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BUILDING THE LINKS BETWEEN FUNDING AND QUALITY IN HIGHER EDUCATION

India's Challenge

LINDSAY DAUGHERTY | TREY MILLER
RAFIQ DOSSANI | MEGAN CLIFFORD



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Summary

Rapid Growth of Indian Higher Education Leads to Concerns About Quality

The higher education system in India enrolls the second largest number of students in the world after China—nearly 22 million. In the past two decades, enrollment grew by 7.7 percent per annum and more than quadrupled. The number of institutions has grown even more rapidly, from fewer than 6,000 in 1990–1991 to more than 46,000 today, the most of any country in the world.

India's spending for higher education has increased at the same time; it now spends at rates similar to other developing and developed countries as a percentage of gross domestic product, yet the growth has not been sufficient to keep up with ballooning enrollment numbers, and private spending has continued to outpace public spending (FYP, 2012; UNESCO, 2007). The funding is also heavily skewed, with most spending going to a small number of “national” universities owned and managed by the Indian government while many state colleges are severely underfunded and most private colleges are left to fend for themselves (Agarwal, 2009).

The rapid growth of the higher education system in India has raised concerns about the quality of education offered by the nation's institutions. A number of reports document the decline in quality that has accompanied the rapid growth and the insufficient quality of the majority of institutions (Agarwal, 2009; FYP, 2012; University Grants Commission, 2012). From the perspective of the labor market, industry surveys find that many graduates are unemployable without substantial on-the-job training (NASSCOM, 2005; World Bank, 2008).

New Five-Year Plan Calls for Reforms in Higher Education

In December 2012, India released its 12th Five-Year Plan (FYP), the nation's key policy document for higher education (and other social services) through 2017. The 12th FYP suggests a range of reforms to higher education to change the role of the national government from "command and control" to "steer and evaluate," giving more autonomy and accountability to the states and to the higher education institutions themselves with the goal of improving quality.

The 12th FYP's reforms reflect the argument by many that issues related to governance are a driving factor for the system's quality problems (Agarwal, 2009; Altbach, 2009; FYP, 2012). The vast majority of institutions are part of an affiliating system, in which primarily lower-tier colleges are responsible for teaching students, and the large state-owned universities with which the colleges are affiliated are responsible for setting curricula, giving exams, and granting degrees. The affiliation system is characterized by standardization, with colleges given little autonomy over curriculum, staffing, and programs offered (Agarwal, 2009). The state- and institutional-level regulations and controls are supplemented by controls imposed from a still higher level, the national government and its regulatory arms. This has led to a collection of unclear and often contradictory policies and laws that have prevented the government from implementing cohesive reforms (Agarwal, 2009; Hill and Chalaux, 2011).

The movement toward greater autonomy and accountability for institutions is a worldwide phenomenon, with countries increasingly building systems that encourage institutions to self-regulate and take responsibility for improving quality rather than trying to ensure quality through tight control over funding and decisionmaking by the government. Higher education systems that are moving toward greater autonomy and accountability often look to financial incentives as an important tool to steer the system. By creating policies that explicitly link quality and funding, countries can encourage institutions to pursue innovative strategies for quality improvement and hold institutions accountable when they do not move toward the goals set by the government and other key stakeholders. These policies can take

a variety of forms, such as explicit formulas that link outcome quality measures to funding rates, grants for innovation, and requirements that institutions meet minimal quality standards to receive per-student funding.

In an effort to explore India's possibilities in implementing policies that link funding to quality measures as a means of improving quality, RAND researchers reviewed the FYP and the research literature on other countries' reform efforts. This report summarizes our findings and suggests seven policy actions the Indian national government and other stakeholders can take to improve higher education by linking funding to quality. Some of the suggested actions can be accomplished in the near term, and others will take more time. This discussion is relevant to reformers in other countries as well, since it reflects lessons learned by governments and institutions worldwide that face a growing demand from potential students, limited resources, and an urgent need to produce quality graduates.

A Course of Action for Improving Higher Education in India by Linking Funding to Quality

The experiences of other countries offer some general guidance to the Indian national government and other stakeholders as they transition the higher education system from a "command and control" to a "steer and evaluate" model. First, goals and quality measures must be defined, agreed on, and communicated to all parties, along with other relevant data. The quality measures must apply to public and private institutions. Policies linking quality and funding are not sufficient to ensure a high-quality system; a range of other supports, such as developing quality faculty and strengthening quality assurance bodies, are necessary for policies linking quality and funding to be successful. The government must keep in mind other priorities in education, such as access, sustainability, alignment with the K–12 system, and the needs of employers. Finally, it will be important to remember that change of this magnitude takes time and that policies may need to be adjusted along the way.

The findings of the RAND study can be summarized in a suggested roadmap for linking funding to quality in India as a means to support the vision described in the 12th FYP:

1. **Continue the Process of Developing and Implementing a Robust Accreditation System for Indian Institutions.** Accreditation distinguishes schools that adhere to a set of standards. In January 2013, the University Grants Commission (UGC), which is the primary national regulator of higher education, made accreditation mandatory for institutions that it regulates.¹ This stands in contrast to the literature, which suggests that voluntary accreditation with ties to incentives is more effective in driving institutional buy-in and compliance. In addition to concerns about compliance, it is not clear that existing accreditation bodies have the capacity to accredit all institutions. Yet India's accreditation system could be modified to overcome these and other potential drawbacks. For example, it could include tiered standards that are tied to the institution's own mission statements, a focus on outcome measures rather than input measures, and maximum transparency to stakeholders. Policies that link financial incentives to accreditation can encourage institutions to seek accreditation voluntarily, making them more likely to engage in the process, provide accurate information, and move toward quality improvement (Salmi, 2009).
2. **Develop, Implement, and Publicize a Quantitative Data System to Measure Quality of Higher Education Institutions and Institute Policies for Continuous Improvement over Time.** A new, decentralized system will need clear metrics by which to assess quality and progress toward national goals and a data system for managing the quality data gathered. The first step is to engage stakeholders, including students, employers, government leaders, university administrators, and

¹ See http://www.ugc.ac.in/pdfnews/8541429_English.PDF, accessed May 22, 2013. UGC regulates all higher education institutions except technical institutions. The regulators for these institutions are expected to follow UGC's lead. See edu-leaders.com, 2013.

faculty, to define the unique goals of higher education in India and determine a set of indicators to fairly and accurately measure institutional contributions toward those goals (Miao, 2012). A challenge for the proposed National Commission of Higher Education and Research (NCHER) will be to create a set of quality measures that will be dynamic and change as data become available while still winning stakeholder acceptance. Such measures could include *input* measures, such as students' test scores and teacher-to-student ratios, and *outcome* and *value-added* measures, such as graduation rates and students' salaries in the workplace after graduation.²

3. **Gradually Phase In Other Methods to Link Funding to Quality Measures.** The literature suggests that tying funding to quality can be a powerful tool to steer and evaluate institutions in a decentralized governance system. India could start by tying funding to the national accreditation process, as described above. India could also fund institutions based on enrollment counts as opposed to cost recovery. As capacity at the institution and state levels develops over time and India expands its data system, India can transition some funding toward performance-based budgeting (providing data on performance to institutions and asking them to develop budgets with an eye on improving performance) or performance contracts (a commitment from institutions to fulfill a number of national objectives in exchange for access to additional funding). These flexible methods to align funding with institutional goals have proven effective in many contexts, and can be implemented with varying degrees of quantitative data. However, these methods can be expensive and administratively burdensome, as institutions must work directly with the government to determine goals and demonstrate progress. Over time, as India develops a robust education data system and a complete system of quality indi-

² The future of the NCHER is in question given substantial concerns about the limitations that may be placed on state power under a strengthened central quality assurance body (Goswami, 2012).

cators based primarily on outcomes, some funding can be put toward explicit performance-based funding—a system that allocates funding based on specific performance measures, such as students’ degree completion, instead of allocating funding based entirely on enrollment.

4. **Continue Efforts to Develop and Implement a Student Financial Aid System and Gradually Tie Eligibility to Accreditation and Quality Measures.** The 12th FYP calls for financial aid as a means to extend access to higher education to underserved populations and areas of the country, and that is the primary purpose of student financial aid systems worldwide (FYP, 2012; Johnstone, 2006). Student loan systems can play a valuable role in linking funding to quality by tying an institution’s eligibility to receive student loan funds to basic quality standards.
5. **Continue Efforts to Expand Funding Available for Competitive Research Grants to Individual Researchers.** The 12th FYP calls for “more investment and focused efforts to build a vibrant research culture and strengthen the research capacity of the country,” and more access to individual research grants is proposed as a means to this end. Peer-reviewed research grants have been introduced and need to be widely extended to make most research grants competitive and open to both the public and private colleges, as is done in public and private organizations around the world. To increase the level of funding for the grants and align funding with the country’s goals for higher education, the national government has established bodies such as the Science and Engineering Council of the Department of Science and Technology. The national priority-driven and peer-reviewed processes of such federally funded research bodies in the United States as the National Science Foundation and the National Institutes of Health offer powerful models.
6. **Develop a System to Provide Competitive Grants to States, Institutions, and Departments to Spur Innovation and Achieve Specific National and State Goals.** Competitive institution- or department-level grants give state and national

governments opportunities to direct funding to specific goals that may change over time or differ across regions. These grants could similarly be used to incentivize differentiation, collaboration, structural changes (e.g., merging of institutions), and a variety of other priorities that are mentioned in the 12th FYP.

7. **Provide Funding to States and Institutions to Build Capacity for Self-Governance in the New “Steer and Evaluate” Model.** Some countries undergoing similar transitions have developed explicit technical assistance programs to help institutions and states change governance structures. Other countries have had success with academic audits, whereby institutions are coached by government officials through the planning and budgeting process (Dill, 2000; Saint, Hartnett, and Strassner, 2003). In India, the World Bank has funded the Technical Education Quality Improvement Programme (TEQIP), which is designed to help technical institutions introduce governance structures that grant greater autonomy to institutions from state university systems on matters such as infrastructure and curriculum development.³ If TEQIP is shown to be effective, it could serve as a template for nontechnical institutions and for widespread application to the private colleges as well. The specific approach for capacity building in India, if any, should be based on a clear needs assessment.

³ See All India Council for Technical Education, 2012.