Trying to Learn from Complex Education System Reform Processes: Guideposts for Navigating Political Waters from Case Studies

Alec Ian Gershberg, Public & Urban Policy Program, The New School

Background to this discussion

Grown out of a review for a DFID-funded project – Education Data, Research & Evaluation in Nigeria (EDOREN), Oxford Policy Management, Shefali Rai

Overarching goal: Originally, identify policy ideas for the new Nigerian government, trying to braoden

Lant roped me into this as a pinch hitter ("update on Nigeria work….")

Methodology: comparator countries

- Examine South Africa, Brazil, India and Indonesia to draw lessons for Nigeria.

- All are large, low/middle-income countries in which sub-national tiers of government play a major role in the education sector ("Federal").

- Like Nigeria, all four are major emerging markets facing the challenge of ensuring that their education systems are able to generate the skills required to sustain growth.

- For each, look at reform episodes over the past 25 years that

  – have been undertaken at the "federal" level, and

  – encompass changes to multiple aspects of education policy and delivery.

  – Focus on particular elements of the reform episodes considered most relevant to Nigeria.

The comparator countries

Country	Reform episodes	Elements of reform that have been focussed on
South Africa	Post-apartheid education reforms	• Various aspects of education financing including the equitable share formula and fee exemptions • The role of school governing bodies
India	1. District Primary Education Programme (DPEP) 2. Sarva Shiksha Abhiyan (SSA; Education for all)	• Community involvement in school management • District-level planning • In-service teacher training • The use of contract teachers • The education management information system
Indonesia	Post-Suharto Reformasi (reformation)	• School-based management • Teacher allowances, certification and teacher distribution • Islamic schooling system
Brazil	1. Fernando Henrique Cardoso's reforms 2. Luiz Ignacio Lula da Silva's reforms	• School financing: FUNDEF and FUNDEB • Division of responsibilities across different tiers of government • Student assessments • Curriculum reforms

The Nigeria reform episodes: two reforms: Universal Primary Education (UPE), and the on-going Universal Basic Education (UBE) Programme.

Key theme: what qualifies as 'rigorous evidence' when analysing system-wide reforms?

The backdrop

- Growing use of RCTs and quasi-experimental studies to identify what governments should do to improve education outcomes
- Specific interventions vs systemic factors
- Implementation and political economy of reform

How to strengthen the performance of education systems?

- RCTs are often too narrowly focussed or hard to scale up (Kenya)
- Can an accountability framework help with this?
- Is this a credible way to assess reforms, and to draw 'lessons' from the experiences of other countries?

System, therefore system analysis (Thanks to Luis Crouch)

- One useful def:
  - <u>Boxes</u> (functions, such as assessment, teacher coaching, setting standards for books, etc.) linked by <u>arrows</u> (flows of information, control/accountability, and money)
- Many ways to lay it out:
  - Can focus on functions and layers of government, can focus on actors
  - Any (many) specification(s) of "boxes and arrows" that helps
- May or may not have a explicit goal, if goals are implicit they may not be publicly admissible
- But all systems produce systematic results ("emergent property" aspect of complexity theory), so you can suss out the implicit goals
- Hence, systems study:
  - Is each <u>box</u> functioning well? Functioning at all?
  - Do the <u>arrows</u> function?→Is the system coherent? (E.g., don't ask for X and expect Y.)
  - How do the boxes and arrows and rules of the game drive the emergent property (ies) or explicit and implicit goals?

The basic accountability framework: WDR04
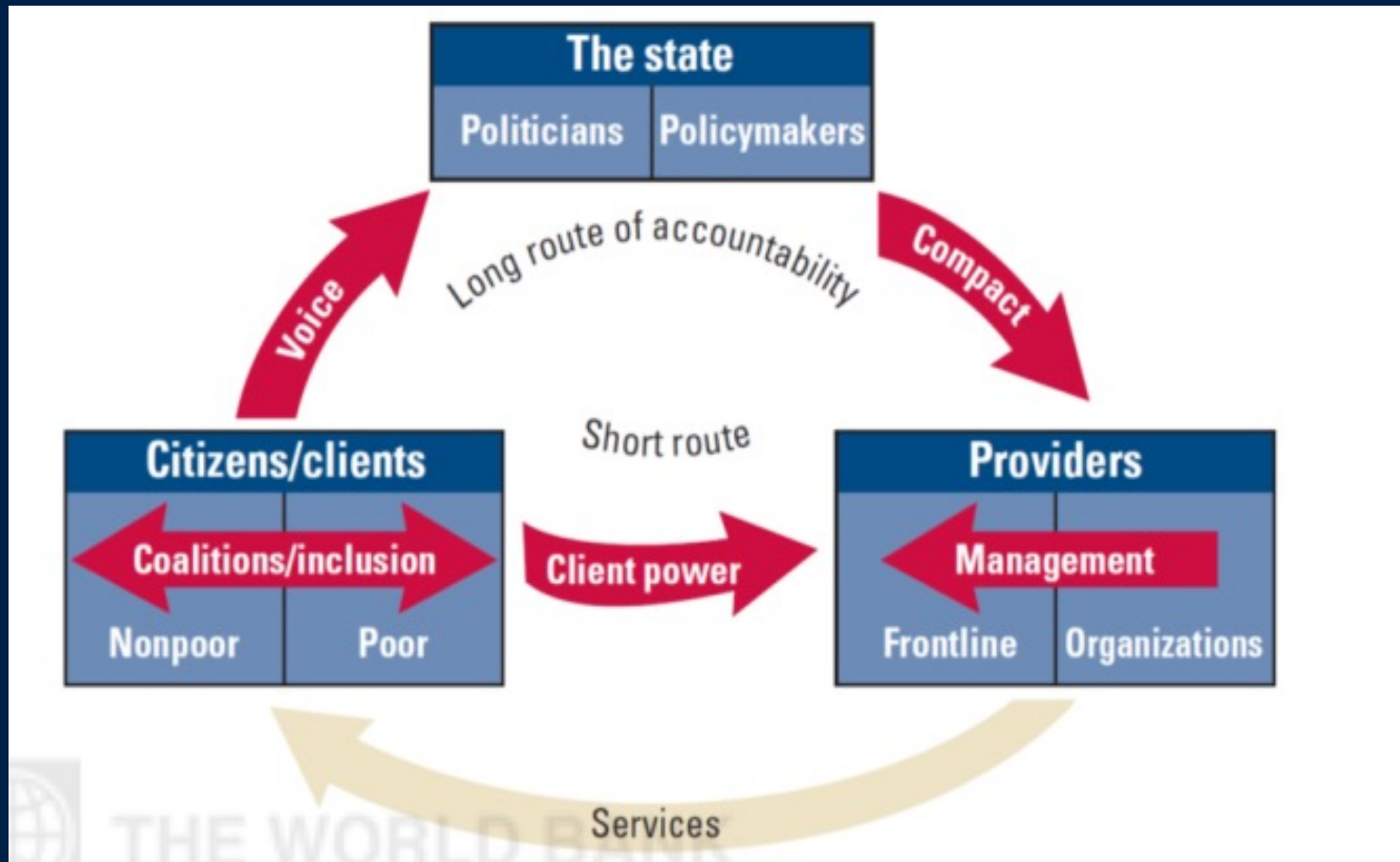
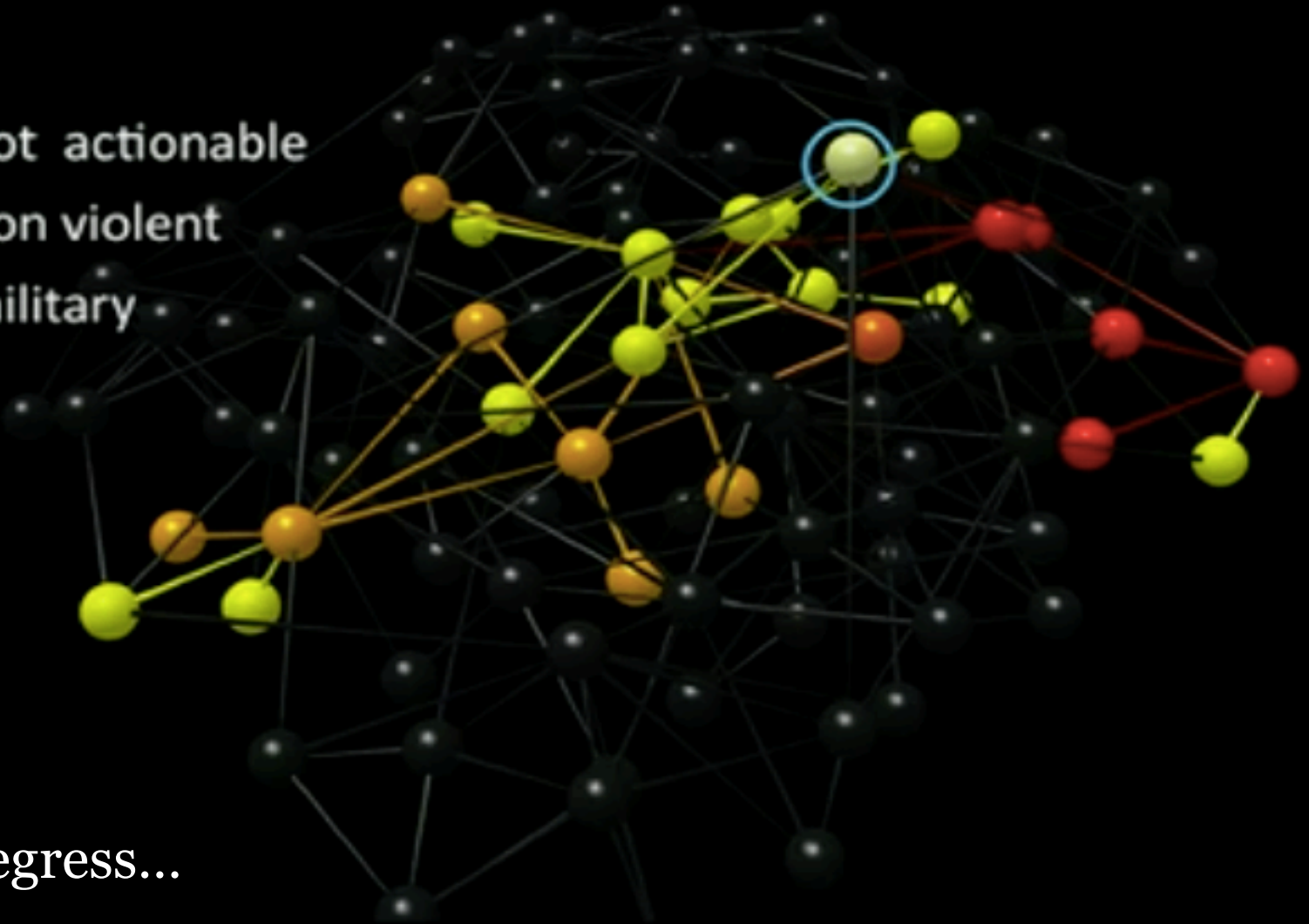# Accountability framework for Education

Afghan Stability, Complex system! Political Economy?
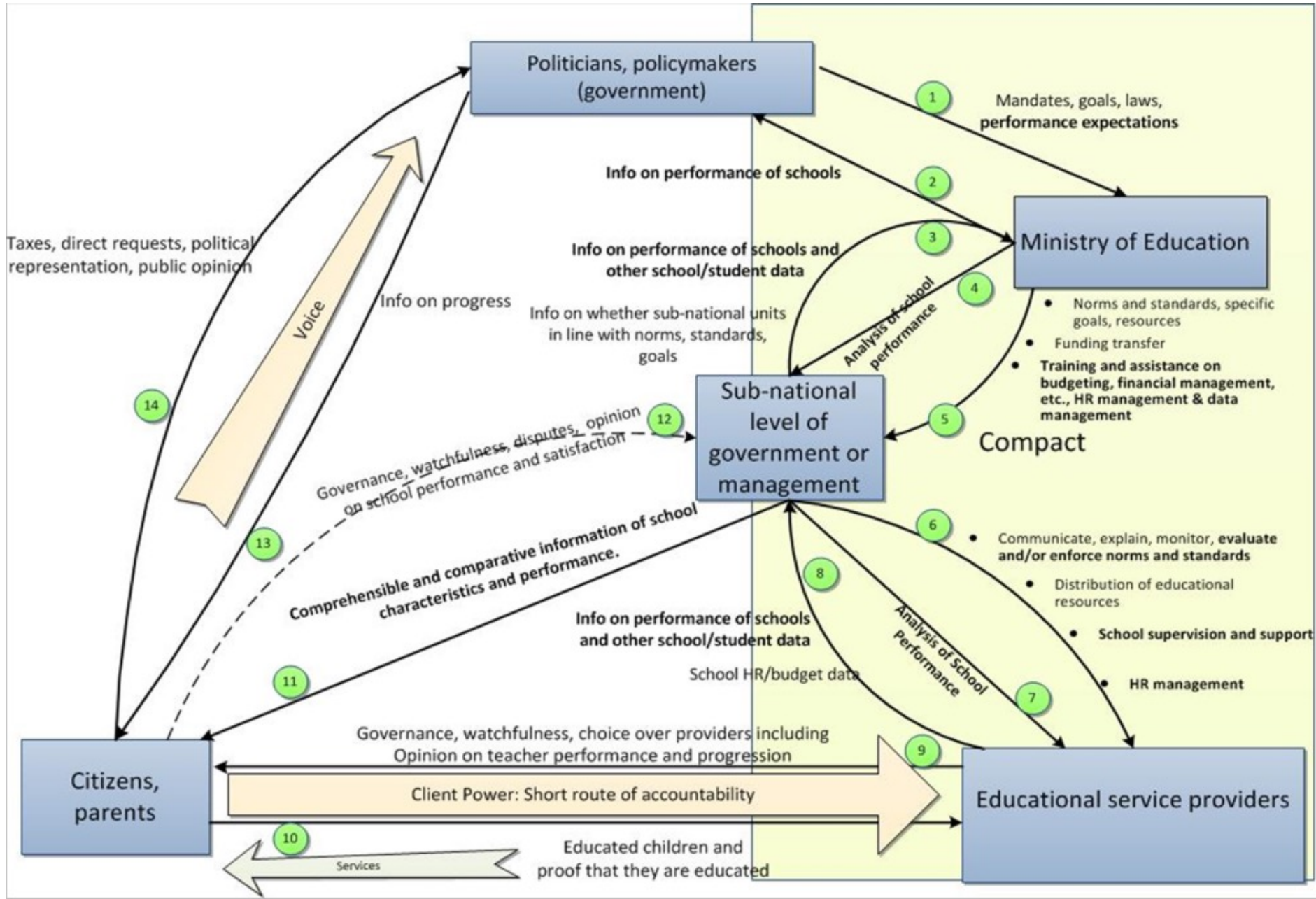
Paring it down: Network Map Afghanistan

But I degress...

"…those who view increased educational accountability as a lever for 'reforming' the educational sector…. are likely to be severely disappointed." -- Henry M. Levin, 1974

- Reasons are political and institutional in nature rather than technical.
- 1) difficulty designing reforms that increase accountability system-wide;
- 2) likelihood that reforms will not be implemented as designed; and
- 3) recognition that even successfully increasing accountability (when defined narrowly as performance on measurable outcomes, e.g. test scores) may not yield either a substantively different school system or improved outcomes if there are no changes in major social, economic, and political institutions.
  - institutional case study approach to complement emphasis on randomized experiments that generally analyze a focused "accountability" intervention.
  - Implies political economy and "historical" approaches
  - replicability of a successful

Policy Process Theory – How does policy change occur?

Advocacy Coalition Framework, (Sabatier, 1988)

- Policy is an ongoing outcome of contests for power at the policy subsystem, or micro-implementation (Elwood, 1989) level as well as higher levels of governance structures.
- Policy outcomes are determined by the dominant coalition within a subsystem, such as school administration fiscal decision-making.
- Coalitions are groups of people in three levels:
  - Deep, core members – very strong, shared cultural and ideological beliefs affinity for one another – change is infrequent. E.g. Conservative versus progressive; Catholic versus secular.
  - Policy core members – cultural and ideological beliefs lead to strong preferences for shared policy outcomes, although they may differ with respect to beliefs and ideology – change is infrequent; E.g. Catholic Church allied with socialists on school subsidies for indigent, students.
  - Secondary members – rational choice or rational strategic alliances – change is frequent and often determines the dominant coalition – E.g., teachers unions allied with school administrators to support increased educational funding.
- Many other frameworks: Kingdon's Policy Windows, Ambiguity-Conflict Model, Social Construction Framework – Schneider and Ingram (1993).

Applying the framework as a Political Economy Approach: Taking stock of reforms in a particular context

- Carry out a literature review
- Pay attention to implementation failures, political economy factors
- Link reforms to the accountability framework
- Example 1: **School based management committees**
  - → Objectives
  - → Implementation failures
  - → Do SBMCs have the potential to fundamentally alter client power?
- Example 2: **Education data**
  - → Introduction of EMIS
  - → Reliability and timeliness of data
  - → No information on learning outcomes
  - → No systematic analysis of EMIS data
- Take stock of changes in the 14 accountability relationships
- Significant changes: 0; Minor changes: 6; No change: 8.

Table 6: Accountability Framework: Application of Expanded WDR04 Framework to Nigerian Reforms Past, present and future18

Accountability Relationships, Arrow Number & (Government Level)	Start of Reform Period	During Reform Period	Current Situation	Case Study Guidepost
1. Mandates, goals, laws, performance expectations (Central)	Not fully in place until the approval of the UBE Act in 2004	Framework added for implementation of UBE, National Policy on Gender in Basic Education and other guidelines for the expectations and implementation of various components of the UBE	In addition to other existing policies, the 4-Year Strategic Plan for the Development of the Education Sector: 2011-2015 explains targets and action plans for achieving various components of education, including basic education, but does not delineate true performance expectations.	*Brazil & Indonesia: Continuity of Central Leadership *Indonesia: Savvy use of ministerial decrees vs. Strong legal Foundation *South Africa & Brazil: equity enhancing fiscal transfers, details key, range of options—from formulas to budgetary shares.
2 & 3. Info & Analysis of performance of schools and other school/student data (Central and Sub-national)	Besides donor projects, little is known about effective, reliable and systematic way of measurement and longitudinal studies that track progresses	Very little change	Very little change	Brazil: serious development of both EMIS and assessment systems. *India: DISE data on school enrolments and inputs for state and district reports cards
4. Analysis of school performance (to Sub-national)	Besides junior WAEC, there is periodic assessment tests (such as NALABE) conducted by UBEC for assessing school performance	No new assessment framework: Very little change	No new assessment framework: Very little change	*India: ASER community based assessment

Accountability Relationships, Arrow Number & (Government Level)	Start of Reform Period	During Reform Period	Current Situation	Case Study Guidepost
5. Norms, Fiscal transfers, Training and assistance on budgeting, financial management & data management (from Centre)	Although responsibilities were not clearly defined, the FG provides leadership in setting standards and providing budgetary allocations and other grants for the UBE implementation at all levels	The FG provides leadership in setting standard and providing budgetary allocation and other grants for the UBE implementation at all levels	There has been no change	*India: decentralization needs strong financial and outcome monitoring * Brazil: Conditional Cash Transfers
6. Communicate, explain, monitor, evaluate and/or enforce norms and standards, distribution of resources, supervision, HR mgmt. (to schools, compact)	Still being developed	Standards have been established but poorly implemented and monitored.	Resources and facilities are inadequate for stated goals and poorly distributed, especially in poor states. Substantial percentage of schools and teachers do not have the curriculum and standards.	*Indonesia (and other international experience): details of teacher accountability reforms key (and politically challenging) *School Based Management plays a role. *South Africa: Financial Mgmt training for school level actors *India Teacher Training and Effectiveness

7. Analysis of School Performance (to schools) 8. Info on performance of schools and other school/student data (from schools)	Results of First School Leaving Certificate examination and Junior Secondary School Certificate examination were measures of students and schools' performance. These were responsibilities of states. Each school received and published its pupils result Communities learnt of school performance through parents teachers association (PTA) Baseline survey of school infrastructure and personnel. Assessment of Pupils/students performances through a National Learning Achievement in Basic Education (NALABE), by UBEC in 2001	Around 2004, the first school leaving certificate began to be awarded on the basis of continuous assessment Setting up of Nigeria Education Management Information System (NEMIS) Assessment of pupils/students performances through a National Learning Achievement in Basic Education (NALABE), by UBEC in 2006 and 2011. Conduct of National Personnel Audit of all basic education institutions to update the database on information for pupils/students, teachers, personnel and infrastructure in 2010; Strengthening institutional capacity in the planning and execution of Annual School Census for regular data update	Currently, the First School Leaving examination has been abolished, & the first external examination (besides in-school exams) is now Junior Secondary School Certificate Examination, which is coordinated at the State level.. There is an automatic promotion policy from primary to secondary school., Each school receives and published its pupils result Communities learnt of school performance through parents teachers association (PTA) and School Based Management Committee Decentralised Education Management Information System operation to States (EMIS) No new national assessment since 2011 Review of the methodologies and strategies and planning for the conduct of a comprehensive census of all public and private basic education and senior secondary institutions for effective coverage and holistic data collection exercise in 2015.	*Brazil and others: School Report Cards can provide key info for school level decision-making and also to parents to hold schools accountable

Accountability Relationships, Arrow Number & (Government Level)	Start of Reform Period	During Reform Period	Current Situation	Case Study Guidepost
10. Educated Children and proof they are educated (Service Provision) 11. Comprehensible and comparative information of school characteristics and performance (From government to communities)	Performance in public examinations	Performance in public examinations	In addition to performance in public examinations, UBEC also undertakes an assessment of Learning Achievement in Basic Education (NALABE) which were done in 2001, 2003, 2006 and 2011 Information have now been generated through the Personnel/School Audit carried out by UBEC.	*Brazil and others: School Report Cards
9. Governance, watchfulness, choice over providers including opinion on teacher performance and progression (client power) 12. Governance, watchfulness, disputes, opinion, on school performance and satisfaction (Clients to Sub-national Govt')	Political relations and political changes often determine government policy direction and choice	Increased trade union and civil society pressure on government accountability. Collective bargaining enhanced and amplified client power. SBMC was introduced but not active in many states to work hand in hand with the government to increase school effectiveness at the grassroots, including monitoring and strengthening of school management	Not much has changed Increased effort to make SBMC function in states	*Indonesia and India: School Based Management, School grants – give site councils real control over meaningful funds and other decisions, e.g. contract teachers. *India: Important role of NGO facilitators
13. Info on progress (From Centre to clients)	No institutionalised framework	No institutionalised framework	No institutionalised framework	
14. Taxes, direct requests, political representation, public opinion (from clients to central gov't policymakers, Long Route of Accountability)	Besides general elections to choose office holders and tax paid by citizens, there is very little political representation.	The Federal Government finances the UBE through Education Tax Fund in which companies with more than 100 employees contribute 2% of their pre-tax earnings to the Fund.	Largely remain unchanged	

Applying the framework: Identifying lessons from the experiences of comparator countries

- A similar review carried out for each of the comparator countries
- Lessons identified on how each of the 14 accountability relationships can be strengthened.

- Distilled 5 key policy guideposts for Nigeria:
    1. Stability of core **political leadership** is crucial (Brazil)
    2. Invest in quality **education data** and assessment systems
    3. Take on the difficult and controversial issue of **teacher accountability (Indonesia, India)**
    4. **Genuine school autonomy** can improve learning outcomes
    5. **Real decentralisation** is powerful but requires **strong financial & outcome monitoring systems**

Identifying lessons from the experiences of comparator countries – an example: Decentralisation

Real decentralisation is powerful but requires **strong financial & outcome monitoring systems**

The Nigeria case study:

- Many government agencies involved in education delivery
- Overlapping roles and responsibilities
- No systematic monitoring of functions
- Little clarity on resource flows to education
- Local government has little authority
- Lack of reliability in financial transfers from the Centre to the States

The Comparator case studies:

- How to create an extensive monitoring system (Brazil)
- The pitfalls of inappropriate staffing patterns (India)
- How to split responsibilities: Centre sets norms and standards; municipalities/provinces have flexibility in how to deliver them (Indonesia, Brazil)
- Education financing: how to redress regional imbalances (Brazil, South Africa)

A few points for discussion

- Is this a useful way to synthesise evidence at the system-level, especially given the renewed interest in systems and political economy?
  - How does it dovetail with Pritchett & Crawfurd's et al RISE work?
    - Can we combine their 4x4 with our 14 arrows ➔ 224 "essential" components of accountability and governance?
    - Trade off between simplicity/understandability and complexity/accuracy/systemic. Need both.
    - Political Economy implies a more historical approach than many of us are used to
    - On the other hand… *The Checklist Manifesto* has merit
  - Mindful of critiques, e.g. Fox (2016) for *Social* Accountability ➔ dealing with amorphous power and multiple principals
  - Tactical vs. Strategic approaches
  - WDR 2018 on Education "Technical *and* Political"
  - Words and Language matter and have meaning, tensions (ES)

Words and Language matter and have historical and contextual meanings and tensions

- On a recent project, an El Salvadoran government minister, a client, requested language changes in a prescriptive study for policy implementation of an administrative decentralization strategy for public schools:
  - He had his own definition of "devolution" for instance. He insisted on our using this definition even though it ran counter to 30 years of literature in the field by both scholars and practitioners
  - The policy analysts (i.e. ME) were torn between being "right" and being "effective" and "client oriented"
  - Could not use the word "privatization" even as part of a conceptual framework: "If anyone wants to put the brakes on any reform, they just need to find a way to call it 'privatization'"
- This experience and others invokes the following questions:
  - How does the language used by development professionals and academics impede adoption of development advice?
  - What do policy studies and other research to date say or imply about language use and policy implementation problems.
  - If so, how can such a problem be mitigated by policy analysts and incorporated into research designs and proposals in ways more rigorous than merely "spinning" policy concepts for specific audiences?
  - Since Pressman and Wildavsky' s (1973) classic examination of policy implementation failure of a US federal government social service program in Oakland, California, the important relationship between cognition and policy implementation have been noted by scholars

From Lant Pritchett and Lee Crawfurd (2016)

Table 3: Four by four diagnostic for systems of basic education				
Four design elements of each relationship of accountability (Principal (P) to Agent (A))	Principal-agent relationships			
	Politics: Citizens to "the state"/politicians (many P to one A)	*Compact:* "The state" to organizations (one P to one A or one P to many A with non-state providers)	*Management:* Organizations to front-line providers (one P to many A)	*Voice/ Client power:* Service recipients (parents/children) direct to FLP/Organizations (many P to one A)
Delegation: Specification of what P wants from A				
Finance: Resources that P provides to A (either in advance or contingent)				
Information: P collects information on performance of A				
Motivation: How is A's well-being contingent on performance? Change to motivation? - Intrinsic - Extrinsic - Exit (force out)				
Performance of agent (endogenous)				

Action Steps as per Pritchett et al	Applied MeE principle here, relevant to a <u>systems</u> reform, but incorporating more PE will complicate!
Reason back from a stated goal of a stated size	Clever implementers narrow goal to achieve success. Generalizability problem: success, but on a narrow front. What might be a valuable not-too-narrow goal? We would propose 2nd or 3rd grade reading and mathematics, as per the experience of Pratham, others, and to try to achieve effect sizes of 0.5 on a system-wide reform, in 5 years.
Reverse-engineer to the instruments	Minimum possible set of likely instruments (bare-bones) as noted. Explore the details, commit, but re-jigger as one goes along both for technical and PE reasons.
Design a project	In this case, we mean design a **reform** as a project. This will require paying attention to both the "boxes" and the "arrows" in the bare-bones flow chart, and the PE and the conditions of institutionalization.
Design by crawling the design space, but also the implementation space	Systems reform: crawling the implementation space is what ultimately designs. To make the project evaluable in the judicial or "congressional-hearing" sense that we propose, the initial design or plan, the crawling, and the redesigns or re-strategizing that results all have to be extremely carefully documented. Crawling, in a systems reform, is not just about trying different technical approaches, but re-strategizing the alliances, the motivations, the systems tolerances to the change, etc.
Specify the design space and select alternative designs	Not sure this is as important for a systems reform implementation project as for a "technical" project. In a system reform project, propose start with well-specified bare-bones system, based on best current research on "pilot" projects, that we think can do the trick. The crawling, then, is around the details of implementation space and the political economy.
Strategically crawl design space: Pre-specify how implemen-tation and learning will be synchronized	This strikes us as perhaps the most important aspect if one is to make the whole project evaluable using the judicial approach we propose. The crawling happens over time and, since how the options branch out is not foreseeable, at each junction the nature of the options, and the decision taken, has to be documented, for a judicial approach to establishing causality to work.