer-based skills development

- Train school principals to better assess their teachers' performance so as to inform supervision and teaching assignments

- Train local school management teams to coach teachers in ongoing skills development and to provide "safe zones" for teachers to communicate their learning needs

- Pilot strategies to engage community volunteers willing and able to complement the work of regular teachers (e.g. as tutors, team teachers in challenging subjects such as science, math)

- Provide seed/matching funding for local community efforts to develop modest libraries and buy instructional materials.

- Pilot a range of strategies to engage local community leaders in substantive observations of classrooms and student instruction

- Develop a phased approach to gradually building local community school oversight—beginning with basic accountability and proceeding to increasingly demanding assessment and feedback