

THE IMPACT OF TEACHER EDUCATION IN SRI LANKA AND PAKISTAN:  
A PRELIMINARY COMPARISON

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Research by Project BRIDGES in Sri Lanka and Pakistan shows marked differences in the impact of professional education on primary school teachers. In Sri Lanka professional education of any kind has a positive influence on teaching practices and student achievement in mathematics. In Pakistan professional education leads to few improvements in teaching practices and has only a modest influence on student achievement in mathematics and science. This note indicates how teacher training is carried out in each country, compares some critical findings of the two studies, and asks why teacher education yields more benefits in Sri Lanka than in Pakistan.

### Types of Professional Education

Sri Lanka uses three different approaches in educating primary school teachers. Pre-service training involves two years of residence at colleges of education and a year of internship providing on-the-job training and supervision by teacher educators and school personnel. The program has an innovative curriculum that places strong emphasis on providing pedagogical knowledge, supervised practice and follow-up, pupil-centered teaching, and experiential learning. Distance education is an in-service program requiring three years of course work carried out through self-study as well as visits with tutors, group activities, and support from peers in teaching. It emphasizes knowledge about teaching and subject matter and, like pre-service training, uses supervised practice and follow-up visits by faculty to schools where their graduates have been placed. The third approach is training provided by traditional teachers colleges. They work with untrained but experienced teachers and require two years of course work on campus. Their program is heavily theoretical, relies mostly on lectures, and puts little emphasis on supervised practice and follow-up visits.

The government of Pakistan offers professional education in teacher training institutes or through distance education from the Allama Iqbal Open University. To obtain the credential required for primary school teaching candidates usually complete a nine-month program at a training institute or equivalent training through distance education and then pass provincial examinations to obtain the required certificate. In three of Pakistan's four provinces teacher training institutes accept candidates before they begin teaching. In the fourth, Balochistan, they work only with experienced teachers. The professional education given at institutes or through distance education is mainly theoretical and relies on lectures or dictation. Neither training institutes nor distance education emphasize field-based teacher education or make visits to help

their graduates once they are placed in schools.

### Research Findings

The results on Pakistan and Sri Lanka can be compared by showing their conclusions on two key questions about the impact of training.

#### 1. Does professional education affect teaching practices?

Researchers in Sri Lanka developed a scale of quality in teaching practices and then asked observers to rate teachers on that scale. Graduates of colleges of education, distance education, and teachers colleges showed higher quality practices than teachers with no professional training. Among teachers with training those from colleges of education and distance education scored significantly higher than graduates of teachers colleges or untrained teachers.

The Sri Lankan study also examined differences among trained teachers on two practices reflecting higher quality teaching: lessons developing a conceptual and critical orientation among students; and a teaching style based on close and frequent interaction with students rather than lecturing. The findings show differences by the type of training teachers had received and by other characteristics, such as formal education, teaching experience, and whether the school was congenial or difficult for teachers. Graduates of colleges of education had better average ratings on both practices than those from the other two training programs.

In Pakistan formal education, or years in school, proved to be a better predictor of teaching practices than professional education. On 19 practices influencing student achievement formal education was significantly related to 10 and professional education to 7. But the results showed no consistent relationship between either type of education and most teaching practices. Both were positively associated with one practice, the number of exercises covered in the mathematics textbook, and professional education was negatively related to assigning tasks to groups, a practice associated with lower academic achievement. On other practices significantly related to formal education or professional education the findings provided no evidence that teaching improved with increases in either type of training.

In short, professional education in Sri Lanka showed significant relationships with positive teaching practices, and some forms of such education showed stronger relationships than others. In Pakistan professional education turned out to be a weaker predictor of teaching practices than formal education, and neither had much influence on how teachers taught.

#### 2. Does professional education influence student

achievement? The study in Sri Lanka related the professional education of the teacher and other conditions to the mathematics achievement of students in grade 4. The Pakistan study explored the relationships between professional education, formal education, other predictors and the results of achievement tests in mathematics and science given to pupils in grades 4 and 5.

In Sri Lanka the students of teachers who had completed any form of professional education had higher achievement scores in mathematics than the students of untrained teachers. These findings persisted when controls were added for the background of the student and the teacher. Although the formal education of teachers taken alone was a significant predictor of mathematics achievement, that relationship lost significance when the predictors included professional education and teaching practices.

In Pakistan the formal education of teachers was significantly and positively related to the mathematics and science achievement of their students on all 4 tests. The teacher's level of professional education was positively related to only one of those tests, mathematics for grade 5. Similar results appeared when the analysis was based on hierarchical linear modeling. That analysis explored the relationship between student achievement and formal education, professional education, the background of students and teachers, whether the school was in an urban or rural location, student gender, teaching practices, and other influences.

Professional education is thus a strong predictor of student achievement in Sri Lanka and a modest predictor in Pakistan. Formal education is a strong predictor of achievement in Pakistan and not a predictor at all in Sri Lanka.

In sum, the professional education of teachers has a greater influence on teaching practices and student achievement in Sri Lanka than in Pakistan. And in Sri Lanka, but not in Pakistan, the types of professional education vary in their impact on teaching practices and achievement.

### Explanation

For an education official interested in the value of professional education the cases of Sri Lanka and Pakistan lead to opposite conclusions. Sri Lanka's experience supports optimism about teacher training. Not only can trainees be taught better methods of teaching, but by completing professional education they can help their students to have higher scores on achievement tests in mathematics. In Pakistan the current system of professional education for teachers may be a waste of time and money. It has little effect on the quality of teaching in primary schools and a positive influence on just one of four achievement

tests. The Pakistan research would seem to support a policy of having candidates for teaching complete more formal education rather than lose 9 months in professional training.

The two countries show other differences in education, health, and welfare. In World Bank tables Sri Lanka and Pakistan are both listed as low income countries. In 1988 Sri Lanka had nearly all of its eligible age group enrolled in primary schools and 71 percent enrolled in secondary education.<sup>1</sup> The comparable figures for Pakistan were 40 percent in primary schools and 19 percent in secondary education. Sri Lanka also shows a far better record than Pakistan on other indicators of health and social welfare, such as infant mortality, maternal mortality and life expectancy.<sup>2</sup> For countries that were both colonies of the United Kingdom, became independent nations within a year of each other and have similar levels of income it is fair to ask about the reasons for such gaps.

Two of the most powerful influences are a country's national commitment to education and the ways it provides professional education to teachers. Sri Lanka and Pakistan show sharp differences on both.

National commitment to education. Since its independence from Great Britain in 1948 Sri Lanka has shown a strong political and financial commitment to education and other human services.<sup>3</sup> This commitment has led to sustained government investment in education, openness to new ideas about student learning, and reforms touching all levels of education. Unlike many proposals for educational change, the reforms moved from principle to practice and received the necessary budgetary support from the government. They have led to changes in school organization and teacher education as well as decentralization of educational decision-making.<sup>4</sup> Even in the face of ethnic conflicts and domestic violence the government of Sri Lanka has continued to support education. Its efforts to raise the quality of education have been bolstered by School Development Societies in communities and by the active involvement of parents in school affairs. Education has been high on Sri Lanka's list of priorities since independence, and remains there.

From its founding in 1947 government leaders in Pakistan have stated noble aspirations for education and carried out numerous innovations but their political, financial, and administrative commitment to primary education has been weak. According to a 1986 report from the government's National Education Council Pakistan never allocated more than 6 percent of its budget to education. The figure for other developing countries averaged about 15 percent.<sup>5</sup> The same report notes that in 1983 Pakistan's budget for education came to 1.7 percent of the country's Gross National Product in comparison with 8.3 percent for Algeria, 7.6 percent for Malaysia, 7.3 percent for

Morocco, and 7.2 percent for Yemen.

Pakistan not only allocated less money to education than most developing countries but failed to spend the funds budgeted for primary education. In the first plan (1955-60) it used 45 percent of the authorized amount, in the second plan (1960-65) 24 percent, in the third plan (1965-70) 38 percent, in the fifth plan (1978-83) 46 percent, and in the sixth plan (1983-88) 50 percent.<sup>6</sup> In contrast, for post-primary and higher education Pakistan spent between 56 and 155 percent of the funds allocated during the same plan periods.

Pakistan's weak commitment to education, and especially primary education, arises partly from domestic and international politics. Having faced armed conflict after the partition of India in 1947, battles with India over the control of Kashmir, a civil war that led to the loss of East Pakistan and the creation of Bangladesh in 1971, and the continued threat of a new war with India, Pakistan's leaders have invested heavily in the country's armed forces. With the percentage of GNP spent on a given sector as an indicator, by 1986 Pakistan was spending more than three times as much on its military as on education and health.<sup>7</sup> Pakistan's military is well-treated and has high-quality primary schools for the children of its staff.

Pakistan has never had a Prime Minister or President for whom education was a top priority. The federal and provincial governments have launched numerous innovations, some of which have been successful, and are now carrying out major changes in the educational systems of two provinces. But the country's political leaders have never developed a comprehensive plan to raise educational access and quality nor carried out a thorough national educational reform. Until those leaders and senior public officials put education, and particularly primary education, at the forefront of public policy and budgetary allocations this sector will continue to languish.

How teacher education is provided. The impact of professional education on teaching practices and student achievement also depends on how seriously it is taken by its sponsors, how long it lasts, and how it is given. Answers to these questions require careful analysis not only of official policies but of how they are being carried out. To cite one example, teacher training institutes in Pakistan's province of Balochistan have an official schedule calling for nine months of residential study. Yet candidates use their accumulated leave as teachers to reduce the real training time to about 6 months.

In Sri Lanka the government takes seriously all three types of teacher training, but carries out the most innovations in colleges of education. It also assigns higher prestige to those colleges and pays their graduates a higher salary than graduates

from the other two programs. These colleges select promising young candidates who are about to enter teaching. They require two years of full-time study and another year of supervised internship in teaching. Teachers colleges provide in-service training to experienced teachers. They offer two years of course work with optional residency, but put less emphasis than colleges of education on supervised practice and follow-up visits to schools. Distance education also works with experienced teachers. Rather than setting a minimum amount of time for training it asks candidates to complete 105 modules. It gives on-the-job training and considers supervised practice and follow-up important elements of its program. Candidates typically need 3 to 5 years to complete their course work.

Though officially committed to the professional education of teachers, the government of Pakistan does not assign it high priority and pays little attention to how it is being carried out. It has not been an area for innovations, and in at least one province former school heads sent to be faculty members at teacher training colleges considered their assignment a punishment. The provincial bureaus responsible for teacher training do little to raise its quality and those bureaus themselves are understaffed and have low status within the public service in education. In general, the federal government and the provinces seem to consider the professional education of teachers a routine duty to be carried out rather than a chance to test new ways of improving skills in teaching.

In their official schedules teacher training colleges in Pakistan allocate only 25 percent of the time to professional education that is seen in Sri Lanka. They also pay little attention to supervised practice teaching. Nor do they schedule visits with their graduates once they have positions in schools. While there are differences in the effectiveness of the different methods of training in Sri Lanka, its government takes the professional education of teachers much more seriously than the government of Pakistan.

The specific ways in which teacher training is provided likewise show great differences in the two countries. Sri Lanka has developed an innovative curriculum in its colleges of education. Their teaching methods include lectures, discussion, seminars, debates, team-teaching, role-playing, simulations, and observation. Even its teachers colleges, which rely on lectures and other traditional approaches to learning, also make use of discussions, team-teaching, community development projects, and field trips.

Six conditions limit the quality of professional education for teachers in Pakistan. First, many trainees entered teaching because they could find nothing better, because they were recommended by politicians, or both. As a result they show little

enthusiasm for teaching and poor motivation to study during training. Second, with some variation across provinces and programs, the instructors assigned to training programs often feel alienated, isolated, and trapped in a profession that provides few rewards and has no career ladder for advancement. Some do a capable job of teaching their lessons while others spend as little time as possible in class and at the colleges. If they want to stay on at these institutions it is often because they are located in a city rather than because of any intrinsic satisfaction with their work. Third, the curriculum is highly theoretical. It pays no attention to some of the most common problems facing teachers, such as multi-grade teaching and bilingual or multi-lingual classes. Though the curriculum prescribes such instruction, the training programs usually do no laboratory experiments in science, even when space and equipment are available. Nor do most institutions allow trainees to use books and periodicals in their libraries.

Fourth, the teaching methods involve mainly lecturing and dictation. In some cases instructors disregard the official curriculum and dictate notes they had taken when they were in teacher training programs. Fifth, course examinations require trainees to memorize and reproduce materials provided by their instructors or the textbooks. In two colleges observed by Project BRIDGES cheating was common and created cynicism about the entire process of examinations. Sixth, officials in the training institutes, the provincial bureaus responsible for their performance, and the federal government provide little leadership for improving professional education programs. BRIDGES research in 1988-89 found no initiatives to raise the quality of instruction or the low faculty and student morale often seen in the training programs.

Hence the Sri Lankan government shows serious commitment to teacher education, has sponsored different ways of carrying it out, believes in supervised field experience, and, particularly in colleges of education, uses mixed methods of instruction to foster learning among trainees. At the time of the BRIDGES survey both federal and provincial governments in Pakistan showed little interest in teacher training programs, advocated no innovations in their organization or teaching methods, and provided only cursory supervision of their performance. Some recent initiatives, such as mobile training for teachers in Balochistan, show promise, but by 1992 little had changed in the institutions responsible for training most primary school teachers. Training programs also continue to be plagued by unmotivated students and faculty, a formalistic curriculum, one-way communication from teachers to students, and cheating on examinations. Thus in Sri Lanka the government-sponsored professional education of teachers stirred some excitement and experimentation while in Pakistan it remained a routine task that interested few and aggravated many.

## NOTES

1. World Bank, 1991. World Development Report 1991: The Challenge of Development. New York: Oxford University Press, p. 260.
2. Ibid., pp. 258, 266.
3. For evidence on this point see Caldwell, J. C. 1986. Routes to Low Mortality in Poor Countries. Population and Development Review, 12:2, 171-220.
4. See Cummings, W., Williams, J. and Gunawardena, G. B. 1992. Management Reforms in Sri Lanka. BRIDGES Research Report Series No. 11, Cambridge, Mass.: Harvard Institute for International Development.
5. Bhatti, Mukhtar Ahmad and others, 1986. Primary Education Improvement: Desired Measures. Islamabad: National Education Council, p. 47.
6. Malik, Ghulam Farid. 1989. Generating Additional Resources for Financing Primary Education in Pakistan. Paper presented at the National Conference on Policy Options for Better Educational Outcomes at Primary Level. Project BRIDGES and the Academy of Educational Planning and Management, Islamabad, Pakistan. The author did not provide figures for the fourth plan period.
7. United Nations Development Program, 1990. Human Development Report. New York: Oxford University Press.