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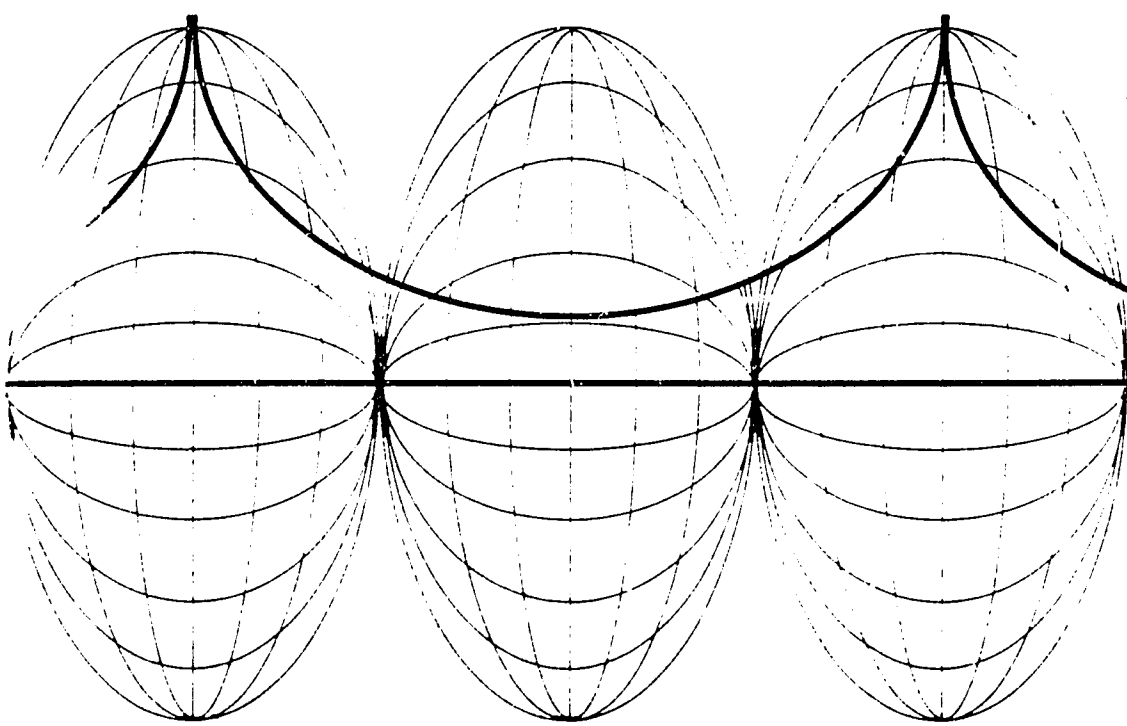

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Focusing on Primary School Quality:

Lessons from the Thai Experience

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Focusing on Primary School Quality:

Lessons from the Thai Experience

Thailand provides a setting in which research on primary school quality is likely to be of exceptional benefit to other nations as they achieve universal access. By the early 1980s, universal primary education had become a reality in Thailand. Government attention subsequently shifted from access to quality as national tests revealed that mean test scores of primary pupils were, in almost all subjects, lower than the 50% standard expected by the government. During the 1980s, the government therefore devised and implemented multiple strategies to improve quality. Other developing nations struggling to increase access to primary education have also come to see problems of quality as a major impediment to creating a literate population (Fuller & Heyneman, 1989). Improved educational quality for these countries will result mainly from better use of existing resources and only secondarily from increasing the resources available to the education sector. Thailand's experience in implementing a number of strategies for improvement within cost constraints, while not entirely generalizable to other settings, may offer insights for other nations just embarking on this path of reform.

In analyzing these reforms and their effects, the BRIDGES/Thailand project integrated three research methodologies over the four-year period of the project (1986-1990): sample survey, cost analysis and multisite case studies. A series of literature reviews and a field study of two school clusters informed the design of the national survey, conducted in January 1988 with a cost analysis component. Later, in August 1989, a multisite case study was conducted to examine contextual factors which could explain certain findings from the survey. Policy options based on the survey (including the

cost analysis component) and the multisite case study are currently being developed collaboratively through a series of policy seminars with Thai policymakers and researchers on the project.

TEN LESSONS ABOUT IMPROVING PRIMARY SCHOOL QUALITY

1. Policies that prove successful in expanding access to education can contribute later to problems of educational quality. Policymakers, therefore, should see the two issues as intertwined and, to the degree possible, begin to address quality issues while access is being expanded.

In 1960 in Thailand of those 25 or older only 33.5% had completed 4 years of primary school; by 1980 the figure had risen to 69%. The most remarkable fact, however, is that this accomplishment occurred while Thailand's population was nearly doubling--26 million to 44 million (Wyatt, 1984). Not only was educational opportunity expanding, it was expanding exponentially. Currently 96% of every age cohort is enrolled in primary school. By any standard this is a remarkable accomplishment.

To accomplish equality of access required a dramatic increase in the infrastructure of education. Thus the major policy initiatives focused on expanding such inputs as buildings, textbooks, teachers and principals. But as equality of access came to be a reality, the problem of instructional quality emerged as a major issue. Moreover, this problem occurred in the context of rapidly decreasing student-teacher ratios, the result of successful government family-planning initiatives. By the mid-1980s student/teacher ratios had plummeted to less than 20 to 1 in many classrooms. Clearly the teaching force represented an underdeveloped and underutilized resource for improving the quality of primary education.

One major reason for such unsatisfactory achievement was the lack of attention to quality in the training of teachers during the period of most

dramatic expansion. During those years, the number of graduates from teacher training institutions doubled, doubled again, and doubled yet again as newly created teacher training programs began providing graduates by the tens of thousands. Even larger numbers were produced through an external examination system. Both routes were subject to substantial criticism by educational leaders and Ministry of Education officials as woefully inadequate for ensuring that competent teachers entered the classroom (Valenti, 1979). Not only did teachers represent an underdeveloped and underutilized resource for improving the quality of primary schooling, so too did the ranks of administrators. Most of the new principals appointed during this rapid period of expansion had simply been promoted from the teaching ranks, which meant that few, if any, had received training for their new responsibilities. As a result, officials from the Office of the National Primary Education Commission complained time and again that when they visited schools they saw no real focus on the academic purpose of schooling (Wheeler, Raudenbush and Pasigna, 1989).

By the 1980s in Thailand, the basic infrastructure for universal primary education had been created. In the process, however, problems of quality emerged, in part as the unintended result of policies used to accomplish this laudable feat. By examining the tensions and dilemmas that resulted from Thailand's efforts to address the problem of primary school quality, strategies may emerge for other Third World countries which can be combined with those already in use to promote access.

2. <u>In Thailand, BRIDGES research shows that policies which reduce inequalities in inputs can, at the same time, increase primary school efficiency and overall effectiveness</u>.

Results from the BRIDGES national survey show that inputs to primary schools in Thailand continue to vary considerably and that these inputs do make a difference to the learning that takes place. Most importantly, the researchers found that the scarcer the inputs to begin with, the more difference they made. Raudenbush and Bhumirat (forthcoming) found that the effect on pupil achievement of increasing educational resources (e.g., buildings, teachers, books) depends on the current availability of those resources: The effect will generally be positive but will be greatest in settings where resources are currently scarce. Pupil-teacher ratio, school spaciousness, school size, textbook provision, and the provision of preprimary education were all found to be nonlinearly related to pupil achievement in ways which imply that the likely effect of adding resources will be greatest when those resources are currently scarce.

Specifically, the BRIDGES findings suggest that:

1. Increasing the number of teachers in a school can be expected to boost achievement substantially in schools having a shortage of teachers. But the expected benefit of adding teachers in schools with adequate staff is small. Conversely, reducing the number of teachers would have little effect in schools with low pupil-teacher ratios. However, areas with large proportions of linguistic minority children tend at present to have smaller pupil-teacher ratios, and it may be advisable to maintain this comparative advantage in those areas.

2. Increasing the school area (space per student) may boost achievement in presently overcrowded schools, but would have little or no effect in other schools.

3. The expected benefit of supplying texts and workbooks is substantially greater for poor children than for better-off children. This finding can be explained by observing that, without public spending, poor children would have little access to books. On the other hand, well-off parents are likely to spend private resources on books.

4. Most children of all backgrounds have access to textbooks. The critical disparity between well-off and poor children in access to workbooks contributes substantially to the achievement gap between these two groups.

5. Most of the benefit of attending pre-primary education occurs during the first year. In terms of achievement, children with one year of pre-primary schooling achieve substantially more than do similar children without pre-primary schooling. However, children with two years of pre-primary schooling score only marginally higher than do similar children with one year of pre-primary experience. Regarding repetition, children with one year of pre-primary education enjoy a significantly reduced risk of repeating a grade during primary school. However, a second year of pre-primary attendance is associated with no additional reduction in the risk of repetition.

The policy implications of such findings for Thai policymakers during the 1990s suggests the need for targeting for such resources more specifically to schools where they are currently scarce. As Raudenbush and Bhumirat put it, a uniform State response "for investing equally across regions, schools, and children would be inefficient because investments in settings where resources were already relatively abundant would be relatively unproductive" (pp. 4-5).

This notion that policies which reduce inequalities in inputs can, at the same time, increase primary school efficiency and overall effectiveness is further strengthened by results from the cost analysis part of the BRIDGES national survey. Tsang and Kidchanpanish (forthcoming) found that while private resources are tremendously important for educational quality and more needs to be done to stimulate such contributions, relying on them currently has the negative effect of significantly increasing social disparities in educational opportunity since the amount parents contribute is strongly related to their personal income. As a result, children's access to educational resources depends in part upon their parents' incomes.

Private resources to primary education include direct private costs (e.g., parent spending on school fees, textbooks, uniforms, and transportation, etc.), household contributions (in cash and in kind), and indirect costs (of foregone opportunities such as child labor). These resources are extremely important. Specifically, this study found:

1. Parent contributions pay one-third of the total cost of primary education.

2. Parents are the major source of spending on textbooks and other materials central to teaching and learning. In fact, parents spend three times as much on these as does the government.

These findings reveal a tension between using private resources to improve education and the tendency of relying on private resources which serve to increase disparities in educational opportunity. During the 1990s, an optimal set of policies would boost private contributions, and, at the same time, use public resources to compensate for the resulting disparities. For other countries (third world and more economically developed) these findings suggest the tension between efficiency and equity becomes a major issue once basic questions of access are solved. The issue of resource allocation in this context takes on a redistributive aspect which has important political implications. The way in which this issue is resolved will have direct implications for further improvement in quality.

3. <u>Policies to improve the process of education can be grouped into those which hold teachers and principals more accountable, that is focus attention more on the academic tasks of schooling as a way to increase student learning, and those which build teacher and principal capacity, that is the capacity to provide and support quality instruction. At certain stages of development, these policies are in harmony with one another, at other stages, in conflict. Sustained improvement depends on careful attention to reducing the negative consequences of the inherent tensions between the two</u>.

In the area of process variables, Thai policymakers responded vigorously to the problems of quality during the 1980s with numerous capacity-building

initiatives: staff development programs to improve teacher competencies in subject matter and pedagogy as well as programs for selected "master teachers" (academic cluster teachers); programs to improve principal knowledge of their administrative responsibilities, including supervising teacher performance in classroom teaching; programs to improve district and provincial staff knowledge of their administrative, financial, and personnel responsibilities; programs to improve parental knowledge of school activities and to stimulate community involvement in school decision making; programs to stimulate student participation in school life; and training programs for school cluster staff in the development and use of instructional materials (Wheeler, Raudenbush and Pasigna, 1989).

As the capacity-building approach evolved, it emphasized collaboration and cooperation to improve the quality of teaching. Under this approach, participation was emphasized in the belief that teachers and principals would collectively develop goals for improving the quality of education in individual classrooms. Teachers were assumed to be competent and sincere in their desire to improve. The most important rewards were often intrinsic, i.e., internal, as the result of participation to define and achieve goals for improvement.

During these same years, the following accountability initiatives were also instituted: a national testing system to monitor and improve student achievement (which spawned an elaborate testing system at the provincial, district and school cluster levels) and various changes in the financial incentives for teachers to reward academic success as a criterion for merit promotions and transfers to other schools (Wheeler, Raudenbush and Pasigna, 1989; Kunarak, 1987).

As the accountability approach evolved, it emphasized regulations, requirements, testing, and hierarchical patterns of decision making and control to improve the quality of education. Underlying the accountability approach was the assumption that teachers needed direction from above, especially poor teachers who might otherwise do little or no teaching. Rewards and incentives were primarily extrinsic, such as salary promotions (double promotions). Public ranking of test results was used as a way to stimulate greater effort by promoting competition among individual teachers.

It was possible during the early 1980s to pursue both policies with equal vigor without much fear that a particular initiative would affect any other initiative. The quality of primary education, simply put, was so poor that almost any intervention would, by itself, make a difference. Indeed, by the late 1980s test scores had risen substantially, principals were focusing more attention to the academic purposes of schooling and teachers had improved both their content knowledge and their knowledge of pedagogical skills (Wheeler, Raudenbush and Pasigna, 1989).

At the close of the 1980s and the beginning of the 1990s, however, tensions had arisen between the accountability and capacity-building initiatives at the cluster, school and classroom levels. These problems reflected, in part, a stage of development from general mediocrity and a dearth of process initiatives to variable quality and a number of policies that affected schools, principals and teachers. As the available "policy space" became filled with new initiatives, they began to interfere with one another (Wheeler et al., forthcoming b). For example, academic cluster teachers by the mid-1980s were receiving mixed messages: on the one hand, they were to spend time preparing, administering, scoring (or at least recording)

and publicizing cluster test results; on the other hand, they were to actively contribute to the professional growth of other teachers---all within very limited time (Wheeler, et. al, 1989 and Wheeler et al., forthcoming, b).

More importantly, however, these tensions reflected an inevitable tension between the philosophies underlying each approach. Accountability as a mechanism for management meant the imposition of norms and goals and the use of external assessment devices to ensure that these were being followed and met. Capacity-building as a mechanism for mobilization meant not only training, but also the development of forms of participation in which principals and teachers had more choice about how they would pursue objectives and about which objectives would be pursued. Enhanced sensitivity and creative response to varying local conditions were encouraged, even expected (Wheeler, Raudenbush and Pasigna, 1989).

In Thailand by the late 1980s one set of initiatives (the accountability approach) began to dominate ONPEC's administration, thereby reducing the effect of the capacity-building approach. As provinces and districts responded to national pressure to improve test results, many school clusters responded by emphasizing that function over the capacity-building role and allocating more resources and efforts to this approach to improving primary school quality. Moreover, the way the accountability approach was interpreted actually began to weaken progress made by the capacity-building approach in stimulating local initiative. For example, a number of school clusters began reporting test results by grade level, by teacher, across the cluster, which created an incentive for teachers not to share effective teaching strategies with each other and to downplay cooperation within their building. Policies which used test results in a more formative way, focusing more on building

level performance, created incentives in the opposite direction (See Wheeler et al., 1989).

These shifts all have implications for realizing the goals of the 1978 curriculum and staff development programs which seek to create a new form of social relations within the classroom, one emphasizing the joint construction of knowledge through greater student participation in the learning process and more problem-solving skills. Such an orientation requires sustained assistance and support for classroom teachers, given the minimal pedagogical skills and rudimentary content knowledge many of them possess.

Continued success in improving the quality of primary schooling in Thailand during the 1990s, thus, may rest on new ways of conceptualizing policy choices for accountability and capacity-building initiatives to address the tensions that have emerged.

4. Instead of thinking in terms of centralization/decentralization, it may be more productive to consider multiple and variable roles for the State. These roles may give more or less emphasis to different types of policy initiatives by different levels of the State, tailored to the specific circumstances of a school.

As a result of the 1980's policy initiatives, primary schools in Thailand, as noted above, now vary considerably in terms of quality: some are excellent; others are in various states of improvement; still others remain mired in mediocrity. Moreover, differences in setting (by region, urbanization, and family characteristics) have led to schools which vary in their access to private resources, including as Tsang and Kidchanapanish (forthcoming) have shown, direct private costs, indirect private costs, and household contributions. Schools also vary in their access to the central

organs of the State itself through its provincial and local agencies. And finally, as seen in Raudenbush and Bhumirat (forthcoming), schools vary in the sense of efficacy of their teachers, in the perceived quality of instruction and, thereby, in student achievement, and in various forms of resource inputs. In Thailand, as elsewhere, these inequalities are a major impediment to broad-based improvement in the quality of primary education.

As argued earlier, in number 2 above, without an appropriately crafted State response, inequalities in private resources will reinforce rather than reduce existing inequalities in the various school resources analyzed by Raudenbush and Bhumirat. As noted above, a variable State response for investing school resources would be more efficient since their effects would be greatest in places where they are most scarce. As argued above, greater coordination is needed between the accountability and capacity-building approaches for improving the process of education. What do these problems imply for the role of the State?

The State is faced with the extraordinarily difficult task of trying to increase the overall level of school performance while reducing the differences between first rate schools (which are better supported by their communities and have better facilities) and third-rate schools (which may be demoralized due to the lack of support from their communities and their own internal dynamics). The most desirable State role under such conditions may require maintaining high standards while avoiding elitist strategies. It may require an active role by the State to allocate resources in a compensatory way to schools and regions where such resources are most scarce. It may call for State support for capacity-building strategies at every level of government to fit the situation of schools at different stages of development

while providing accurate and useful feedback on the level of performance achieved by each school and holding them accountable if they fail to perform adequately (Schwille and Wheeler, forthcoming).

In short, the State's response during the decade of the 1990s may need to vary by organizational level to address the different stages of particular schools. For example, in terms of process variables, it may be one thing for a district or a school cluster to support schools where principals are trying to improve their schools or are actively maintaining excellence and another to stimulate greater activity by principals who seem unwilling or unable to improve the quality of their school (Schwille and Wheeler, forthcoming). At the school cluster level, the capacity-building responsibility could be reinforced if more emphasis were given to staff development initiatives, development of instructional materials, and use of resources available from the cluster resource center. In addition, testing by the cluster could be shifted from a summative emphasis, involving ranking and publicity, to a formative emphasis to help teachers improve their instruction. Clusters could expand their inservice activities, for example, by drawing on the local knowledge of teachers by organizing workshops for specific grades or specific subjects to work on content knowledge and knowledge of pedagogy. Such policies would provide a much wider array of resources for use by principals who seek internal change but lack resources to begin this process. (See Schwille and Wheeler, forthcoming, and Chuaratanaphong et al., in process, for examples of school clusters which carry out such activities.)

At the district level, with its direct administrative line of authority over principals and teachers, its distance from schools, and its limited staffing, more of an emphasis could be given to accountability activities,

without excluding initiatives which support capacity-building both at the district and the cluster levels. (This latter point is especially important according to Chuaratanaphong et al. [in process], who in their BRIDGES study of school clusters found that when district offices pursued this kind of emphasis, school clusters were more active in pursuing capacity-building initiatives and the overall effect by clusters and district offices on school improvement was greater than when district offices were inactive or simply pursued an accountability approach.)

Since Third world countries, Thailand included, are regularly criticized for top heavy, overly centralized administrative systems which impede policy implementation and the accomplishment of policy goals, this approach to policy has relevance beyond Thailand. Decentralization is put forward as a remedy, with the implication that the ills associated with centralization will thus be cured. Such a view, however, may miss the realities of policymaking, especially in education. The decision regarding centralization/ decentralization may not be an either/or proposition.

Rondinelli, Nellis, and Cheema (1984) make this point in their review of attempts at decentralization in developing countries:

> It should be noted that centralization and decentralization are not mutually exclusive or dichotomous arrangements for governance. Few, if any, countries are either totally centralized or totally decentralized. Thus, the challenge for most developing country governments is to find the proper balance between centralized and decentralized arrangements and to link them in ways that promote development most effectively. The optimal mix is not easily determined. It shifts as social, economic, and political conditions change (p. 28).

While a perspective that focuses on the State's variable role in education helps to clarify the complexities of educational policymaking in Thailand, its most important contribution may lie in helping shift the debate

in other developing countries away from sterile arguments over centralization or decentralization to an examination of the multiple roles that the State can play in improving primary school quality.

5. Educational reforms require policymakers to have a sound conception of the teaching and learning they wish to create. This conception will be more compelling if it is empirically grounded in a way similar to the Thailand BRIDGES' work.

Policy research can clarify the components of effective teaching and learning and the contextual factors which make such instruction more likely to occur. Such information is important for policymakers since reform initiatives need to be based on a sound conception of what effective teaching and learning is and what an effective school does to promote it. BRIDGES research in Thailand provides information on the components of effective instruction and the contextual factors which support such instruction.

At the classroom level both the survey and the case studies identified key dimensions of instruction which lead to high total achievement and reflect student perceptions of highly effective instruction. Effective teachers tend to actively engage their students by encouraging them to present their ideas in class and to ask questions when they are unclear. Effective teachers skillfully use instructional materials rather than simply lecturing or writing on the blackboard. And effective teachers consistently monitor student learning by providing practice exercises, testing students at the end of an instructional unity, explaining exercise and test results, and providing remedial reaching when needed (Raudenbush, Bhumirat and Kamali, forthcoming; Bhumirat et al., 1989; Wheeler et al., in process).

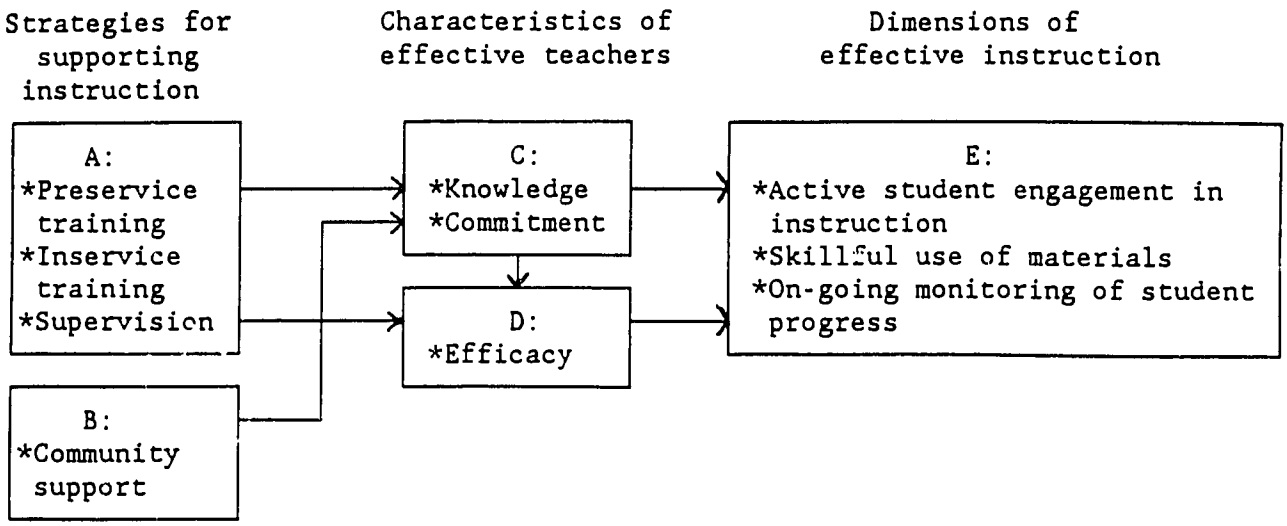
These teaching practices do not occur in isolation; rather, they are directly related to certain teacher characteristics: knowledge, commitment and

sense of efficacy. Thus empirical results indicated that effective teachers are highly knowledgeable about the objectives of the 1978 curriculum and about appropriate pedagogical practices. Also, such teachers are rated as strongly dedicated to their profession. Finally, teachers rated as knowledgeable and dedicated feel efficacious in their teaching, reporting comparatively few obstacles to effective instruction in their classrooms. The interaction of these factors leads these teachers to engage in the teaching practices described above.

Activities at higher administrative levels (school, school cluster, district, provincial or the national levels) in turn influence teacher knowledge, commitment and sense of efficacy. For example, teachers with a bachelor's degree in education are more knowledgeable about the 1978 curriculum and more effective as instructors than are teachers with less education. But the results showed that preservice education, a responsibility of the national level, is not sufficient to produce effective teaching. Teachers who consistently receive supervision within the school feel more efficacious than other teachers and are seen to be more effective as instructors. Receiving inservice training (a cluster, district, provincial or national responsibility) is also associated with more effective instruction. And teachers working in communities which strongly supported education feel more efficacious in their teaching than do other teachers. The diagram below shows this model of teacher effectiveness in Thailand.

Such a model, however rudimentary, provides a conceptual framework for policymakers to think about reform initiatives such as staff development for teachers and principals, monitoring activities by school clusters, district and provincial offices, and reallocation policies by the national government. It neither prescribes what reforms should be initiated nor limits the

A Model of Teacher Effectiveness in Thailand



controversy over the goals of schooling, which are multiple and, sometimes, conflicting. It allows policymakers to focus discussion on what types of policies, at what levels, and how they are to be implemented so they might enhance the chances of the factors described above to operate in a way to promote more effective classroom instruction.

6. <u>School-based, flexible staff specialization leads to more effective classroom instruction than the explicitly stated national policy of staff generalization</u>.

In Thailand, it is the policy of ONPEC to encourage staff generalization rather than specialization. Every teacher is expected to teach each of the five major subject areas in the Thai curriculum. Systems of instructional support, including teacher and principal preservice and inservice training programs and systems of evaluation, are based on the assumption that all teachers are generalists. BRIDGES research, however, found that in about a third of the ONPEC schools, some degree of specialization nevertheless occurs (Schmidt, in process). In those schools teachers divide up subject matter

assignments so that not every teacher must teach every subject. Such specialization, however, was not found to be the equivalent of departmentalization.

BRIDGES research found that school-based, flexible teacher specialization came in two forms. First, teachers teaching in the same grade divided up responsibilities so that, for example, one sixth grade teacher taught math and life experience, a second sixth grade teacher taught Thai language and character development, and a third sixth grade teacher taught work-oriented experience. This kind of specialization, of course, did not occur in schools with only one teacher per grade.

Second, teachers assigned to different grades divided responsibilities. For example, a fifth grade teacher taught math to both fifth and sixth grade children, while the sixth grade teacher took responsibility for Thai language for both fifth and sixth graders. Such specialization was possible for all types of primary schools.

Specialization was more likely to occur in large schools than in small schools, more likely in urban than in rural schools, and more likely in some regions than in others. Also, in primary schools not under the control of ONPEC (that is, in private schools, municipal schools, and Bangkok schools), specialization in the upper grades is the rule rather than the exception. However, in all schools, no matter how small, no matter where located, and no matter how administered, some degree of specialization could and often did occur. Even some of the small, remote ONPEC schools used some specialization.

Teacher specialization was found to be significantly positively related to student achievement in every subject area. That is, specialization in math was associated with elevated math achievement; specialization in Thai language

was associated with Thai language achievement; and so on. The positive effects of specialization were found even after controlling for a host of student background and school-level variables, including student social class, nutrition, distance from school, pre-primary experience, prior grade point average, school social class, school size, region and school resources. Specialization, wh it occurred, was organized at the school level through principal and teacher initiative.

Regarding specialization, four policy implications for countries struggling to improve primary school quality derive from BRIDGES findings. First, the beneficial effects of specialization provide a reason to consider a policy of actively encouraging and supporting school-based, flexible teacher specialization. Such specialization may not be beneficial in all cases (for example, it may not work well for linguistic minority children), but, in most instance, it does seem to produce positive effects.

Second, inservice training programs which assume that all teachers are generalists when in fact many are specialists may be wasteful of resources. To the extent teachers do specialize, targeting inservice training in areas like pedagogy, curriculum, and measurement and evaluation to the subject specialties of the teachers may be more effective and less costly than basing such programs on the assumption that all teachers will be generalists.

Thirdly, preservice programs that train teachers to be generalists may not be contributing as much to school improvement as they could. A program encouraging teacher candidates to develop an academic major coupled with courses that provide a foundation in all content areas may create a more competent classroom teacher.

Last but not least, such findings suggest that national attention to adaptations negotiated at the local level may be worth considering in the design of policy. While national policies may prescribe one approach to effective instruction, local actors may develop policies that prove more effective. National policies may need to be re-evaluated in light of such local practice.

7. The role of principal as instructional leader can be created, learned and implemented. The experience of Thailand suggests that policy can play an important role in fostering such change, which in turn has proved critical to improving primary school quality.

At the beginning of the 1980s school principals typically spent little time on academic affairs. Routine paperwork, checking to see that regulations were being followed, attending meetings away from the school, and pursuing their own interests with the community (often involving financial or business dealings) occupied most of their attention (Chantavanich, Chantavanich and Fry, 1990). According to the Deputy Secretary-General of ONPEC at that time, part of the problem stemmed from a lack of training (Interview, June 1988).

> The problem was like this: the control of primary school education in Thailand at the time was very, very poor. For example, there were no training requirements for principals. There was little leadership by the principal because when we changed the curriculum, we didn't train the principal. We only had a very short training program for the teachers. So we're talking about school supervision.
>
> If the principal went into the classroom and the teacher asked some key words about the new curriculum, he couldn't answer. He felt if he stayed in the school he would suffer a loss of face or embarrassment, so he moved out of the school to spend his time in the community, at the Ampur or the district. So when I went to visit schools, the problem was that I could not find any principals who stayed at the school. So teaching was very, very poor. There was no supervision, no monitoring or anything like that....

During 1985-1988 all principals in Thailand participated in an inservice program funded by the World Bank. The training had four phases and was

conducted in an atmosphere designed to encourage them to take it seriously: a pretest was given, homework before the second phase was assigned, systematic discussion of the different areas of principal responsibility occurred during the 5 days of intensive training, simulations were used, and participants were required to pass a posttest. Those who passed the posttest and also received good evaluations during a year of follow-up by district and provincial supervisors were awarded a certificate. A 1987 evaluation found that over 60 percent of principals ranked "high" in terms of changed behavior as a result of the training (ONPEC, 1987).

Concurrent with this initiative were a number of changes in the regulations governing the requirements to become a principal. Teachers can no longer simply move into the ranks of administration. Minimum qualifications are required, district and provincial approval is needed, and all candidates must complete a training program in educational administration. Rankings for available positions are determined on the basis of test scores upon completion of the training program and the quality of a "mini-thesis" research project on a theme or issue in educational administration (Wheeler, Raudenbush and Pasigna, 1989). Once in a position, the principal's attention to the academic purpose of schooling was reinforced by the increasing emphasis given to testing at all levels of administration.

Policy changes were necessary but not sufficient. All these changes took place within a cultural context that provides strong support for leadership. In Thailand, authority for leadership is assumed and the right to exercise it is expected, and, within wide bounds, tolerated and accepted. In the absence of leadership, group life often degenerates into individual conflicts as those on similar levels of authority demonstrate their reluctance to accept decisions from equals (Xuto, 1987; Hanks, 1975).

These policies and the cultural context in which they were implemented help to explain results from both the BRIDGES survey and case studies which showed the principal plays an especially important role at the school level in creating a context for more effective classroom instruction. BRIDGES survey results, for example, showed that internal supervision is related to higher student achievement, particularly in reducing disparities in achievement among students. This means that poor students were given more attention as a result of internal supervision of teachers. Furthermore, supervision predicted teacher effectiveness, supervised teachers felt more efficacious in their teaching, used materials more effectively, engaged students more actively in class activities, and were perceived as more effective instructors by students (Raudenbush, Bhumirat and Kamli, forthcoming; Bhumirat et al., 1989). Finally, more active principals were able to raise more local resources (cash and in kind) from their communities than inactive principals. These resources, as noted above, could then be used in various ways to improve the quality of instruction (Tsang and Kidchanapanish, forthcoming; Tsang and Wheeler, 1990).

The survey also provided evidence that inservice training of principals improved principal instructional leadership and teacher effectiveness. Specifically, principals receiving inservice training were significantly more likely to provide teacher supervision than principals who did not receive training (Raudenbush, Bhumirat and Kamali, forthcoming; Bhumirat et al., 1989).

The case studies carried out as part of the BRIDGES research in Thailand showed that internal supervision and the ability to raise local resources were part of a larger set of activities that comprise effective principal

leadership (Wheeler et al., in process). In schools with higher student achievement (where more teachers used effective teaching strategies) and schools which were actively undergoing change to improve, principals were found to pursue leadership styles that differed from principals in less effective schools. These styles differed, first of all, in terms of school management practices within the school (e.g., creating an academic focus in the building, improving time on task, carrying out supervision and providing helpful feedback, implementing evaluation and reward systems which recognized, to some degree, merit, and role modeling). They differed, secondly, in terms of efforts to promote better school-community (temple) relations (e.g., involving parents and the abbot in school affairs, participating in community affairs, and getting staff members to be involved in the community). Thirdly, they differed in terms of their receptivity to initiatives from higher administrative agencies (see Wheeler et al., in process, for a greater elaboration on these factors).

While training alone (preservice or inservice) is not the answer to improved school performance, evidence from the Thailand case suggests that coupled with other policies and a cultural predisposition of deference towards leadership once it is exercised, school managers can indeed learn to become instructional leaders within their school and that such leadership provides a critical ingredient for sustained internal improvement in primary school quality.

8. <u>School clusters are not a panacea for improving primary school quality. They represent a management strategy, which, under certain conditions, can contribute in limited ways to school improvement efforts</u>.

The school cluster movement, the administrative grouping of schools in close geographic proximity for educational purposes, has grown recently in

popularity. In addition to countries in Latin America, such clusters have been introduced in Burma, India, Nigeria, Papua New Guinea, the Philippines, and Sri Lanka (Bray, 1987). In Thailand, where the movement dates back 40 years, primary schools belong to school clusters (7-10 schools per cluster) which are responsible for improving the performance of the weakest school(s) in the cluster and for improving student performance across all schools in the cluster.

The BRIDGES project carried out a number of studies of school clusters which showed that, under certain conditions, school clusters influenced both the management processes within schools and the teaching-learning processes within classrooms (Wheeler et al., 1989; Wheeler et al., forthcoming, a; Chuaratanaphong et al., in process). But while cluster activity contributed to improving the capacity of teachers and principals to perform their jobs well and to holding both accountable for the results of their efforts, the degree of cluster influence is dependent on two factors: internal efficiency and school receptivity to cluster initiatives. What seems to be at work in terms of school cluster influence is a threshold effect. That is, if all the internal organizational factors of the school cluster are working well, then maximum influence is possible. How much influence occurs, however, is dependent on the degree of receptivity of each individual school. There is variation, by schools within a cluster, to each cluster initiative. Schools vary by accepting initiatives, modifying them, or even ignoring them.

Problems of internal efficiency plagued most of the school clusters we studied, which contributed to the finding that few clusters fulfilled the national government's aspirations. These problems included:

1. Cluster office staff who do not perform effectively because: a) they lacked sufficient knowledge of their accountability and capacity-

building responsibilities; b) the double promotion system did not encourage the best people to apply or to work actively at cluster tasks; and c) an incentive system which did not encourage principals to allow their best teachers to work at the cluster office;

2. Academic cluster teachers who lack knowledge of how to provide assistance to teachers to improve their teaching.

Efficiency was also affected by district office and provincial pressure to emphasize an accountability role to the near exclusion of any capacity-building role. This limited the range of strategies available for a cluster to pursue.

Regarding school receptivity, the role of the principal was found to be especially important. The principal influenced school response by affecting teacher participation in cluster-sponsored initiatives, by promoting building-level attention to issues raised by cluster interventions, and by encouraging the cluster to pursue policies congruent with teacher interests. Principals trying to improve school performance or to maintain current levels of high performance were most receptive to cluster policies; principals from the poorest performing schools were less interested in cluster initiatives. Principal support for cluster initiatives, therefore, created important constraints on the role the cluster could play in improving school quality (in addition to Wheeler et al., forthcoming a, see also Tsang and Wheeler, 1990).

Improving the role of school clusters requires attention by policymakers to the balance between accountability and capacity-building initiatives, problems of internal efficiency, and the role the principal plays in affecting school receptivity. School cluster contribution to school improvement will always be limited by the tensions inherent in such an organization, but its role could be enhanced by strategies which address the problems described above in a systematic way.

9. Useful staff development can be delivered in many ways. Formal programs from the central government have the greatest effect when they are designed to meet the specific needs of teachers and are delivered in a way that involves them in the instructional process. A great deal of learning occurs in other ways which government policy can support.

A comprehensive review of educational policy initiatives from 1980-1988 found that policies designed to improve capacity had the greatest chance to be implemented and to make a difference in student learning if they had the following components: strong and united national government support, teacher and administrator involvement in the design and implementation phases, content that met the pedagogical and subject matter needs of teachers, and increased student engagement (Wheeler, Raudenbush and Pasigna, 1989). Staff participation in designing and implementing training programs proved to be a way to build knowledge of what participation meant. Such knowledge was then transferred to the classroom where teachers elicited active involvement of students in the teaching-learning process. In a very real sense, desired classroom changes had to be embodied or expressed in the social relations through which the program was implemented. That is, to a certain degree, the medium through which the program was implemented became the message about how classrooms should function.

The survey and case studies also showed that on-the-job learning, linked organically to local practice, created the conditions for lasting changes in teaching practices and improved student learning. Principal supervision with feedback provided in a supportive way, teacher sharing of knowledge of content and pedagogical practice within a school, and cluster organized opportunities for teachers to share experiences about classroom practice and to develop materials tailored to their needs are all examples of such locally-generated staff development opportunities which were translated into changed

instructional practice, greater student engagement and increased learning. Moreover, these practices had two advantages over nationally-sponsored programs: They could be initiated without waiting for a national initiative and they were far less expensive. Perhaps their most important contribution was to encourage greater initiative at the local level to meet specific needs (Raudenbush, 1990).

Such findings are relevant to other Third World countries who realize the necessity for improving the capacity of teachers and principals to perform their roles more effectively but lack resources to launch major national initiatives.

10. Management Information Systems require both a quantitative and a qualitative component, not only for accuracy, but also for helping policy researchers at the central level to keep in touch with local school realities.

Many Third World countries are currently designing, reforming and implementing some form of a Management Information System (MIS) to track progress towards improving primary school quality. Results from quantitative variables, however, can only demonstrate correlations which are suggestive of relationships. By including a qualitative study component drawn from the quantitative study and focusing on specific relationships, the contextual factors which more fully explain such relationships can be illuminated. Knowledge of these contextual factors can often prove critical for policy implementation (Wheeler, Raudenbush and Pasigna, 1989; Schwille et al., 1986). Moreover, they have the advantage of helping policy analysts at the central level to keep in touch with local realities. For example, BRIDGES quantitative research on staff specialization helped Thai policy makers see a "policy" which they did not know existed to the degree it does; the qualitative component helped illuminate the way such a policy was implemented

in small rural primary schools. BRIDGES qualitative research on principal leadership helped explicate a single finding from the survey, the importance of supervision for school quality, into a model of effective and ineffective principal leadership which could then be used in preservice and inservice training. Perhaps the most important aspect was not the information itself but the fact that policy researchers from the central level were the ones who gathered such information. In highly centralized systems, there is a special need for a well-grounded feedback loop. One method for helping those at the central level to understand better the contextual factors that affect policy implementation is to involve them in systematic studies of a qualitative nature at the school and classroom levels.

Conclusion

The dilemmas and tensions inherent in stimulating change while managing overall system performance represent challenges of major proportions once a system moves from the stage of access to the need to improve quality. While BRIDGES research on Thailand provides no answers for other countries, it does illuminate the issues, suggests the kinds of questions which must be considered and, based on its experience to date, provides some guidance for directions which might prove fruitful.

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