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**POLICIES FOR TEACHERS WORKING IN THE PERIPHERY:
AN INTERNATIONAL REVIEW OF THE LITERATURE**

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A. INTRODUCTION

The focus of much recent educational policy has shifted from providing educational access to improving the quality of education. This shift is reflected by changes in policies directed to teachers. Whereas previous policies focused on attracting a sufficient number of individuals--often-times with minimum qualifications--to cover the demand generated by goals such as education for all, the tendency now is to concentrate on improving the quality of those individuals who are currently teaching or who plan to become teachers. These attempts have traditionally seen teachers as no more than mere recipients of state mandates placing them at the margin of policy making and implementation. In congenial, accessible, or urban areas this approach may work, however in difficult, remote, or rural areas it has not. In marginal situations the challenge for policy makers has been to attract well qualified individuals, or individuals who have the potential to become effective teachers, and who would stay for extended periods of time in schools and locations where life itself is a challenge. This paper begins with the assumption that future policy for the periphery has to take greater consideration of teachers' needs and it seeks to present a number of ways to do this; some of these policies already have proven viable; others will require further testing and evaluation.

This paper reviews the literature in regards to teachers working in the periphery and educational quality. It addresses five questions: What are the major policies that have been developed to increase the quality of education in peripheral areas in relation to teachers? What are the major assumptions of these policies? How effective have these policies been? What is the role of teachers in the design and implementation of policies that will eventually affect them? What are the informational needs and conceptual frameworks for policy making in regards to educational quality and teachers in a peripheral context?

B. LOCAL VERSUS CENTRAL CONTROL

The conceptualization and implementation of policies designed to affect the quality of education through the teacher are dependent in great extent on the degree to which these policies are centrally or locally designed and implemented. Recent research in the U.S. has pointed to the fact that practitioners are street level bureaucrats (Lipsky, 1980; Cohen, 1990). This research recognizes that the ultimate implementation level of a policy is by definition local. This

conceptualization is not however what has dominated policy making in regards to teachers and implementation systems worldwide specially in those countries with a strong tradition of a centralized educational system. In centralized systems it is often assumed that policies are made at the center to be implemented at the local level with little or no input from the recipients. This however does not mean lack of enforcement during policy implementation. To insure compliance, centralized systems have built in mechanisms and created such roles as the inspector of the school and others. In spite of this, central level policy and implementation has often failed to address local level needs and by implication national needs as well (Baker, 1988; Dove, 1982a; Thompson, 1990). This situation however, is gradually changing inspired in part by the common sense idea that if policy initiatives are to be successful they need to address the needs of those to whom policies are directed, with input from these populations, and in part by empowering local communities to develop and implement policies thus increasing the possibility of making a difference at the local level (Shaeffer, 1990; Vera, 1990). This is specially true in countries where the geographical location of teachers, the social complexity of the context in which they work, and the lack of infrastructure makes it difficult for authorities in the center to have an accurate picture of the situation at the periphery. Only infrequently however are teachers asked to provide input in developing policies, and implementation plans (Thompson, 1990). Not all local implementation and decision making capacity, however, is beneficial for difficult or remote schools. For those schools and communities which lack resources and which have been constantly marginal, awareness raising at the center may be the first step towards improving the quality of education in those areas. If poor schools are left at their own devices--which may be a consequence of misinterpreting local level decision making and implementation--the result may be an exacerbation of their existing poor condition (Cummings & Ridell, 1992). In many cases, specially in recent times, enlightened centralized educational systems have look to decentralize a number of functions in attempts to better serve the population in a more cost-effective fashion (World Bank, 1991).

In highly decentralized educational systems, policies are more likely to originate from the local levels or the community (Caldwell, 1986). Policies at this level typically require collaboration from local groups, the parents, and the community in an effort to support teachers'

work situation, to attract or retain teachers, or to improve the conditions of the school and that of individual students (Dove, 1982b). Researchers argue that these initiatives tend to be more comprehensive and less detached from the teachers' reality in the school. They may go from raising funds to supporting a larger number of teachers in the school, to improving or raising a school building, participating in school board governance, or implementing feeding or boarding programs for children among others. Policies and resources are managed and distributed at the local level. Though this should not be understood as an argument for privatization of schools in the periphery, in decentralized education systems schools and teachers in remote areas would seem to stand a better chance for having their needs met. This however depends in great measure on the level of economic and social development of a given country, as well as on its infrastructure. Even in decentralized systems scarce resources are often allocated to serve members of elite groups. Some exceptions are found in some socialist countries where there is a conscious effort to avoid elitist policies (e.g., Sri Lanka). Decentralized systems would seem to be better equipped to deal with issues brought about by the existence of complex populations, assuming that local management of education is consistent with the needs of these special populations. This is however not always true. Female access to education is often times discouraged at the local level even though there are national policies that attempt to do just the opposite such as in Pakistan (Anderson & Chaudhry, 1989). Even in highly decentralized education systems such as the U.S. there are still mandates from the federal government developed to benefit marginal populations such as federal subsidies for education, equity oriented policies to increase access, and opportunities to learn for disadvantaged groups in the population such as school desegregation, Head Start, or mainstreaming of handicapped children in regular classrooms (Silver, 1987; Southwest Educational Laboratory, 1990). This fact raises questions about the influence that social class, race, gender, and handicap status has over policies for peripheral situations (Kyle, 1990).

It should be noted that centralization does not preclude the use of local strategies (sometimes defined as de-concentration) in a single country. Countries with centralized educational systems such as Mexico (McGinn & Street, 1986), China (World Bank, 1991), Sri Lanka (Cummings et. al., 1992; Totto et al., 1991) may resort to locally based strategies to

increase the efficiency and efficacy of their educational systems. This is a phenomenon that has increased recently (Cummings & Riddle, 1992). A number of countries such as Chile and Mexico have begun to encourage local level responses to problems of educational quality at the primary level such as moving operational control to municipalities and encouraging participation of the private sector (World Bank, 1992).

Many educational researchers such as Dove for example, have argued that local level development and implementation of policies are more appropriate for remote schools whereas other researchers contend that the initiation level of a policy is not as important as the involvement of the affected people in the process of developing and implementing such policies (Korten, 1980). Similarly, Schwille & Wheeler (1992) discuss the variable role of the state in policy formulation and implementation and caution against thinking about centralization and decentralization as an "either/or proposition and that too much emphasis on one or the other may miss both the realities of how a system works and of constructive options for improving the ability of the State to influence the direction of educational change" (p.225).

C. KEY ISSUES

1. THE SITUATION OF TEACHERS IN THE PERIPHERY

Peripheral areas are usually located in rural zones or remote areas of a country and a number of conditions such as difficult access to communication means, lack of resources, and neglect from more powerful sectors of the country combine to place these regions in the periphery of educational and other opportunities. Thus both rich and poor countries have peripheries within themselves such as certain regions of Alaska in the United States or certain regions of Chiapas in Mexico. The challenge for teachers in these areas is multilevel. Teachers may have to walk several miles to school, reside in rural or remote areas away from their own family, and survive as an outsider in the school community. Both untrained or trained teachers are often poorly prepared to teach in these areas and lack sources of professional support or development. Because of lack of preparation or knowledge of the community teachers may have difficulty addressing the learning needs of their students. Often times rural or remote status is accompanied by low salaries and recognition and poor possibilities for promotion.

There are other peripheral areas as well. These are populations who actually live in large cities but whose marginality is determined by their history of access to educational and job opportunities, and who usually live in conditions of poverty. Examples of these peripheries can be found in certain regions of big cities such as New York City in the U.S. or Mexico City in Mexico. Schools serving these populations are often lacking in resources to properly address their students needs. Teachers in these conditions confront problems of violence, drug addiction, abuse, and learning difficulties--among others--that they are not prepared for. In every case teachers of peripheral populations are peripheral themselves. Although teacher issues in terms of status, salary, support, recognition, and personal conditions, may vary from region to region and country to country, they all have a common tread, they all provide an opportunity to analyze the different responses to problems that emerge out of situations related to teachers' work in extreme conditions.

Because the issues involved in teaching peripheral populations are many and varied, and cut across industrialized and less industrialized countries, this literature review attempts to be inclusive and looks at policies for teachers in the periphery regardless of the country in which they originate. The review does however, include descriptions of the different contextual factors that do in one way or another influence both policy development and impact.

2. THE EMERGING RELEVANCE OF TEACHERS FOR THE IMPROVEMENT OF EDUCATION QUALITY

Increasingly researchers, educators, and policy makers point to the teacher as a key individual in the implementation and success of educational policies designed to improve the quality of education and to increase pupil achievement in both centralized and decentralized systems (Cohen, 1988; Fuller & Snyder, 1991; Lockheed & Verspoor, 1989; Rust & Dalin, 1990; USAID, 1991; Verspoor & Leno, 1986). Recently, international agencies, such as the World Bank and the United States Agency for International Development, have highlighted the importance of teacher training in improving the quality of education. This emphasis is evident both in these institutions' research agendas and in the initiatives they support in a number of countries (Avalos & Haddad, 1981; Fuller, 1986b; Lockheed & Verspoor, 1989; USAID, 1991; Williams, 1979).

The conceptualization of the importance of the teacher in improving the quality of education is evident in a recent informal review of World Bank's 93 basic education projects for the last ten years, which shows teacher training as an important component in each one of these projects. Although this emphasis on teachers represents a remarkable departure in educational policy and budget allocation priorities in the countries included in this review, it should be noted that only six out of the 93 projects reviewed include provisions to deal with teacher issues in a comprehensive manner addressing simultaneously education, recruitment, retention, and deployment issues. This disparity makes evident the predominant conceptualization of teachers as "inputs" in the larger educational machinery rather than teachers as social entities (World Bank, 1992).

There seems to be agreement in the literature that the ability of teachers to improve the quality of education depends to a large degree, on the level of satisfaction of teachers needs in relation with the structure of the educational system and the level of collaboration and support existent in the workplace (Avalos & Haddad, 1981; Fuller, 1986b; Johnson, 1990; Lockheed & Verspoor, 1989; Rosenholtz, 1989; USAID, 1991; Williams, 1979).

As early as 1966, Beeby pointed out in his work on the quality of education in less industrialized countries, that the development of educational systems depends on a great extent on the teacher (Beeby, 1966). Using an evolutionary framework based on an equilibrium functionalist paradigm he analyses the different stages of evolution of an educational system as conditioned by the level of education of teachers. According to this analysis there are four stages of development which are not necessarily linear. The first stage, the "dame school," is characterized by poorly educated or untrained teachers and poses severe limitations to the quality of education children receive. The next stage he calls "formalism" and is characterized by ill-educated but trained teachers. The third stage he calls "transition" in which teachers are better educated than in stage II and are therefore better able to provide higher quality teaching. The fourth stage he calls the "stage of meaning." In this stage teachers are both well educated and well trained. At this point he argues, teachers teach for conceptual understanding. It is at this point that teachers may gain more control over the classroom and the school situation and it is at this point that more innovative approaches to teaching may be successfully implemented.

Although his analysis still sees the teacher as an individual that needs to be “managed” by the State, he does recognize that the intellectual needs of teachers have an important impact on their effectiveness and on students' learning.

D. CONCEPTUAL FRAMEWORK

There are at least two perspectives that could serve as a point of departure in analyzing the problematic of teachers in marginal or peripheral areas. The first represents the point of view of the employers of teachers, usually the state through a specific branch of the Ministry of Education or in less centralized countries through school districts. The second represents the point of view of the teachers themselves.

The perspective most often found in the literature, is that of the employers of teachers and has focused on four policy questions with respect to teachers and their impact on educational quality: (a) how to attract qualified and competent individuals into teaching; (b) how to train or educate teachers to improve their level of knowledge, skills, and dispositions; (c) how to make the best use of teachers in relation to the context in which they will teach, and (d) how to keep well qualified and competent teachers in their assigned or chosen schools as well as in the profession. These questions get phrased somewhat differently by central and local authorities but regardless of the central or local character of these questions, they still originate from one side of the work equation.⁷

The second perspective represented by the point of view of teachers is quite different from the first and may be more important for thinking about the periphery. Whereas it used to be true that most teachers would comply with their assignments to difficult or marginal areas--with governments/employers mostly following a coercion model--more recently teachers have begun to resist those approaches and they either refuse a placement if work and personal conditions are perceived as not appropriate, or worse, drop out of the profession altogether. Therefore teachers, just as any other professionals, in order to work productively in peripheral schools would have to make a personal choice to go to these schools.

⁷ Discussions with William Cummings helped develop this idea.

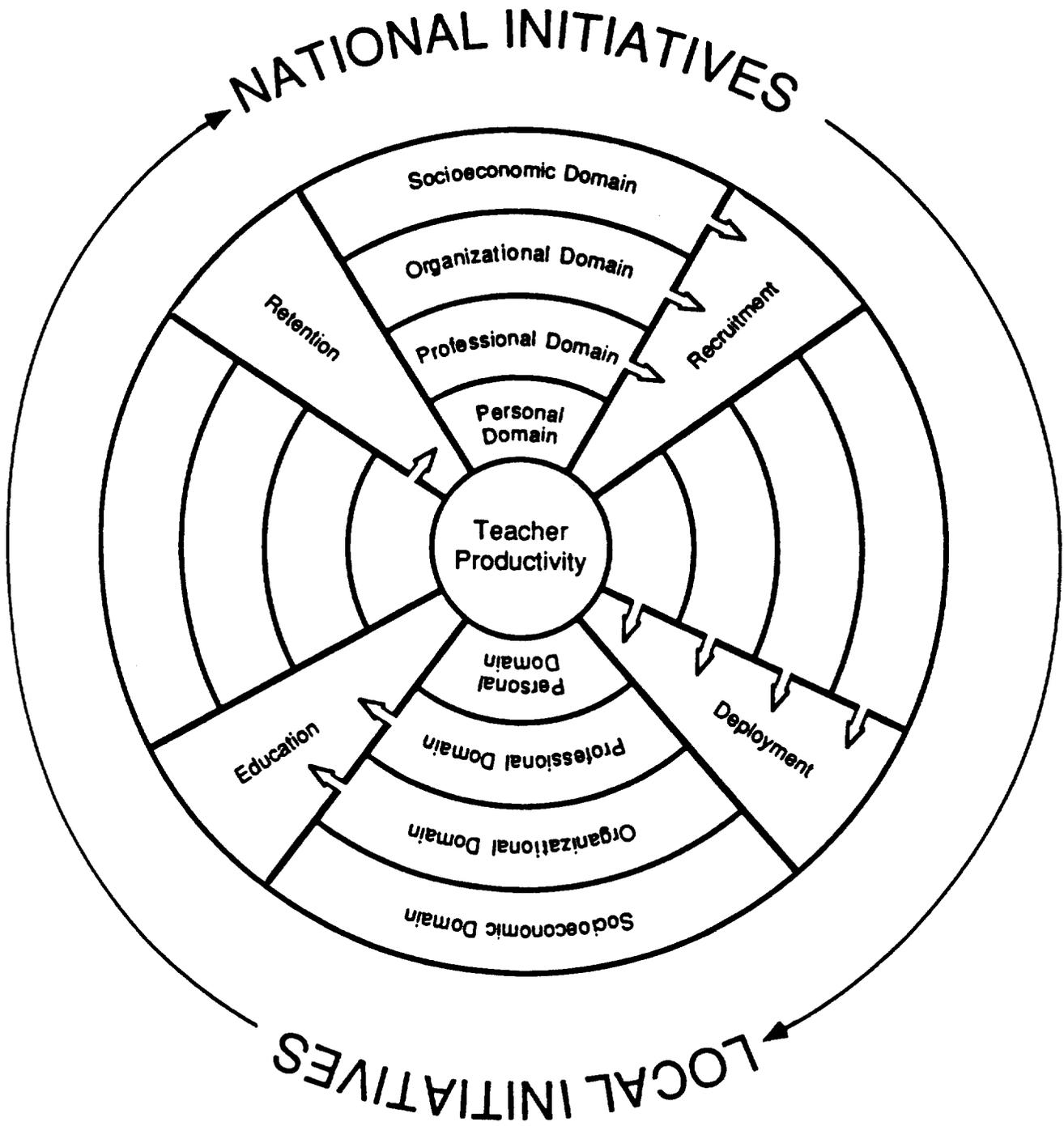
The following aspects may influence teachers choices and impact their productivity: (a) personal and opportunity costs and benefits; (b) existence of supporting structures that will facilitate teachers' success once in the school; (c) perceived readiness to teach in these specific situations; (d) perceptions about teachers' own personal image and status as a result of such choice.

If teachers' needs and their consequent effect on productivity are to be effectively addressed through policies, a new conceptualization of the role of the state and the teacher will require for the latter to be active producers and implementors of policy rather than its passive recipients and for the state an increased flexibility in its role as facilitator of teacher, school, and community empowerment.

In this paper I propose that teachers in considering their place of work and its impact on their productivity have four sets of concerns or needs: socioeconomic, understood as the social-economic benefits and meanings attached to being a teacher, organizational, understood as those arrangements and conditions existent in the school and its impact on the teacher, professional, such as the resources-- including teachers' own knowledge and skills--that enables or hinders teacher's effectiveness in the classroom, and personal, defined as those basic needs to be fulfilled so that the teacher can effectively concentrate in the task of teaching and learning.

Figure 1 presents the conceptual framework guiding this paper.

Figure 1. Teacher Policy Domains



In Figure 1 the teacher's levels of need and its effects on productivity (represented by "the core"), are shown as circles one nested within and dependent on the other forming concentric circles. In the base of the "nested circles," are policies directed to improve the socioeconomic needs of teachers which is a key element on which this infrastructure is sustained. That is, if the socio-economic needs of teachers are not satisfied the infrastructure may crumble. The second circle represents the organizational policies addressing the improvement of the working conditions within the school. The third circle refers to the teacher professionalization policies which are mostly directed to impact the classroom conditions under which teachers and pupils interact. The fourth circle represents policies directed to impact the personal needs of teachers. The last circle or the "core" represents the outcome of the degree of satisfaction of teachers needs at these four levels or teacher productivity. Personal level policies are placed closer to the core (or teacher productivity) since they have a more immediate impact on teacher effectiveness than the other less immediate, however important, policies. These four levels of policies affect issues of recruitment, training, deployment and retention of teachers in different degrees but all these should be seen as interacting and complementing each other. Socioeconomic policies for example, are more likely to address issues of recruitment, deployment and retention, whereas organizational and professional policies are more comprehensive in the sense that they address recruitment, training, deployment, and retention issues. Finally personal policies are more likely to affect deployment and retention issues. They all need to work together, however, in order to comprehensively address teachers' problematic. Depending on the level of central or local control the policies will have a broader or a narrower base representing local or central initiatives and will reflect in varying degrees the contextual characteristics that gave them origin.

The development of this framework within the configuration of "nested domains" attempts to make explicit the belief that in order to explain policies for teachers, when considering teachers as social entities, it is necessary to examine several layers of factors that interact, influence and depend on each other and eventually delimit policy outcomes. Other fields such as organizational and sociological theory have resorted to nested domains to analyze social phenomena. For example, in the early sixties Sutermeister developed a "nested model" to explain major factors affecting employees' job performance and productivity (Sutermeister, 1963).

What follows is an attempt to understand the premises and origins of policies directed at teachers, within the framework explained above, and their likelihood of success depending on the assumptions and the structure under which they have been implemented. Considering as well the structural level--central or local--under which these strategies are implemented. A table at the end of each section summarizes a number of policies that have been implemented or suggested to address the different levels of teachers' needs.

E. POLICIES ADDRESSING TEACHERS LEVELS OF NEED

1. SOCIOECONOMIC LEVEL

Policies directed to affect the socioeconomic needs of teachers rely on the idea that extrinsic rewards and incentives--such as salary and benefits--job status, job security and job placement, and professional and social prestige--through credentials or expectations for future promotions among others--are important factors that can be manipulated in order to attract, deploy and retain effective teachers. Merit pay in the U.S., and the recent IEES proposal in Indonesia to implement career ladders for teachers are good examples of this type of policy (IEES, 1990; Murnane, Singer, Willet, Kemple, Randall, 1991).

According to the literature, socioeconomic strategies seem to have a stronger impact on improving--or worsening--the quality and quantity of the teachers recruited (Dove, 1986; Thompson, 1990). Low salaries in the more industrialized countries such as the U.S. associated with hardship in work conditions prevent qualified individuals from entering the profession for higher paid occupations (Kerr, 1983; Sykes, 1983). In less industrialized countries low salaries have more dramatic repercussions. Frequently, teachers see themselves pressed to take up two jobs, and in more extreme cases to abandon teaching for other more lucrative occupations (Dove, 1982a). In some cases, however, thoughtful salary policies have been implemented which managed to attract as well as retain qualified candidates to the profession. Salary differentials, for example, have been used as compensations for assignment to schools in difficult areas (Bruno & Negrete, 1983). Socioeconomic level policies are especially relevant when talking about teachers who are recruited to work in the periphery. The salary level in these cases need to vary by province or region. Claude Tibi (1990) cites Morocco as an example where the increase in basic salary on assignment to a difficult area is 8 to 10 percent according to seniority and

qualifications (p.11). Benefits such as housing or housing allowances as is the case in Sri Lanka (Baker, 1988; Tatto, et al., 1991) or in Senegal (Tibi, 1990) increase the chances to improve recruitment and deployment conditions. Tibi (1990) documents the use of the overtime system in the majority of French speaking African countries as a way to insure additional pay to teachers for extra work. This strategy, he argues, has helped solve the under supply of secondary teachers specially in science subjects (p.11).

In less industrialized countries with a centralized government tradition, salaries, monetary rewards, and other benefits have been typically set up at a national level under the assumption that this strategy may bring about more equal conditions for teachers--though not necessarily more equalitarian--across the board. The implications of this situation for teachers in peripheral areas is significant. In theory the setting up of salaries at a national level guarantees a more equal distribution for all teachers in a given country regardless of the region where they teach as long as they comply with the commonly used seniority and qualifications criteria for salary determination and increases. But even when the salaries are set at the national level teachers in the periphery may be at a great disadvantage since they are prone to lack qualifications, to have lower seniority, and to be locally hired. Consequently, teachers of very poor regions typically would get extremely low salaries whereas teachers from richer regions or urbanized areas would get disproportionately higher salaries (Tibi, 1990; World Bank, 1991). Similar conditions are observed when considering other monetary rewards and benefits. This situation, however, changes across systems. Even in some centralized systems, while there is a uniform scale for basic salary, there can be additional pay or subsidies to reward those working in "hardship" or peripheral areas as in China (World Bank, 1991).

The job status of teachers usually refers to whether or not they belong to the civil service (Tibi, 1990) or whether or not they are considered government or non-government (locally or community hired) employees and the degree of job security they have (i.e., whether they can be fired at any moment). According to Tibi (1990) "the aspirations engendered by this status and by the continual increase in levels of education and training of new teachers has [...] caused the assignment and maintaining in post of teachers in rural areas to be more difficult, giving the living and working conditions there" (p. 5). In every case those teachers hired by the Federation

as in Brazil or by the provincial/local government as the case in China are in a better situation than those hired by the community or the locality.

In China for example, gonban teachers are official employees of the provincial/local governments with corresponding salary and benefits averaging about 100-110 yuan per month. Minban teachers, who are not considered government employees because they are directly hired by the local community, receive only subsidies from the government (not a salary) which averages about 40 yuan per month, and they have no benefits. Although the community gives subsidies to minban teachers this amount varies according to the level of wealth of the community and averages about 30 yuan per month. In addition gonban teachers' residence status is urban (with all the benefits associated with it such as urban schools for their children, food subsidies, and easy access to other resources) while minban teachers have a rural residence status in rural areas (World Bank, 1991, p. 87).

In Brazil teachers recruited by the federation receive a contract as permanent staff, the state-teacher receives a temporary staff contract, and the teachers in municipalities work without contract, receive nominal remuneration for their work, and have no legal protection (Tibi, 1990, p. 5). This situation affects as well the possibilities that teachers have for promotions. Promising tendencies in centralized countries rely on governments working collaboratively with local educational authorities and community groups to support salaries and other needs of teachers.

Job placement is another important factor affecting teachers socioeconomic needs (Thompson, 1990). The perception on the degree of input that teachers have in determining where they will work as well as the perception as to whether they will be part of a good work environment varies depending on the level of centralized (or localized) control over teacher placements. When teachers are recruited and deployed at the local level perceptions about the placement are likely to be closer to reality than those made under mandated central control. When teachers cannot be recruited and deployed locally, two-staged deployment strategies, assigning teachers to specific areas of the country and giving teachers themselves and local staff control over teachers' placement among available positions in the schools in such area, have been recommended to facilitate a "better fit" between the teachers, the school, and the community (Thompson, 1990). Educators have recommended moving socioeconomic level policies towards

a more context oriented model calling for more coherence between mechanisms of recruitment, deployment and training to prepare teachers to work in difficult or remote areas (Dove,1982a).

BOX 1. THE NEW TEACHER COMPENSATION AND PROMOTION SYSTEM IN INDONESIA

The new teacher salary schedule, effective April 1989, together with Replita V planed for more material support and upgrading opportunities and curricular reform, representing a massive effort, on the part of the government, to remedy the lack of incentives for entering, remaining in, and working in basic education. The major issues that needed to be solved were the structure of incentives, opportunities for structural promotion, the recruitment and deployment of the teacher supply system, and the differential access of primary and junior secondary teachers to Diploma 2 upgrading.

The new teacher compensation system proposed the provision of automatic salary increases within every two years and opportunities for advancement in rank every four years. Promotion to a new rank was based on a credit system, which provided the same weightings on a variety of items for all teachers from primary through university. The number of credits required for movement to a next rank varied. Relatively few credits were required at the lower end of the salary scale, while a large number of credits were required at the upper end of the scale. Although credits were expected to be cumulative over time, all credits do not have equal weight. For promotion 70 percent of the credits needed to be derived from educational credentials and hours of teaching. Only 30 percent of the remaining credits necessary for promotion could be accumulated from other categories (participation in inservice training, teaching learning activities, remote area teaching, community service, curriculum development, publications, etc.

The new compensation system attempted to provide very strong incentives for acquiring additional credentials, remaining in the teacher service, and teaching in more than one school. Less weight was given to preparing for class, writing and correcting tests, counseling students, participating in curriculum development, and attendance.

This compensation and promotion system is a response to the recognition that the system falls short of addressing the needs, recruitment, and retention of teachers who work in rural/remote areas. The reasons for this situation are seen as twofold: (1) lack of consensus on the definition of rurality; (2) a perception that teachers should not be singled out for such an incentive since that represents only one class of civil servant asked to serve in remote/rural areas. The credit weightings in the new teacher compensation plan were expected to be cumulative and remote area compensation to be paid only when teachers were serving in such areas. Possible suggestions for policy are: the provision of an extra allowance for the higher cost of living in remote areas; reward remote teaching with greater opportunities for subsidized training; payment of the cost of moving to rural and remote schools and subsidize home visits; and improvement of the system of salary payments to obviate both delays and the high cost of travel to obtain salary payments.

Extracted from: IEES (1990) A review of teacher education issues in Indonesia. Improving the Efficiency of Educational Systems Project.

The provision of credentials to new recruits or to experienced but untrained teachers is a strategy that has been used in countries such as the U.S. to improve the status of the teaching profession, and in others as an incentive for untrained teachers to improve their knowledge and skills, expecting that, in the long run, they will receive a higher pay and better opportunities for promotion or even for transfer (Hawley, 1986; Tatto et al., 1991). Sri Lanka for example has experimented with providing different types of credentials for those teachers who engage in long term inservice training program versus those recruits new to the profession assigned to preservice programs. Those recruits who graduate from preservice programs get a diploma of education (as opposed to a certificate obtained by the inservice recruits) which guarantees them a higher teacher status and higher salaries but also requires them to serve for their first three years of teaching in difficult to access areas of the country. In those systems where central control predominates there is a tendency to grant standard credentials and to professionalize teaching. For teachers in the periphery hired at the local level the tendency is to find teachers with no credentials (deprofessionalization of teaching) or with non-standardized ones (Dove, 1982a). This may mean for those teachers low pay and low possibilities for mobility. However in remote or difficult areas the hiring of untrained individuals may be the only alternative for communities to provide an education to their children (Dove, 1982a). Increasingly educators and researchers are calling for an appropriate preparation for teachers in peripheral areas in association with salary and compensations commensurate to the context of their special assignment (Tibi, 1990; World Bank, 1991).

The provision of incentives, salary increases, and promotions for teachers working in the periphery have been neglected over the years. Part of the reason for this, some educators argue, is the difficulties in defining "periphery" or "rurality" and the development of criteria that would bring about provisions for teachers working in difficult contexts without creating a different "class" of teachers (IEES, 1990). Nonetheless, a creation of a system of incentives--which could or could not be monetary--at a national level for those teachers who choose to teach in rural areas, and at a local level to attract qualified recruits, may encourage individuals to commit themselves to the job.

Automatic salary increases and opportunities for advancement within reasonable time periods, and the establishment of career ladders and a credit system based on hours of teaching in difficult/remote schools to grant promotions, as has been proposed in Indonesia, are promising innovations attempting to improve the socioeconomic level of teachers (IEES, 1990).

Issues to be considered when developing socioeconomic level policies are that even if teachers get the standard pay and benefit packages they may be at a disadvantage since: a) the cost of living is higher in remote areas; b) under traditional arrangements they rarely have access to training and professional development activities which lead to upward mobility; c) there are rarely opportunities--outside farming--to supplement income.

In summary, socioeconomic policies are of great importance for the economic well being, social prestige, job satisfaction, and ultimately productivity of teachers. This review of the literature indicates that policies related to salary, monetary rewards and benefits as well as job status and placement, promotions, and credentials have a high potential to bring about improvement in the socioeconomic status of teachers working in the periphery. Potential policies or strategies, however, need to be evaluated in terms of their economic feasibility before implementation (e.g. see Tsang, 1988). The research suggests that the perspective of the teacher is crucial in the formulation of relevant policies and that the empowerment of communities where these teachers work will tend to provide better support for teachers (World Bank, 1991).

Table 1 presents a number of strategies that have been used or suggested to improve the socioeconomic needs of teachers both at a national and at a local level.

Table 1
Strategies to address the socioeconomic needs of teachers

	National Initiatives	Local Initiatives
Teacher recruitment	<ul style="list-style-type: none"> • Parity in salaries with urban area teachers. • Extra-allowances for high costs of living in rural/remote areas. • Improvement the efficiency in the system of salary payments to rural/remote areas. • Provide teachers working in the periphery with job security (i.e. initial contract for 3 years). 	<ul style="list-style-type: none"> • Additional monetary incentives locally administered. • Complementary salary and benefits provided by the community. • Effective decentralization of system of payment to the local level.
Teacher deployment	<ul style="list-style-type: none"> • Create a national system of extra-pay/incentives for teachers who choose to teach in rural/remote areas. • Allow for staged deployment. • Allow teachers the possibility to chose their post. 	<ul style="list-style-type: none"> • Provide incentives for local-high ability students to become teachers in their own community. • Allow for staged deployment within the region.
Teacher education	<ul style="list-style-type: none"> • Associate teacher training with credentials, pay raises, promotion, mobility and job placements. • Subsidize costs of teacher training (may include food and board expenses for preservice training). • Subsidize costs of teacher training to encourage in-service training for rural teachers. 	<ul style="list-style-type: none"> • Associate training with health and other benefits, and with role within the school. • Provide fellowships awarded by the community to finance training of locals.
Teacher retention	<ul style="list-style-type: none"> • Automatic salary increases at about every two years. • Opportunities for advancement at about every four years. • Establishment of a credit system for advancement into a new rank linking it with hours of teaching in remote/rural schools. 	<ul style="list-style-type: none"> • Community support or compensation for extra-work for teachers. • Establish a credit system for promotion or added responsibility within the school or schools in the area.

2. ORGANIZATIONAL LEVEL

Policies directed to affect the organizational needs of teachers assume that the work place has powerful socializing and motivational effects and that the perception that teachers hold about their work place at the recruitment stage will greatly contribute to whether or not they will choose to work in a peripheral school. Similarly, the effectiveness and success of a teacher depends on the structure and support teachers encounter in the organization of the school which in turn will have an effect on teachers' professional development. The actual experiences while at the school will greatly contribute to the level of commitment and the length of time teachers will bring to a placement.

The literature on policies oriented to affect the organizational needs of teachers has gained importance in recent years. The quality of the organizational context has been documented as a reason why qualified individuals do not enter the profession or leave prematurely specially for those individuals who have experienced poor resources, poorly feed children, and isolation during their first years of teaching in the best situation or who look to a lifetime of service in these contexts in the worst (Baker, 1988; Dove, 1982a; Hurst & Rust, 1990; Moore-Johnson, 1990). The perception in more industrialized countries about the first year(s) of teaching as a "sink or swim" experience communicates to the teachers that they are expected to work in isolation from the community of the school and that support may come from the school administration and some compassionate teachers, however, the circumstances under which this may occur seem to be random at best. It has been widely recognized in the last decade that the context where teachers work directly affects their performance and effectiveness to reach pupils which in turn affects the length of their commitment to a post or to the profession (Hurst & Rust, 1990; Mitchell, et. al., 1987; Lortie, 1975; Moore-Johnson, 1990; Rosenholtz, 1989).

The literature reveals, that attention to the context in which teachers work in remote or poor contexts, and alternatives for support and improvement need more extensive and serious study specially in less industrialized countries (Hurst & Rust, 1990). The literature has largely ignored the interrelation that exist between what the teacher does and the context where they do it (Moore-Johnson, 1990; Thompson, 1990). Educators have pointed out that teachers who are satisfied and stay in the profession seem to derive their greatest rewards from what they are able

to teach to their pupils and from the recognition they receive from their pupils and their families (Mitchell et al, 1987). The premise of the organizational level policies is that for teachers to be successful they need a supportive and nurturing environment. If teachers are not able to work effectively because of organizational constraints, their level of satisfaction and possibilities to stay in the post or the profession decrease (Dove, 1982a).

The continuous questioning of what factors influence teachers' work and the role of the organization of the school on teachers' success has prompted a series of promising strategies. These initiatives define teacher-initiated-teacher-focused policy as one of the most important means to improving the quality of education.

In Tanzania schools have created community-school councils whose task is to recruit and select potential teachers to work in the schools' communities (Dove, 1982). This strategy has the advantage of empowering schools and teachers to place teachers locally (rather than coerce teachers through a national placement system) creating a sense of ownership and commitment from and to the teachers who will be working in these schools. Other organizational policies supporting teacher recruitment and deployment in difficult areas may include the provision of previous orientation to teachers who have the potential to choose to work in peripheral schools, and the provision of training to cohorts of teachers from the same regions who will return to work in peripheral schools.

The managerial guidance and support that can be provided through principals, head teachers, or supervisors at the school level to teachers is an important organizational strategy. Although in centralized structures this support tends to be hierarchically structured it is still recognized that a well qualified and competent principal can greatly improve the quality of education provided in the school and enhance teachers' abilities in the classroom (Cummings, 1992; Kyle, 1990; McLaughlin et al., 1985). Haiti has implemented a program that provides principals with teacher training, school administration, record keeping, financial management, budgeting, and resource needs assessment and planning skills (USAID, 1990). In Thailand, Raudenbush et al., (1991) report on a study where the principal received training on school administration, staff supervision, budgeting, planning, and other tasks. The crucial factor of this policy in Thailand is that the principal is seen as an individual who can perform instructional

functions effectively providing on-the-job training for teachers. This same principle has prompted instructional programs for principals in Sri Lanka and Indonesia and in the more industrialized countries such as the U.S. where the principal is recognized as a potential instructional leader. In a less hierarchical approach (or combined with it), and under a more locally controlled structure, participatory guidance and support among teachers and in collaboration with the school administration have been more frequently tried as ways to build a school community. Examples of this approach can also be seen in Sri Lanka under the new educational reforms. Teachers who participate in the Distance Education training program are introduced by teacher educators to the art of working and learning as a group with positive consequences on teachers' practice and student achievement (Tatto et al., 1991). In more industrialized countries such as the U.S. the Professional Development School concept bases the whole premise of its approach on the idea of developing learning communities in schools with large minority populations in urban areas (although smaller schools are also included in this project) with the expectation to change traditional school structures into more flexible ones to allow for a more reflective teacher practice, with a conceptual orientation, and a positive impact on pupil achievement (Holmes Group, 1990).

School financing and governance represent another group of policies and initiatives strongly influencing the organizational context of the school. Cummings and Ridell (1992) make clear that those who have control of education are those who pay for it. According to them, this is an essential feature that varies across centralized and decentralized systems. In decentralized systems the cost and control of education is locally managed and parity and uniformity are more difficult to enforce. In centralized systems the cost and control of education tends to be nationally managed, tends to look for parity and tends to press for uniformity. Although in theory the search for parity is commendable, in practice it rarely occurs. Schools in remote or disadvantaged situations often find themselves in a situation of central control and poor financing with few possibilities for improvement. The mandate is to come from the center for any change to occur. The case of minban teachers in China mentioned above is applicable here as well. Schools in remote or rural areas are mostly dependent on minban teachers for their children's education. Although the local communities are allowed to hire these teachers, the government controls

teachers salaries, benefits, living conditions and location. New initiatives are looking to change this situation by involving the community in a collaborative effort with the central government to finance the salaries and benefits these teachers deserve (World Bank, 1991). Local management of finances and governance at the organizational level of the school has been found by educators to be a more adequate strategy when dealing with schools in remote or disadvantaged areas (Dove, 1982a; Dove, 1982b).

Community support and involvement is another focus of recent policies looking to improve the quality and efficiency of education in remote or difficult areas (Dove, 1982b; Kortan, 1980). In Thailand for example there is a especial emphasis on promoting school community relationships (Wheeler & Tsang, 1989). Although traditionally in centralized countries community and parent involvement in schools is encouraged, the role they play is limited by set structures and regulations, as is the decision making power and input they may have on school dynamics. In contrast, in locally controlled systems this support is not only encouraged but is essential to the very existence of the schools. As centralized systems have come to realize that community involvement is essential to increasing the efficiency of education and to decreasing costs to the state, more aggressive movements have been made in this direction. As governments see the need to attend to the demands of communities in remote areas an openness to local initiatives has increased. For example, School Development Societies support schools in cash and in kind in Sri Lanka (Cummings, Gunawardena & Williams, 1992). Although an openness to initiatives is essential, support in kind and in cash as well as continuity of the effort are required if such initiatives are going to survive. An example of this support is the Small School Development Program implemented in Sri Lanka in 1976 with the support of UNICEF and described by Baker, 1988 as follows:

[This program was...] designed to reach some 2500 schools in deprived areas with an enrollment of less than 100 pupils. The aim was to help upgrade these schools through community-school reciprocal development activities...[T]he program set about through small-school teacher orientation workshops to build a sense of commitment in the teachers and principals. The basic ideal was a two-way

school-community involvement stressing self-reliance in developing the village...[B]ut...[t]he Small Schools Program dwindled and died out. The enthusiasm and momentum present in some 500 of the 2500 schools involved was by an large not forceful enough in itself to keep the fires of school community development burning...[in 1984 after a couple of evaluations UNICEF discontinued its financial support.] (p. 55)

The example above represents a case of a community development scheme designed and implemented from above and although the program pursued self reliance goals for the community it most likely lacked a grass roots essential to it. This top-bottom strategies seem to occur more frequently in centrally controlled systems than in local ones often with unpredictable consequences.

BOX 2. DEVELOPING STRONG LEADERS TO SUPPORT DYNAMIC SCHOOLS.

Cummings and collaborators have recently found in a study carried out in Indonesia that dynamic schools in this country are characterized by principals who have "taken charge developing approaches that reach beyond the prescriptions of the government programs and the exclusive dependence on government supplied resources." (p. 1)

Congruent with the idea that "the greatest productivity and adaptability is achieved when those closest to the problems are given wide levels of discretion to respond to local situations" (p. 17), Cummings et al. found that the more dynamic and efficient schools could be portrayed in terms of the politics-market metaphor where more dynamic schools were characterized by more independence from government regulations, by principals who were comprehensive managers and showed entrepreneurship, by the relatively high proportion of resources financed from client revenues, and by moderate costs to clients.

We include excerpts of the description of a school exemplifying this situation as shown by Cummings and collaborators:

The 70 year old *Pondok Parabek-Padang Panjang* school is situated in a rural area and is a private institution in terms of fiscal matters receiving only modest assistance from the government....[F]ormal responsibility for the school rests with a group of individuals one of whom is the school principal. Associated with this group is an advisory board composed of a notable group of political and religious leaders, many of whom reside in West Sumatra. This board meets once a year to provide advice on long-term planning. Daily operational affairs, including financial management, rest primarily on the hands of the principal and his assistant; these two chief officers apparently share most of their decisions with the other teaching staff....[T]he institution currently has 1200 students enrolled with more at the lower than the higher levels....[M]onthly fees at the lower levels (elementary grades) are Rps. 6000 and at the higher levels are Rps. 7000....[T]he teaching staff consists of five faculty who are provided by the Ministry of Religious Affairs and 55 who are on an honor basis (at Rps. 3000 a month per hourly load) and whose pay has to be covered from students fees. Most of the staff are former students....[W]hile the school reports little difficulty in retaining staff, it nevertheless began a pension plan four years ago...[to be given to teachers who have been associated with the school for ten years]...the school begins putting Rps 10,000 a month into the teacher's retirement fund; after fifteen years, the contribution is raised to Rps. 15,000 and similar increments occur for each additional five years....[S]imilar care is evident in other areas of the school's management...[such as efforts to reach out to the community]. pp.16-17

Cummings et al. (1992) conclude that "the most dynamic Indonesian schools are those where principals have taken charge, developing approaches that reach beyond the prescriptions of the government programs and the exclusive dependence on governmental supplied resources." (p.1)

Extracted from: Cummings, W.K., Suparman, M.R., Thoyib, I.M. (1992). The Indonesian school principal: Broadening responsibility. Paper prepared for the IEES-EPP Workshop. Jodjakarta, Indonesia, June 28-July 2.

The school curriculum is another case in which national interests and adaptability to local needs makes development and implementation a complex issue. Traditionally, teachers from the periphery find themselves learning during their training a curriculum that is irrelevant to their needs when teaching in difficult/remote schools. Similarly, teachers find themselves implementing a curriculum that is irrelevant to the needs of their pupils in those areas (Montero-Sieburth, 1992). A more effective participation of teachers with experience in peripheral areas is recommended when developing the curriculum for teacher education programs as well as school curriculum at both national and local levels.

In Colombia La Escuela Nueva a restructuring of the school curriculum and teaching method based on programmed materials and multi-grade teaching is a good example of initiatives that have evolved at the school/teacher level and that have achieved success because of the level of ownership that teachers have developed towards an innovation they intellectually designed (Arboleda & Colbert, 1990).

The allocation of quality instructional and material resources and specifically their use by teachers has been documented as an important factor in improving educational quality (Raudenbush, 1991; Fuller & Heyneman, 1989). Although important efforts in parity have been made by centralized structures in this area, the efficiency in the delivery of resources is found lacking making parity policies obsolete. This inefficiency affects as well the actual instruction in the classroom. In a number of countries such as Mexico, the provision of free textbooks has been a breakthrough in efforts to improve pupil access as well as teacher effectiveness in the classroom. Sri Lanka is another case in point. In 1980 the State implemented the provision of free textbooks for all children in grades from 1 to 10. This policy, considered a milestone for education in disadvantaged areas, was however accompanied by inefficiencies in the system of delivery with remote areas at a disadvantage exacerbating the already dual division between urban and rural school and between the rich and the disadvantaged (Baker, 1988). The distribution of food through food programs another important initiative in Sri Lanka, has been receiving less support from the center with negative consequences for children and education in remote areas (Caldwell, 1986). Central governments aware of the failures in this area have increasingly relied on community involvement and support to implement locally originated and

locally managed strategies to address these issues. Locally controlled strategies tend to be more efficient but also may exacerbate disparities in remote or poor areas since richer communities will have better resources more readily available to them. The provision of free textbooks in a country as large as China relies in a decentralized system of private firms to publish and distribute textbooks although these textbooks are of poor quality lasting only for a year or less (USAID, 1990). In summary, policies within the organizational domain have a direct influence in the retention of teachers and an indirect but powerful effect on their recruitment and deployment.

Table 2 presents a number of strategies that have been used or suggested to address the organizational needs of teachers both at a national and at a local level.

Table 2
Strategies to address the organizational needs of teachers

	National Initiatives	Local Initiatives
Teacher recruitment	<ul style="list-style-type: none"> • Development of minimum standards for recruiting high ability teachers. • Development of requirement in relation to the areas where teachers work. • Development of teacher networks to offer support to teachers and schools and to make the condition of difficult/remote schools more attractive. • Develop supportive strategies such as school clusters or teacher cohorts. 	<ul style="list-style-type: none"> • Development of community-school councils for the recruitment and selection of potential teachers. This council could also have monitoring, follow-up and orientation capacities for the newly hired teachers. • Recruitment of teachers similar to the population they will teach. • Recruitment of teaching aides from among members of the community to support teachers in the classroom.
Teacher deployment	<ul style="list-style-type: none"> • Form a committee to match schools with teachers and vice versa in which the teachers themselves participate actively. • Use staged deployment strategies. • Use advertisements to promote posts in difficult areas. 	<ul style="list-style-type: none"> • Form a local school-community committee to recruit and deploy teachers from the region. • Use local staged deployment. • Use local advertisement.
Teacher education	<ul style="list-style-type: none"> • Create an instructional supervisory role within the schools. • Create advisory groups formed by teachers and principals from difficult schools to develop relevant curriculum in the schools as well as in teacher education institutions. • Encourage the re-training or updating of teacher educators which may well require the overall restructuring of teacher education itself. • Develop new and efficient programs to educate teachers such as distance education or preservice education. • Help teachers develop materials from regional products to compensate for the lack of instructional resources in the classroom. 	<ul style="list-style-type: none"> • Create teacher teams to support the development of teaching skills in difficult contexts. • Create and support the work of teacher teams in the development or adaptation of curriculum relevant to the needs of remote/rural schools. • Promote and support teacher participation in school decision making such as planning, evaluation, finances, and school governance. • Promote and support parent participation on school decision making and governance. • Develop the role of teacher as mentor within schools.

Table 2. Strategies to address the organizational needs of teachers
(Continued)

Teacher retention	<ul style="list-style-type: none"> • Provide principal and peer support. • Develop strong school leaders to provide instructional support to help teachers be effective in the classroom. • Develop team teaching. • Hold frequent faculty meetings. • Provide schools with appropriate and usable instructional resources. • Formation of school clusters. 	<ul style="list-style-type: none"> • Parent involvement and support in student learning at home. • Provide teachers with teacher aides. • Parent involvement in supporting the school in cash and in kind. • Provide teachers with usable resources. • Community involvement and support in student learning. • Community involvement in supporting the school in cash and in kind.
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3. PROFESSIONAL LEVEL

Policies directed at addressing the professional needs of teachers assume that teacher's actual classroom performance which include the degree of a teacher's social and academic success with their pupils, and the teacher's control over classroom and social situations, greatly influences teacher effectiveness and success at the classroom level and positively impacts teacher recruitment, deployment, and retention. Within this line of thinking, policies have been developed to provide teachers with the knowledge, skills, and dispositions they require as professionals, and have looked to empower teachers and school personnel to participate in school decision making in order to increase ownership and to stimulate effective involvement.

The Teacher as a Professional. Recently a revolutionary conceptualization of the teacher has begun to emerge: the teacher as a professional. This conceptualization--which is more often discussed in more industrialized countries--brings together the notion that good teaching is more complex than commonly thought (Lampert, 1987). Contrary to the belief that anyone can teach, teaching is increasingly being recognized as a complex mixture of in-depth knowledge of subject matter, pedagogical content knowledge, and abilities to teach diverse learners, as well as knowledge and understanding of the context where teaching occurs (Shulman, 1987; Kennedy, 1991; Borko & Livingston, 1989). This dramatically different concept of teaching brings as a consequence a profound change in the types of knowledge, skills and dispositions teachers need to have. In addition to seeing the teacher as a professional, more and more research points to a fact that, although common sense, it is rarely recognized or addressed when designing teacher policies: the important role that teachers have in the success or failure of educational policy as

their ultimate implementors and the knowledge that they require accordingly (Cohen, 1990).

In peripheral areas in both industrialized and less industrialized countries, the role and impact of the teacher is more important than in non-peripheral areas. Since the Coleman Report in 1966, educational researchers have been attempting to find those factors susceptible to policy that may break the strong link between pupils socioeconomic status and school success. More and more research since then points to the fact that what the teacher knows and is able to do has an important effect on teachers classroom performance which in turn influences pupil achievement (Raudenbush, 1991). Ironically, not much effort has been devoted so far--worldwide--to help teachers acquire the knowledge, skills, and dispositions that would allow them to appropriately fulfill their important role. Not until recently more and less industrialized countries alike, have begun to recognize that in the urgency to implement educational reforms they may have forgotten the main ingredient of such reform: the teacher. Although in less industrialized countries there is less concern about the level of professionalization of teaching there is a growing concern about the level of preparation of teachers and about the role that teachers play in their students learning (Fuller & Heyneman, 1989). This is specially true for schools located in peripheral areas where teachers, students and other school personal lack more in social and cultural capital than in urban areas. The two concepts discussed above: the teacher as a professional and the teacher as a policy implementor has shaped the types of policies designed to address teachers' professional needs. One important policy area addresses the need to improve teachers' skills, knowledge, and dispositions if teachers are going to acquire the specialized knowledge and character attributed to a professional. The other area addresses the need to facilitate or encourage teacher empowerment and autonomy under the assumption that teachers who participate in school decision making, planning, evaluation, curriculum development, and school governance will not only gain more ownership of what they do but will bring relevance and coherence to the design and implementation of school policies. This trend is more noticeable in the U.S. and other industrialized countries. China, Mexico, Colombia, and Chile have begun to encourage teachers to continue already existent structures or to create new ones to fulfill this purpose (World Bank, 1992). Other way for teachers to gain control is through teacher unions and other professional associations (Street, 1991).

Policies to Improve Skills, Knowledge, and Dispositions. According to the literature, strategies that strengthen professionalism have a strong impact on the productivity of teachers (Dove, 1982a; Moore-Johnson, 1990; Rosenholtz, 1989; Mitchell et al., 1987; Murnane, Singer, Willet, Kemple & Randall, 1991; Tatto et al., 1991). One such strategy is the preparation of teachers. Although there is disagreement on the type, extent and depth of teacher preparation, there is general agreement across a variety of countries about problems in the teaching force such as lack of knowledge of subject matter and pedagogy, and in their students such as low achievement level, and high repetition and drop out rates, and suggestions about how these problems could be addressed by preparing teachers (Dove, 1982a; Fuller, 1991; Kennedy, 1991; Raudenbush et al., 1991; Tatto et al., 1991; Feiman-Nemser, 1991).

Issues dealing with teacher preparation have been seen in industrialized and less industrialized countries alike as belonging to at least three areas: how to improve teachers knowledge of the subject matter they teach, how to improve teachers pedagogical skills to teach that subject matter appropriately, and how to prepare teachers to teach diverse learners (Kennedy, 1991). In addition to dealing with these issues, there is a fourth area relating to the understanding of the context in which teachers will teach. This implies that for teachers who are expected to teach in peripheral areas there is a concern--although it is often poorly addressed--to prepare teachers to act productively in these situations.

Dove (1982a) talks about this aspect when she discusses the typical manner with which teacher education has addressed the problems confronted by teachers in peripheral situations: by ignoring them. Dove argues that teachers are tacitly encouraged to think about teaching in peripheral areas under a deficit model rather than a challenge model. She argues that although traditional forms of teacher education have helped to exacerbate this view by either not addressing issues of peripheral populations or by focusing on those populations that characterize the center--evident through the design or choice of the curriculum--teacher education is a hopeful resource to address the needs of teachers who will teach in peripheral areas. Moreover, she argues that a comprehensive strategy including issues of teacher preparation, recruitment, retention, and deployment has the more promising possibilities to work. It is conceivable, she argues, to change the traditional manner school systems have thought about teacher preparation

when dealing with remote or difficult areas and resort to more appropriate strategies that have been successfully used such as the field training of teachers in Bangladesh under the Universal Elementary Education Project and other strategies in remote areas where local teachers are recruited and receive training on site.

A number of considerations in preparing teachers will be discussed here briefly because of the importance they are given in the literature. An important consideration in the implementation of teacher preparation refers to the content and style of the teacher training program, this is what is considered relevant to teach teachers (i.e., are teachers being prepared to think about peripheral areas under a deficit model or are they being trained to look at it as a challenge? Is the content directly related to the context where they will teach or is it mostly divorced from the reality of schooling in peripheral situations? Is the curriculum mostly subject matter oriented? Or is teacher education expected to teach only pedagogy?). There is also debate as to whether teachers should be trained liberally or whether they should study a technically oriented curriculum. Another source of debate among educators relates to the question of what is the most effective teaching method in teacher training institutions (such as lectures versus participatory training) and the implications for actual classroom teaching.

Another question has to do with the support that teachers should receive, during student teaching, during their first year of teaching, or on the job. When the objective is to train teachers to be successful in peripheral situations an important aspect is the support they receive to make training more relevant to the context where teachers will teach. This support is usually provided by a supervisor, a mentor or peers who look at teachers practice, and provide feedback within a structured situation.

Another important question specially when dealing with disadvantaged schools is whether to recruit people who have strong knowledge of the subject and give them short courses on teaching methods, or to recruit strong candidates and give them full training, or to recruit people from the area and give them in field training and support.

The format or approaches that have been used to train teachers and their appropriateness in relation to national and local goals, and costs merits further discussion. The more usual formats to provide formal training to teachers working in the periphery are the preservice,

inservice, induction, and alternative route approaches. Another type of teacher training which for purposes of this paper will be identified as context-based teacher education has been developed indigenously or locally with the specific aim to adapt teacher preparation to contextual needs. Examples of these initiatives are on-the-job training by a qualified supervisor, field based training of local recruits, teaching practice in-site among others. These may be centrally or locally originated and supported affecting their relevance and effectiveness.

A further consideration on teacher preparation strategies is the mode of delivery, which can be institutional, at a distance, or on site. These are described in more detail below.

Preservice teacher training. The defining characteristic of preservice approaches is that teacher candidates receive some kind of teacher training before they start teaching. Quite often the trainees in these approaches are young and idealistic, and their reasons for going into teaching may have more to do with their own experience as students than with the reality they will encounter in the classroom. In less industrialized countries central governments have created policies to channel competent high school recruits into teacher training such as is the case in Sri Lanka. Depending of whether the control is central or local the curriculum will get set with more or less priority to national or local goals and needs. Preservice approaches have been criticized by what is often seen as their divorce from the day to day realities of the classroom (Dove, 1982b). As a response to these criticism more and more preservice approaches have incorporated components such as teaching practice and internships as a requirement for completion. In less industrialized countries--specially those with a large rural population such as Sri Lanka, Thailand, Indonesia--an essential ingredient of these programs is instruction of teachers in the development of productive relationships with the community of the school, with parents, and with students who may be quite different from the trainees themselves in terms of both social class, gender or ethnic background. This aspect has been less stressed in industrialized countries such as the U.S. where until recently, it was rare to find teacher education programs that would address issues related to teacher-parent-student communication, or methods about how to teach diverse populations (Davies, 1989; Flaxman & Riehl, 1987).

The mode of delivery of preservice approaches tends to be mostly institutional. In some cases governments subsidize this institutionalized aspect of teacher preparation. Such subsidies

can vary from building locales where the training will occur to building hostels and payment of boarding and living expenses to the recruits. Thus the cost of these approaches varies greatly depending on the commitment the government makes to training prospective teachers.

A number of research studies point to preservice strategies as useful and relevant to prospective teachers when a number of conditions are met. The most frequently cited are a current curriculum based on recent research on teaching and learning, opportunities to practice what one learns while in training, continuous mentoring, peer support and guidance, and structured mentoring during the first year of teaching which can be provided by the program, a mentor teacher or by a trained and caring principal (Tatto & Nielsen, 1991).

Inservice training. We will refer here to inservice programs as those that involve the experienced teacher in a long learning experience either in an institutionalized or in a field setting and that may be on-going for a considerable period of time. Other type of inservice programs may be quite short and serve discrete purposes such as updating teachers in the latest curriculum changes. Although important in themselves, they are so many and varied that it would be difficult to characterize them here.

Because of the intrinsic nature of these approaches in contrast with preservice ones--providing learning to experienced teachers--relevance becomes less of a problem. Since these teachers have themselves struggled with a number of dilemmas in their classrooms they may see in training an opportunity to gain knowledge that can give them specific directions in their future teaching. Still the degree of input that local circumstances have in the design and implementation of such programs will greatly increase their relevance and effectiveness. The mode of delivery of inservice programs varies a great deal depending on the model under which these have been designed. The British model seems to favor institutional inservice training programs thus removing the teacher from the classroom situation in a design that resembles preservice arrangements. Although these programs have trained a large number of teachers in less industrialized countries, the capacity is still reduced by the natural constraints of the model such as the provision of buildings to house the program and the trainees. In addition some of these programs are considered outdated and expensive. For one thing the State needs to supply new or substitute teachers for every teacher who goes into training. Increasingly, a new modality of

inservice approach has been favored for its low costs and if properly implemented, for its effectiveness: the distance education modality. Distance education approaches have been seen as a cost-effective way of dealing with issues of access to teacher upgrading in the periphery (Tatto & Kularatna, 1993). Because teachers learn while they are still teaching there seems to be a greater possibility for finding relevance on what teachers learn. Although this type of training demands a great deal of discipline and time from the teacher, it offers several advantages. Teachers can study at their own pace. If these programs have been appropriately designed and supplied, teachers may have opportunities to discuss with peers the dilemmas confronted in their teaching and receive support from tutors, hired by the program, in figuring out how to solve such dilemmas. The State does not need to supply substitute teachers or in the worst of the cases bear the burden that some students will go without teachers for indefinite periods of time until a substitute can be found.

A number of research studies point to distance education strategies as useful and relevant to teachers when a number of conditions are met. The most frequently cited are a current curriculum based on recent research on learning, carefully designed high quality self-study materials, opportunities to practice what one learns while in training, continuous mentoring and face-to-face meetings with program tutors, and peer support and guidance (Biniakunu, 1982; Gana, 1984; Gardner, 1990; Hansen, 1987; Hawkrige, Kinyanjui & Orivel, 1982; Henderson, 1978; Ligons, 1990; Mahlck & Temu, 1989; Tatto & Nielsen, 1991).

Induction and alternative route approaches. In the U.S. induction approaches usually rely on the existence of a group of college graduates who may be interested in going into teaching and willing to obtain a higher degree--such a Masters--which grants them a teaching credential and eases their entry into the profession by providing mentoring support during their first year of teaching (Feiman-Nemser, 1992). Although prospective teachers may receive as little as one year of training under this approach, the existence of appropriate structures--such as mentoring--to facilitate learning, may provide a greater chance for appropriately preparing teachers for the classroom challenges that lie ahead.

In more industrialized countries alternative route approaches have been effective in attracting professionals--who receive a short training period of one to three months--into inner

city classrooms to teach complex subject matter content to peripheral children specially Hispanics and Blacks. The advantage of this approach is that it attracts experienced professionals with an applied view of subject matter who are committed to help children of marginal populations. Although they receive relatively short training, some critics of teacher education argue that it is precisely their not behaving as traditional teachers that makes them so effective in the classroom (Mathews, 1988).

Context-based teacher education approaches. In this paper I use the term context-based approaches to teacher education to refer to those approaches that are locally born from indigenous attempts to solve the educational problems in communities which have been exacerbated by remoteness and difficult access and may or may not have support from the center (Booker & Riedl, 1987). Increasingly, these initiatives are becoming recognized and supported as serious attempts to deal with issues for which traditional policy channels do not seem to have the answer to. Policy makers and educational researchers alike have learned to recognize that the most important innovations in education of peripheral populations have been initiated in the periphery itself such as Freinet, Freire, and Don Milanis methods (Canevero, 1984).

Field based teacher training as suggested by Dove (1982a) involves more than the simple training experience but includes elements of teamwork in which teachers, principals, and teacher educators working as a team in the school become the center of the learning experience. This strategy has the advantage of bringing together these elements--teachers, principals, teacher educators, the school community, and parents--essential in the coherence, meaning and efficiency of field based teacher preparation programs. In addition to team work, community participation in teacher preparation and local recruitment serves a dual purpose, that of facilitating a sense of ownership in the process and that of educating the community about its schools, the curriculum, and the characteristics of the local children. In addition, locally recruited teachers may develop a special role as mediators between the mainstream culture of the school and the local culture of the pupils. Finally, Dove stresses the point that this conceptualization of teacher preparation blurs the distinction between preservice and inservice training to teacher training and education as a long life process in which teachers, teacher educators, students, community, and administrators locally participate. Examples of such programs are the Compensatory Education

Project in Malaysia which attempts to improve the educational opportunities for the children of rubber states. This scheme heavily involves parents and it is distinguished by its flexibility and responsiveness to the needs of parents as they train themselves to educate their children (pp. 24). The Nigerian Primary Education Improvement Project is another example mentioned by Dove (1982a). This project used mobile teacher trainers to train teachers individually and in groups in six schools. The training helped teachers achieve curriculum understanding and effective lesson application. This project is seen as an example of a successful partnership between a University, the Ministry of Education, and an international agency. It is also an example of a centrally controlled initiative gradually transformed to suit local conditions (pp. 21). Dove gives other examples in her article, but the main point of her essay is to call attention to the need to re-think the traditional approaches that have been used to improve the quality of education through teacher policies in rural/remote areas emphasizing that a mayor resource that has been rarely fully utilized is the local community, and the development of partnerships between central or local agencies--including the school and school personnel--, higher education institutions, international agencies and the community--including families of the children attending the school.

BOX 3. TEACHER TRAINING FOR COMMUNITY SCHOOLS IN TANZANIA.

In 1970 Tanzania redesigned the structure and curriculum of teacher education and training as a way to promote the community school concept and to implement universal primary education by 1977. A "crash program" for teacher training was begun in 1976. The aim was to produce 40,000 extra teachers. The program, through a village education committee under the ward education coordinator, recruited and selected primary school leavers. Provided them with three years of training with 12 to 15 weeks of teaching practice (three days per week). The trainees were tutored and supported by program and school personnel during their training. The course included compulsory correspondence courses in principles of education, mathematics, Kiswahili, and syllabus analysis; optional correspondence courses in English, geography, history, and political education; radio broadcasts in several of the courses mentioned above; and a six week residential training which involved revision of education, mathematics, Kiswahili, and syllabus analysis as well; and two weeks of teaching practice before sitting for the national examination in the four subjects.

The Teaching Certificate was given to those teachers who passed the national examination in the four subjects, teaching practice, and character assessment and attitude to work. According to Dove (1982) as of 1981 the program had trained 35,058 teachers and was believed that the program had achieved its objectives.

Important features of this program is the selection of teachers not only in terms of academic qualifications but also on character assessment. In Dove's words, "these teachers have to prove themselves worthy members of the community, able and willing to participate in self-reliance activities. Once trained teachers normally teach in their own region. The policy is to encourage teachers to work in their own communities whenever possible. Another innovative feature is the teamwork approach to training. Student teachers teach in the community and on-the-job not in isolation from the community as in conventional college based programs. The tutors from the training colleges, inspectors, head teachers, and practicing classroom teachers cooperate to supervise their work. The college teachers and inspectors have had experience of primary teaching themselves a factor given great importance by the authorities. The itinerant teacher educators (ward education coordinators) are key figures traveling around to guide and advise teachers in training and liase with the schools." (pp. 78-79)

Extracted from: Dove, L. (1982. Lifelong teacher education and the community school. UIE Monographs No. 10. UNESCO Institute for Education, Hamburg.

On the same lines but studying the role of an specific individual within the organization of the school, Raudenbush et al., (1991) points to the experience in Thailand in which teachers in rural areas receive on-the-job-training as provided by the school principal. This scheme has worked because the principals have received specialized training to improve their skills in providing supervision of classroom teaching. The study found clear evidence of a link between

the intensity of internal supervision a teacher receives--by the principal or designated teachers--and the academic achievement of that teacher's students "...[T]here is equally strong evidence that their students view teachers receiving this supervision as providing higher quality instruction than teachers with less supervision." (pp. 33) The researchers conclude that supervision increases teacher quality.

BOX 4. IN-SCHOOL SUPERVISION BY PRINCIPALS IN THAILAND

Over the last 10 to 15 years, Thailand has achieved near universal primary access. Currently the focus of Thai educational policy is on increasing the quality of education through improving the competence of practicing teachers. Because of the rapid population growth with a corresponding educational expansion, Thailand supported the rapid certification and deployment of primary teachers. In the late seventies just as educational access was close to be achieved, population growth declined. This dynamic left a large number of people ready to teach but who lacked subject matter and pedagogical knowledge. Because the limited number of teachers that could be trained under preservice approaches, Thai policy makers have focused their efforts on alternatives that would allow the improvement of teachers in service. Various reforms have been carried out including a national program of inservice training for principals with strong emphasis on classroom supervision, and the organization of schools into clusters each having a resource center and each encouraged to involve teachers in developing and using instructional materials.

Of special interest is the reform on inservice training and the campaign to improve principal's and district supervisory skills in providing or encouraging supervision of classroom teaching.

The findings of a study by Raudenbush et. al (1991) show "...[c]lear evidence of a link between the intensity of internal supervision a teacher receives-supervision provided by the principal or by designated teachers-and the academic achievement of that teacher's students, after controlling for a variety of covariates measured at the school, teacher, and classroom level. There is equally strong evidence that their students view teachers receiving such supervision as providing higher quality instruction than teachers with less supervision." The researchers add "...[T]he evidence is consistent with a theory holding that internal supervision improves student achievement by improving instructional quality." (pp. 33)

In a parallel research study (Wheeler et al, in press), the researchers found "...[i]nternal supervision to be more common in schools classified as effective than in schools classified as ineffective.

...[e]ffective principals in small rural primary schools orchestrate a variety of resources and incentives, internal and external to the school, to support academic instruction. Several principals who provided supervision or who encouraged expert teachers to provide it also encouraged parents and the local abbey to support the school's academic mission...by raising funds to provide supplementary instructional materials. Hence supervision fit into a larger effort to support teachers' academic efforts." (pp. 35)

The researchers conclude that "interventions into the lives of teachers may pay off when focused on problems of practice and viewed as useful in the eyes of the practitioner... and recommend that ..[r]egular internal supervision of instruction, should be considered as a potentially direct and cost efficient policy option for supporting effective instructional practice." (pp. 35)

Extracted from: Raudenbush, S. W., Suwanna, E., Di-Ibor, I, Kamali, M., Taoklam, W. (1991). On-the-job improvements in teacher competence: policy options and their effects on teaching and learning in Thailand. East Lansing, MI: College of Education, Michigan State University.

In summary, research on teacher education points to the importance of the opportunities to learn that teachers have under different arrangements, and stresses the importance of mentoring, the possibilities for self-reflection and feedback on teachers' own practice as essential elements of a productive learning experience that may provide opportunities for change.

The review of the literature seems to indicate that a major advance in the re-conceptualization of the format and level of teacher preparation could be achieved by reformulating the question regarding teacher education to a broader more flexible one regarding the exploration of teachers' opportunities to learn in different contexts and under diverse conditions to help them become more effective within those contexts.

Teacher Empowerment Through Teacher Autonomy and Participation in School Decision Making. In centralized systems teacher autonomy is misunderstood and it is rarely encouraged beyond the national educational authority guidelines (unless such movement occurs within the teacher union in which case it often becomes politicized and removed from the classroom) (Dembele, 1992). There are some exceptions to this situation. In China, for example, with a centralized educational system teachers under an institutionalized format called "Jiaoyanzu" work in collaboration and constantly help and monitor each other to improve classroom practice (Paine & Ma, 1991). In contrast, in decentralized systems such as the U.S., teacher autonomy is seen as very important and is more likely to be of a "private" character--this is the teachers are autonomous behind classroom doors--and until recently this practice has been tacitly encouraged at the local and school levels (Lanier & Little, 1985).

Although teacher empowerment entailing teachers' participation in school decision making is seen as a logical consequence or outcome of professionalizing teachers, in many countries teachers rarely "feel empowered." An educated teacher is expected to be able to make informed decisions about what and how to teach and to incorporate the contextual content into the curriculum. In practice, however, many conditions have to be present. First, teacher education initiatives need to be context relevant, this may imply to carry out the training in the schools themselves or have alternatives to the traditional institutionalized training, and to improve and update the qualifications of the faculty. Second the structure and management of the school needs to be arranged in ways that support professional development and professionalization of teachers.

Third, teachers need to have support from their peers, their students, their students' parents, and from the community. Fourth, an appropriate reward and incentive system accompanied by a reasonable salary structure will provide teachers with economic stability needed to dedicate their time and energies to develop professionally.

For schools located in remote areas empowered and autonomous professionals are essential for the provision of quality education. This point is worth emphasizing. Whereas in urban areas teachers may rely on a network of other teachers and resources, teachers in remote areas mostly rely on themselves. Recently, policy makers have begun to think about ways of supporting teachers in rural situations. In the Republic of Yemen, for example, educators have begun to think about networks of regional centers in order to empower teachers through inservice training (World Bank, 1992).

Dove (1982b) cites an example of a project that was initiated by Sri Lankan educators to empower teachers in rural areas to better serve these marginal populations, although this project was not initiated by teachers themselves, the final result was that teachers did take ownership of the project and have expanded it to the point of becoming institutionalized.

In the U.S. in different regions of the country the major characteristic of the most recent educational reform focuses on empowering teachers to be able to address the learning needs of their students and develop plans for the diversity of styles existent in one classroom. In an attempt to improve education towards developing the teachers and the teacher educators, The Holmes Group, a consortium of Deans of Colleges of Education, have launched a project called Professional Development Schools. This is a program of collaboration among universities and schools with strong support from the State to pursue such goals as teaching for understanding, organizing the school and its classrooms as a community of learning, teaching for diverse learners, life long learning (for adults as well as children), making reflection and inquiry a central feature of the school, and restructuring schools. The process for the formation of professional development schools includes strong support to novice and experienced teachers from teacher educators to collaborate with teachers in improving and reflecting on their teaching practice (Holmes Group, 1990). There are however inherent difficulties in the professional development

of teachers, specially if this requires extra work and a redefinition of the teachers'--and of the teacher educators'--job description.

In addition to recognizing the need for policies that address the complexities of teaching and the important role of the teacher in peripheral situations at a professional level, it is necessary to analyze the differential impact that the level of local or central control has in the design and implementation of these policies. According to Dove (1982a) the level of control plays a crucial role on the effectiveness and relevance of these policies. Because the context where policies evolve greatly determines their impact, the research of educators such as Dove, Raudenbush et. al., and Tatto et al., seems to favor strategies that both evolve and can be implemented on site. Dove (1982b) for instance has collected a series of examples where locally trained teachers and aides seem to be quite effective in remote areas. Raudenbush et al. (1991), and Cummings et al, (1992) examine the case of rural, remote schools in Thailand and Indonesia respectively, where the principal is an essential ingredient in the professionalization of the teaching force in schools in these countries. Tatto et al.(1993) examine the findings of a research study in Sri Lanka where well trained teachers were able to influence the level of achievement of their pupils in schools mostly located in difficult areas at a level similar or higher than that of those of students in urbanized congenial schools. Similarly another research study reports the important influence of the interpersonal dimension of teacher education as an strategy to help the teacher make the transition from a training program to the school or to improve current practice (Tatto & Kularatna, 1992). In general, teacher participation when is initiated at the center, has been more through national teacher organizations and committees, through general government mandates or plans and followed up by government workers or "change agents" whose role is to stimulate plan implementation. In contrast, local initiatives focus on teacher input at the district/province and school levels and have the likelihood to more readily respond to the needs that gave them origin (Booker & Riedl, 1987; Haas, 1990; Hansen, 1987; Kyle, 1990; Orvik, 1970; Randell, 1979; Shaeffer, 1990; Sturman, 1982; UNESCO, 1988; Vera, 1990) .

Although he does not talk specifically about teachers, Korten (1980) emphasizes that effective change can come about from any source (i.e., central or local) and within any institution

if the *process* is what is emphasized and involves those who will be affected by the change in planning and implementing their own transformation.

In summary, policies in the professional domain are seen as the central strategy to empower teachers to overcome the difficulties of the job and to improve the quality of education in remote or difficult schools.

Table 3 presents a number of strategies that have been used or suggested to address the professional needs of teachers both at a national and at a local level.

Table 3
Strategies to address the professional needs of teachers

	National Initiatives	Local Initiatives
Teacher recruitment	<ul style="list-style-type: none"> ' Provide incentives for local trained teachers to return to local area. ' Provide incentives at a national level to principals and master teachers to train as instructional leaders. ' Provide resources for the hiring of teacher aides to support trained teachers on language and cultural requirements of community children. ' Recruit qualified teacher educators for teacher training in rural areas. 	<ul style="list-style-type: none"> ' Provide incentives for training local teachers on site. ' Provide local incentives to master teachers and/or principals to get training as instructional leaders/supervisors to provide on the job training to teachers or teacher aides. ' Hire local aides to support local and non-local teachers in the classroom.
Teacher deployment	<ul style="list-style-type: none"> ' Attach rural/remote service requirement to subsidized teacher training. ' Teach teachers in-site how to teach in difficult schools. ' Institute follow-up by teacher educators of their graduates with feed-back. 	<ul style="list-style-type: none"> ' Allow teachers to select the schools where they will teach as well as allow schools to select their teachers. ' Encourage educated locals to teach in their community's schools.
Teacher education	<ul style="list-style-type: none"> ' Improvement of the skills, knowledge and dispositions of prospective teachers and teacher educators. This can be done through institutional or distance education. ' Develop a program of teaching induction for a year for new teachers or for teachers who will be teaching for the first time in a school in the periphery. This program may involve tutors and teachers in exchanges throughout the year on classrooms and help them develop strategies to deal with different issues. ' Include teaching practice as an essential component of teacher education programs. ' Effectively introduce teachers into the community. 	<ul style="list-style-type: none"> ' On-the-job training of teachers by school principal, master teachers, other teachers or teacher educators who have had experience working effectively in schools in the periphery. ' On-the-job training of teacher aides by the school principal, teachers or teacher educators. ' Community support of training centers/units for principals, teachers, and teacher aides. ' Create the role of teacher educators as liaisons between schools and teacher education institutions. ' Institute internal supervision of instruction. ' In school assessment of teacher's character and attitude to work in addition to assessing knowledge and skills. Provide teacher with feedback.

Table 3. Strategies to address the professional needs of teachers
(Continued)

Teacher retention	<ul style="list-style-type: none"> • Reward remote teaching with opportunities for subsidized training. • Provision of relevant teacher training: teacher education programs need to include strategies for teaching multi-grade classes, bilingual children, and the development of relevant curriculum. Teachers who feel successful at what they do are more likely to stay in the school. • Continue follow-up visits by teacher educators, instructional supervisors, or tutors. 	<ul style="list-style-type: none"> • Form a group of teachers who can help teachers understand in-site the learning problems and opportunities of children in the community. This group may also help teachers establish a productive and supportive collaboration with parents and the larger community
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4. PERSONAL LEVEL

Policies directed to affect the personal needs of the teacher assume that individuals' internal processes such as their personal needs, personal views about teaching, teachers cognition, satisfactions expected out of teaching, and motivational level, will influence decisions such as becoming teachers, leaving the profession, or staying on the job. Examples of these are policies addressing teachers' need for recognition, for personal and professional fulfillment, and needs for security and feelings of belonging to the community.

Examples of policies addressing teachers' personal needs are found in Sri Lanka's colleges of education which provide recruits with credentials and opportunities for promotion relative to the training they are able to attain. In addition colleges of education provide training in the actual community, and support from tutors to understand how to use community resources for the benefit of the children and the school (Tatto et al., 1991). Other policies address issues of scheduling, possibilities for promotion, and deployment strategies that look to keep together husband and wife such as has been suggested in Pakistan (Warwick & Haroona, 1991).

In the overall, the literature shows a lack of studies in this area, possibly as an indicator of the low priority traditionally given to the personal challenges and needs that teachers confront in remote or rural areas. The studies reviewed reveal that current policies have been mostly addressed to attract teachers through salaries, incentives and so on, but have disregarded aspects such as the need for affiliation of teachers, security (being and feeling safe), housing,

independence and privacy, and the need to feel recognized and accepted by the community.

Although little research has been done in this area, educators are increasingly placing more attention to understanding how the personal views of teachers and teacher educators influence the way teachers teach (Dove, 1982a; Lortie, 1975; Tatto, Kennedy, & Schmidt, 1992). Recent research has as well pointed to the importance of understanding teachers' cognition at different stages in their careers and its effect on teaching practice, opening new avenues to conceptualizing teachers' work (Borko & Livingston, 1989).

In the U.S. Moore-Johnson (1990) talks about the importance for teachers to have a supportive environment where basic needs of security, economic (salaries), affiliation (living with family), and a supportive community are met. But teachers in rural areas are more likely to be seen as a rare commodity by the community rather than as individuals who have important personal needs. Dove (1982b) shows the results of a survey applied to teachers in Cameroon in 1982 where about 20 percent of the teachers surveyed confessed leaving their job in a remote or difficult school to live near families and relatives, the next highest percent given by teachers were health reasons (pp. 72). In this same study it was evident that teachers not only had to adjust to the demands of living in a remote area without their families, they had as well to meet the very disparate demands placed upon them by the community which where in some cases extreme. About 50 percent of the teachers surveyed said that community members frequently asked them to formulate and write letters, and close to 41 percent said that the community often asked for loans of cash, material or other type of support. Other requests ranged from having to host school age children in the teacher's home to providing counseling, supplying medicines, assisting in obtaining a job or in payment of tuition fees (pp. 79).

Because rural/remote area populations are rarely reached by a number of social services better off populations may take for granted, quite often the school is called upon to fill the gap. Although it is possible to educate the community about the range of responsibilities that a school is expected to fulfill, constant rejection of community requests by teachers may only alienate the community and isolate the teacher. A better alternative--aside from actually bringing the needed social services into the area--may be to recognize the informal as well as the formal roles that

the school in difficult/remote areas is often called upon to perform, and provide staff and equipment to the school in order to support the teacher and the community as well.

BOX 5. SUPPORTING NEW RECRUITS TO THE TEACHING PROFESSION IN SRI LANKA.

The Colleges of Education started as a response to a number of educational policies looking to improve the quality of education in Sri Lanka through improving the quality of the teacher. These institutions are an innovation in Sri Lanka in more than one way. They attempt to provide preservice training--the first time in Sri Lanka's history of teacher education--and they attempt to produce high quality recruits that will teach for the first three years in remote schools in "difficult areas."

The colleges have a curriculum designed to familiarize and provide meaningful practice as well as encourage involvement with the community for its trainees. The curriculum consists in great part of extracurricular activities which are mostly directed to take trainees into the community and actively participate in community projects. Because these are inexperienced teachers, the program is designed to place teacher education faculty in advisory roles throughout the training period lasting two years. After this the trainees are placed in the classroom with supervisors from the colleges and from the schools for a year as part of their teaching practice.

The needs of the trainees during their training and their first year of teaching are carefully taken care of through subsidized living and study expenses, they are skillfully introduced to the community where they will teach, and the school context is managed so as to provide a supportive environment during the first year of teaching--which the literature argues determines to a great extent whether trainees will remain in the profession.

Extracted from: Tatto, M.T., Nielsen, D.H., Cummings, W., Kularatna, N.G., Dharmadasa, D.L. (1991) Comparing the effects and costs of different approaches for educating primary school teachers: The case of Sri Lanka. BRIDGES Research Report Series No. 10. Cambridge MA: Harvard Institute for International Development.

In more industrialized countries such as the U.S., the personal needs of teachers are not dramatically different from those of their teacher counterparts in less industrialized countries. For example, Murnane et. al., (1992) after an extensive study in two states in the U.S., have come up with a number of incentives "that work" such as higher salaries, flexibility in salaries for teachers in shortage fields, better working conditions, and support for initiative (pp. 119-126). In a pioneer study of near to 6000 teachers in the U.S., Lortie (1975) classified teaching rewards into extrinsic--or earnings attached to a role involving money, income, a level of prestige, and

power--, ancillary--or characteristics of the work that may be perceived as rewards by some (such a period of time during the summer that teachers usually see as "vacation")--, and intrinsic--or psychic, subjective valuations made in the course of work engagement (such as "getting through to students and that they have learned"). He determined that the rewards that teachers get from their jobs are mostly intrinsic and ancillary. Lortie's study clearly expresses the strong need teachers have, at least in the United States, to feel that as a result of their work students have learned. Secondary to this need, teachers in Lortie's study expressed the following needs: respect from others, chance to use influence, "appropriateness for people like me," time for traveling specially during the summer months, and security of income and position, in that order (Lortie, p. 105).

Policy makers have recently come up with important initiatives that signal the increased importance given to the personal dimension of teachers. Although these initiatives are few and recent, they signal the beginning of a trend to improve teachers situation where it seems to matter the most. In Nepal for example, a project has been designed to provide an integrated inservice teacher training and supportive supervision system, teacher's guides and other supportive materials, and to improve teacher motivation by improving school management, greater community interest and support, and the development of peer group support within the profession (World Bank, 1992). More efforts in this direction are needed as well as evaluative studies that provide information on their impact.

BOX 6. ATTENDING TO THE NEEDS OF FEMALE TEACHERS IN RURAL OR REMOTE AREAS

A recent USAID publication reports that "the absence of female teachers in rural schools is a barrier for girls' enrollment, particularly in countries where religion requires seclusion of women, and parents allow girls to attend only single-sex schools with female teachers. In low income countries only one third of primary, one fourth of secondary and one-tenth of tertiary education teachers are women. Rural areas have a number of factors that exacerbate the overall shortage of female teachers. Woman teachers from urban areas are generally reluctant to work in rural areas. Candidates from rural areas are scarce since rural women usually do not qualify to enroll in teacher training schools in the cities. In addition, programs in rural areas to identify, recruit and train girls to become teachers are few. Although some countries have provided various incentives and have actively recruited girls from rural areas for teacher training, evidence suggests that these strategies are unlikely to attract even motivated teachers to these remote areas." (p.7)

"Pakistan and Nepal have developed a strategy that has proven successful in boosting the number of females teachers working in these areas. This strategy involves placing teacher training institutes in rural areas, actively recruiting females from the particular area, and, after training, placing those graduates in schools near home. Girls who do not satisfy the entry requirements for the schools are first provided with training to satisfy those requirements." (p.7)

Extracted from: USAID (1990) *Lessons learned in basic education in the Developing World: An A.I.D. Workshop*. Washington, DC: The Office of Education Bureau for Science and Technology, United States Agency for International Development, February 15-16, pp. 7.

Although centralized countries such as Indonesia have begun to re-design their system of rewards and incentives for teachers, these attempts often fall short of effectively addressing the needs of teachers in remote or rural areas. Addressing the needs of teachers in rural areas may include more locally oriented approaches as suggested by Beeby (1966) and others such as providing extra allowances for the higher cost of living in remote areas, rewarding remote teaching with greater opportunities for subsidized training; paying the cost of moving to rural and remote schools and subsidizing home visits; and improving the system of salary payments to avoid both delays and high costs of travel to obtain such payments (IEES, 1990).

In summary, policies addressing the personal needs of teachers have been largely neglected but are increasingly receiving more attention as the teacher is seen as central to improving the quality of education.

Table 4 presents a number of strategies that have been used or suggested to address the personal level needs of teachers both at a national and at a local level.

Table 4
Strategies to address the personal needs of teachers

	National Initiatives	Local Initiatives
Teacher recruitment	<ul style="list-style-type: none"> · Provision of credentials. · Provide opportunities for structural promotion relative to training level. · Develop and implement strategies to improve the image and status of the teacher in peripheral schools at a national level. 	<ul style="list-style-type: none"> · Provide safe and functional housing. · Subsidize home visits for non-local teachers. · Payment of costs to moving to rural area. · Provide job opportunities for spouse.
Teacher deployment	<ul style="list-style-type: none"> · Provide general orientation to teachers during the recruitment or at the training stage to help form their expectations on their future job and role in peripheral schools. · Subsidize costs of moving. 	<ul style="list-style-type: none"> · Provide specific orientation to teachers deployed to the region by teachers and other personnel they will work with.
Teacher education	<ul style="list-style-type: none"> · Subsidize teacher training for new and experienced but untrained teachers offer inservice or preservice initiatives according to needs. · Subsidized living and study expenses for those teachers undergoing training. · Design of training programs to upgrade teachers' skills without leaving their school, families or regions such as the distance education approach. 	<ul style="list-style-type: none"> · Provide one day per week with pay for study for those teachers undergoing training. · Introduce teachers to the traditions, habits, and facilities available in the community where they will teach. · Assign the new teacher at least one mentor to assist in matters from settling in the area to planning and implementing successful classes within the new setting.
Teacher retention	<ul style="list-style-type: none"> · Extra allowances for high costs of living. · Subsidize home visits. · Improve system of payment of salaries. · Subsidize the moving expenses of family members. · Allow for alternative sources of income such as tuition. 	<ul style="list-style-type: none"> · Protect teacher's privacy and independence. · Facilitate for teachers to bring their families to the region. · Provide medical and social services information to teachers and possibilities and support to use them. · Provide teachers with benefits such as retirement.

F. SUMMARY OF FINDINGS

We began this essay by raising five major questions regarding the type of teachers policies that have been developed up to date in a variety of contexts and their assumptions and effects, the role of the teacher in their formulation and implementation, and the need for the development of new frameworks and systems to help conceptualize and better inform policy development. In this section we attempt to present a concise summary of the findings in relation to these questions.

Policies for teachers developed to increase the quality of education in peripheral areas.

To address the first question properly, we need to refer to the distinction we made at the beginning of this paper, that is, that policies for teachers have been mostly formulated from the point of view of employers of teachers and rarely from the teachers viewpoint. Taking this fact into account, employers of teachers have formulated a number of policies directed at recruiting, training, deploying, and retaining teachers characterized by addressing discrete areas of teachers problematic. Policies designed with or by teachers have the possibility of being more comprehensive and of addressing the needs of teachers in context while simultaneously addressing the needs of the school community.

Major assumptions of teacher focused policies. It became clear through our literature review that there are three major dominant assumptions around teacher policies: (a) The teacher has been generally seen as just one more input into the education system rather than a social entity. This major assumption reflects on the discrete character of the policies that have been developed for teachers; (b) teachers are rarely seen as able, capable, or competent professionals to get involved in planning their own future or participating in school decision making with the consequence that teachers are an unempowered group. This situation is ironic if we think that in peripheral areas (more than in any other areas) teachers need to be self-reliable, independent, and autonomous to make smart decisions about how to deal with the constraints imposed by the difficulty of the context where they work; and (c) teachers are to be content with the status quo. This is, poor working conditions, little or not input on the design of their work or living situation, and poor remuneration for their work. The truth is that teachers are now starting to demand a more balanced situation. If educational systems want to increase the quality of the education

children receive they need to pay attention to one of the more neglected individuals in the system: the teacher.

Degree of effectiveness of these policies. Policies that are seen as more effective are those that either originate in site or include the input and participation of teachers, administrators, or the community to support teachers and the school. Policies implemented/or adapted by the school community with the intention to respond to the needs of teachers (and their students) in context are seen as more effective in the long run than those implemented by other entities. The participation of teachers and school staff in their own process of change is seen as having a positive effect on development and implementation of policies directed at teachers. Finally policies that are designed to provide teachers with fair remuneration for their work and that attempt to satisfy the personal needs of teachers are seen as having a positive impact on their recruitment, and retention regardless of where they originate in the educational structure.

The role of teachers in the design and implementation of policies. A new conceptualization of the teacher as a decision maker and as a professional, has revolutionized the way the education field has started to think about teachers and about the role they could or need to play in making decisions regarding their own teaching, placement, and professional development. But this revolution is by not means what characterizes the role of teachers in the design and implementation of policies across the world. It is more common to find teachers at the margin of these dynamics struggling to do their best to fulfill their mission or dropping out of teaching for a higher status, better compensated work. The role of the teachers needs to be re-considered and new venues opened to allow for full participation and improvement in teachers' work conditions. As I have argued earlier in this paper, this type of initiative needs to be accompanied by support and provision of knowledge and skills to teachers. It would be a mistake to expect teachers to be able to successfully develop a decision maker-implementor role without preparation, support, or resources, a common situation in peripheral schools.

Informational needs and conceptual frameworks for policy making in regards to educational quality and teachers in a peripheral context. As this literature review has made evident, policies for teachers in peripheral areas have been formulated for the most part from the top, in a disjointed manner and with what seems to be a lack of understanding of the problematic

that teachers, pupils, schools, and communities confront in these situations. In spite of this, the literature reviewed shows a trend towards a more comprehensive conceptualization as well as a movement towards increasing the relevance of these policies. This movement is manifest in a willingness to gain input from localities and to devolve power to these localities to design, implement, or adapt policy. These initiatives go from the hiring of local teachers and in site training to full community involvement in improving the quality of education in peripheral schools. More needs to be done, however, in the following areas: (a) recruitment, training, deployment, and retention policies need to be teacher centered and re-conceptualized into the nested levels of need developed here: socioeconomic, organizational, professional, and personal, and carefully considering the role of central and local initiatives; (b) teacher policies need to be conceptualized and implemented by and with teachers and school communities in a comprehensive manner; (c) teacher policies need to be purposeful and context relevant; (d) systems information are needed in the four areas examined in the paper. This last point is worth emphasizing. There is little research in the evaluation of the success on the effectiveness of policies that have been implemented to improve the quality of education through the teacher. This lack of information makes it difficult to develop a better idea of where resources need to be invested to improve teacher quality and by consequence the quality of schooling. The evidence we have from recent studies carried out by the BRIDGES Project in Sri Lanka and in Thailand reveal that carefully designed and implemented teacher training, school clusters, and principal training may have an important impact on educational quality. But the availability of information that may help us improve the quality of education through the teacher based on past successes, specially in developing countries, has just began to emerge through studies such as IEA, BRIDGES, IEES, Lockheed & Verspoor (1989), and Fuller & Snyder (1991). Lacking is basic and comparable information across countries on the actual number and allocation of teachers to schools, teacher mobility, teacher mobility patterns, levels of education, levels of achievement after they leave formal education or teacher education, and so on.

G. IMPLICATIONS AND POLICY RECOMMENDATIONS

This paper has presented a framework to think about policies addressing teacher issues as related to four nested levels of need: the socioeconomic, organizational, professional, and personal needs of teachers, and their interplay with central and local educational systems. We have also asserted that the conceptualization of teacher policies in this manner allows us to take a more comprehensive look at the way these policies attempt to address the major issues referred to in the literature on teachers: recruitment, training, deployment, and retention. Policies that seem to address the teachers' problematic in a more comprehensive manner are those that originate from the organizational and from the professional domains, especially when dealing with remote or poor schools, and are conditional to the adequate fulfillment of basic socioeconomic and personal needs. This is an important insight in the policies that seem to matter and make sense for peripheral populations. The training and empowerment of teachers are obvious factors that need to be considered in order for these teachers to be able to work productively in situations that up to now have been seen as unattractive for a majority of teachers. Policies that directly or indirectly affect the organization of the school seem to be essential in peripheral areas. In addition, neither of these policies need to be necessarily complex or expensive. Training and empowerment of teachers could be achieved through teacher education programs such as the distance education program in Sri Lanka. The improvement of the organizational environment where teachers work, could be achieved through relatively inexpensive measures such as increased community involvement, creation of clusters, creation and encouragement of in-school teacher support groups with clear work objectives and so on.

Educational systems either centralized or decentralized need to effectively involve teachers in the formulation and implementation of policies and need to develop information systems that will help inform the effects that specific policies have in a diversity of situations for a diversity of purposes. It is evident from the literature that few studies exist on the assessment of the effect of policies on teachers. National and local level statistics are needed providing information on the nature and length of teacher training, teacher qualifications and background, deployment areas, and mobility indices among others. Such information is essential for the development of new policies.

A constant theme emerging from the literature is the lack of a comprehensive conceptualization and continuity on policies designed to address teacher issues. This is probably due to the overwhelming lack of input that teachers seem to be subjected to when teacher policies are designed.

Another trend is the growing evidence that local structures and initiatives, and community originated and implemented policies seem to be more responsive in peripheral situations.

The need to better understand the teacher situation working in peripheral areas calls for both in depth studies of an anthropological or ethnographic nature as well as large scale studies with quantifiable indicators of those factors that seem to affect teachers work as well as the effects of policies implemented both under centralized and decentralized structures.

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