

# Culture, Place, and School: Improving Primary Education in Rural Ecuador

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## ABSTRACT

Educational reform is becoming an important issue in many nations around the world. This paper discusses an approach towards improving primary education in rural areas of Ecuador, an approach that is different because it strives to make formal education relevant to the cultural and environmental contexts of students' lives and relies heavily upon participation of the local communities in the educational process. The Paramount Educational Center (CEM) project empowers people to take increased control of their lives and to work towards solving the community's perceived problems. Investigation of educational reform efforts in rural highland Ecuador provides insight into the relationships among culture, environment, and education.

## DEVELOPMENT AND EDUCATION

The literature of development has, in recent years, come to focus on the need for culturally appropriate responses to problems as perceived by the communities "being developed." Friedmann (1992,31) advocates an "alternative" development that focuses on "people and their environment rather than protection and profits." He contends that while "mainstream" development often destroys cultural and ecological diversity, alternative development strives to sustain such diversity (1992, 134). Fundamental to this latter form of development is the empowerment of ordinary people through grass-roots efforts supported by the state (Friedmann 1992; Annis 1988). The formal education system is an important arena in which to implement this strategy, as indicated by Paulo Freire and his theory of "concientization," which advocates education as a liberating force in society (Freire 1985).<sup>1</sup>

An "appropriate" educational program might be defined as one that enables people to take increased control of their lives and to work towards solving those problems perceived by them (Bunch 1982; Freire 1985; Chacón Padilla 1988). To this end, local participation in the planning, implementation, and evaluation of the community's educational program is not only desirable, but necessary. Since the time of European contact, however, formal education of children in Latin America has been dominated by church and state (Larrea Cabrera 1990; Leonard 1988). It is only within the past several decades that decision-makers have begun to recognize the importance of what I shall hereafter refer to as "community participation" in education.

This paper discusses one program that is using a community participation approach to improve the education system in rural areas of Ecuador. It begins by describing the conditions of primary education in Latin America and Ecuador in particular, pointing out elements that hinder participants from achieving a quality educational experience and the need to make formal education relevant to the daily lives of rural students, teachers, and communities. Presentation of the case study, the Paramount Educational Center (CEM) based in the village of Gualsaquí, follows, including an explanation of the program PROMECEB, organization of the CEM [end p. 107] system, a profile of the community of Gualsaquí, and discussion of CEM Gualsaquí's operation. Although a complete analysis is premature, this preliminary study indicates that the community participation model is effective in achieving rural development through educational reform. In addition, the experiential nature of this model has important implications for geographic education in a larger context.

## PRIMARY EDUCATION IN LATIN AMERICA AND ECUADOR

In Ecuador, as in most of Latin America, the national government controls nearly every aspect of public education, from curriculum to school calendar to textbooks and other didactic materials, and all elements are homogenous throughout the country. This lack of recognition of the heterogeneity existent within areas is

lamented by external development agencies and researchers, administrators and teachers themselves (CEPES 1989; Gajardo and DeAndraca 1988; Tovar et. al. 1989).

Ecuadorian children are legally required to complete nine years of formal education-six years of primary school and three of intermediate (Marcillo y. 1992, 91-92). However, retention even at the primary level constitutes a serious problem, particularly in rural areas, and it is nearly impossible to force parents to send their children to school (Andrade Lema 1992). Recent legislation<sup>2</sup> provides for the establishment and execution of "experimental" educational programs that need not conform to the national standards (Marcillo Y. 1992, 215-28), but these programs are, by definition, "special cases" not available to most of the teachers and students who would benefit most from them. Indeed, despite the fact that such new, "customized" programs are beginning to appear, one teacher with whom I spoke was unaware that any deviation from the national curriculum could exist.<sup>3</sup> As a result, most teachers follow the proscribed curriculum as best they can with the limited training and materials they possess.

In theory, the uniformity of curricula, calendars, programs, language of instruction, and teacher preparation was instituted "so that education would not be discriminatory" (Alaix 1985,93). In practice, however, it is discriminatory in that rural children, teachers, and communities do not have equal access to educational opportunities, and the system fails to take into account their particular needs.

There is a great need to adapt the educational systems in Latin America to specifically address the needs of the large rural population.<sup>4</sup> Among the top priorities of educators themselves are specialized curricula for rural areas, flexible calendars, appropriate texts and teaching materials, new pedagogical methods and training for schools with combined classes, better training for teachers to deal with the needs of rural communities and the multiple roles expected of them, and economic incentives for teachers to practice in the most needy areas (Borsotti 1984; CEPES 1989; García-Huidobro 1989; Gajardo and DeAndraca 1988; Montero-Sieburth 1987; Tovar et. al. 1989). Clearly, there is a push for education, particularly in rural areas, to relate to the daily experiences of the community.

One possible approach towards improving education in rural areas involves taking advantage of the social spaces in which children and their families live and work by utilizing resources readily available in nature and in the community. Abner Prada (1978:346) points out the need to "localize" rural education by "closely relating it to the environment in question." This idea of localization can be related to Buttimer's (1980) concept of "centering." Buttimer (1980,171) suggests that "one's sense of place is a function of how well it provides a center for one's life interests." Her definition can be expanded to include the concept of education: one's ability to learn is a function of how well the material presented can be understood in terms of one's life experiences, aspirations and interests; ideally, education also helps in the process of organizing and "centering" one's interests. Because the formal educational system in Latin America is oriented toward the urban population, in its curricula, calendars, texts, and even methods of teacher preparation, rural children find little that they can relate to their own daily lives and interests, and almost nothing that helps them feel at home in their locale.

The teaching-learning process too often occurs only within the confines of the classroom and fails to take advantage of the social and geographical spaces used by children and their families in order to elucidate concepts being taught. In addition, many teachers do not use as examples materials which **[end p. 108]** represent everyday situations or experiences. For example, they might show a picture of a telephone to represent the letter "t" when children have never seen or used such a thing (Cerda 1992). One teacher I spoke with said:

I am convinced that we do not do a good job of teaching [the children] to read here ... We have to force them to ... Including even holding them back a year [in school] for not reading. Why is it that ... I have seen children of Americans ... sit down in the living room and read without anyone saying anything to them, but our children don't?

Part of the problem lies in the reading materials available to students. Another teacher added that in almost all of the textbooks, "there are things that our children don't know [like indoor bathrooms, telephones, and airplanes], but because it is in the book, we have to teach about it-though it will never be of any use to them." Nor do educators use resources of the natural and social environment, such as clay and straw to encourage creativity and understanding, or the schoolyard itself to grow gardens which would not only provide educational opportunities, but would also help to feed children who are often undernourished (Vecino et al. 1980).

Preston (1985) discusses the disparities of education which have occurred within the rural areas of Ecuador and how these disparities have changed as the domain of public education has expanded over the years. She outlines the core-periphery pattern of schooling in rural areas, with schools established first in the larger towns, then in smaller villages, and finally in "isolated parish hamlets" (1985, 94). By the time the actual schools reach the periphery, those at the core areas have already made further advancements, creating further disparities.

Despite recent efforts to improve Ecuador's educational system, there exists *de facto* segregation of and discrimination against the rural poor, most of whom are Indians (Preston, 1985). Most parents who are financially stable will send their children to school in the cities, or at least in the largest nearby town. According to one informant, a woman who teaches in a rural school in Imbabura:

There's a custom here that people believe that by sending their children to school in the city, they will learn better and more. So more mestizo children attend school in the city, and the Indians remain in the campo.

And a teacher who lives in Otavalo but teaches in a rural school asserted,

Here in the city there are children who are Quichua, but the parents do not want their children to learn the same language in school ... and [many of] those who live in [towns nearby] also send their children here to Otavalo because they don't want their children to be taught in Quichua. They want the children to learn Spanish so they can go to the cities and get jobs. But there are not enough jobs --not good jobs.

Rural schools are (almost by definition) not well-connected with larger population centers; therefore, they suffer from both a lack of resources (which cannot be transported easily from central distribution areas even when economically feasible), and a journey to school that can be quite difficult for students and teachers alike (Montero-Sieburth 1987; Preston 1985; GajardoAnd DeAndraca 1988). Most public school teachers are required to purchase their own classroom materials, for which they are given an annual stipend of 40,000 *suces* (approximately USD 27 in summer 1992), hardly enough to cover a few books and supplies; many teachers spend some of their own meager salaries (about one hundred dollars per month) on notebooks and pencils for their students.<sup>5</sup> Because schools do not and teachers cannot provide adequate curricular materials, families must purchase their children's books and materials; too often, they cannot afford to do so. One of my informants lamented,

Books are very expensive, so not all the children can buy them. It's difficult to get enough books and hard to teach when not everyone has a book-so the education suffers. You can only give homework to those who have the book, but you cannot demand a child to do homework who doesn't have the book.

The cost associated with attending school is just one of the reasons that many rural parents are reluctant to send their children to school. Other factors include lengthy and arduous travel conditions and the fact that children attending school are not available to do work around the home.

The school has traditionally played an important role in society; an examination of the relationships among society, the state, and education shows that many activities within the school serve to support and reproduce the

dominant ideology and culture (Larrea Cabrera 1990). Indeed, the educational system in Latin America has been criticized often by intellectuals as serving the growth of a one-dimensional capitalist system and culture (Chacón Padilla 1988). Another common criticism is that the [end p. 109] rigid curriculum imposed by the national government fails to respond to the social, cultural, and linguistic diversity of the population (Larrea Cabrera 1990; Gajardo and DeAndraca 1988; Helg 1987; Navarro de Britto 1986; Prada 1978; Preston 1985; Vecino et. al. 1980; Leonard 1988). Students, teachers, and communities are victimized in the bureaucratic processes of an educational system which fails to take into account the particular needs of the participants.

## **THE IMPORTANCE OF PARTICIPATORY LOCALIZATION IN EDUCATIONAL INITIATIVES**

Freire (1985, 85) asserts that "The starting point for organizing the program content of education or political action must be the present, existential, concrete situation, reflecting the aspirations of the people." In this study, the term "community participation" will be used to describe this idea of community involvement in the educational process. In order for education to be effective, there must be active participation by all parties whom it impacts: students, teachers, parents and other community members. In order for education to be relevant, aspects of the local situation must be incorporated into the school's curriculum, programs, and activities.

The empowerment of grassroots initiatives is linked to their relationships with a variety of other actors: local elites, the state, and national and international funding sources, not the least of which are the Non-Governmental Organizations, or NGOs (Zimmerer 1992; Maguire 1984). Although proponents of "small and local" development programs may regard the state as an adversary, local action is often not sufficient and must be bolstered by external agents, notably the state (Friedmann 1992; Annis 1988). Alternative development, argues Friedmann, advocates "involvement of [local people] in actions that will lead to their own empowerment," while pursuing "structural changes at the national level as well as local meliorative action" (Friedmann 1992, 164). However, as Zimmerer (1992, 280) cautions, it is dangerous "to assume that even [external agents] with the best intentions for serving the needs of local people can adequately represent the development interests of social movements."

## **INITIATIVE FOR IMPROVING PRIMARY EDUCATION IN RURAL AREAS OF ECUADOR**

In recent years, several programs of Ecuador's Ministry of Education and Culture and of independent agencies have been attempting to address the educational needs of rural communities. One promising project involves the creation of a system of rural schools called Paramount Educational Centers, or *CEM*, through the Program for Improving the Quality of Basic Education (PROMECEB).<sup>6</sup>

PROMECEB emerged in 1991 as the Ministry of Education's primary effort for improving the educational experiences of Ecuador's most marginalized children. It grew out of Project AMER (*Atención a la Marginalidad Escolar Rural*), a program that ran from 1986 to 1991. Efforts of Project AMER included the establishment of four Rural Centers for Education and Investigation, or CREI (*Centros Rurales de Educación e Investigación*), which offered training seminars for rural teachers; the coordination of forty-seven pilot schools for the Community Curriculum program; and the development of a series of textbooks written specifically for rural students (Morales 1992; Vega 1992).

A major difference between AMER and PROMECEB is that AMER worked only with the six grades of primary school, while PROMECEB includes pre-school, primary, and the three years of intermediate education. According to its promotional literature and to discussions with Ministry of Education officials at the national and provincial levels, PROMECEB is attempting to provide all residents of rural areas a basic education program of nine years that will prepare them to play "a leading role in the construction of a new society" through a three-pronged approach of developing human resources, redesigning the curriculum, and improving the system's physical and technological infrastructure (Ministry of Education and Culture 1992a,22).

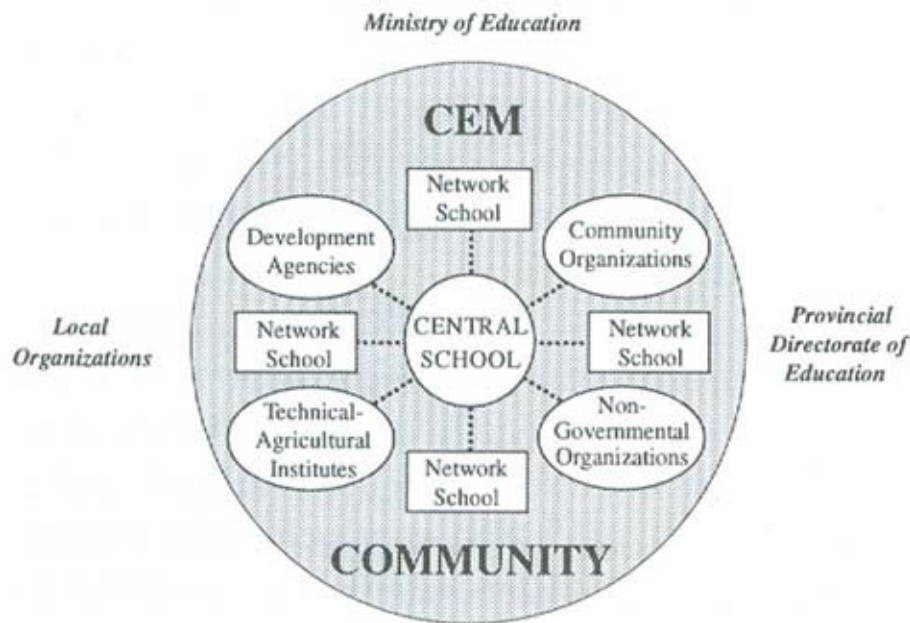


Figure 1. The CEM concept. The CEM system is comprised of a matrix of CEM networks, each of which is, in turn, comprised of a central school and various satellite schools. Each network works closely with development agents, community organizations, non-governmental organizations, and technical-agricultural institutes. System-wide coordination exists with the Ministry of Education, Provincial Education Directorates, local educational organizations, and the Pedagogical Institutes. All aspects strive to improve relations between school and community. Source: Ministry of Education and Culture, Quito, 1992a, 24.

At the heart of PROMECEB is the Centro Educativo Matriz (CEM), an educational structure located in a "homogenous zone" defined by geographic, socio-economic and cultural conditions.<sup>7</sup> It is comprised of a central school and a network of [end p. 110] satellite schools, organized with a "radius of influence" of approximately five kilometers per school and up to twenty kilometers from the central school (Ministry of Education and Culture 1990, 1992a). The CEM is designed to ensure that the rural population has access to a basic educational system of nine years (Figure I). By the summer of 1992, fifty-six CEM networks had been organized, and two dozen more were in the works, for a total of eighty networks (Ministry of Education and Culture 1991b, 1992a, 1992d; Figure 2).

Field research was carried out in Ecuador in the summer of 1992 to study the implementation of this initiative. Data collected through interviews with teachers, visits to government offices and to a CEM in the province of Imbabura indicated that, even though the CEM program is in its initial phases, it is coming one step closer to meeting the educational needs of Ecuador's rural population.

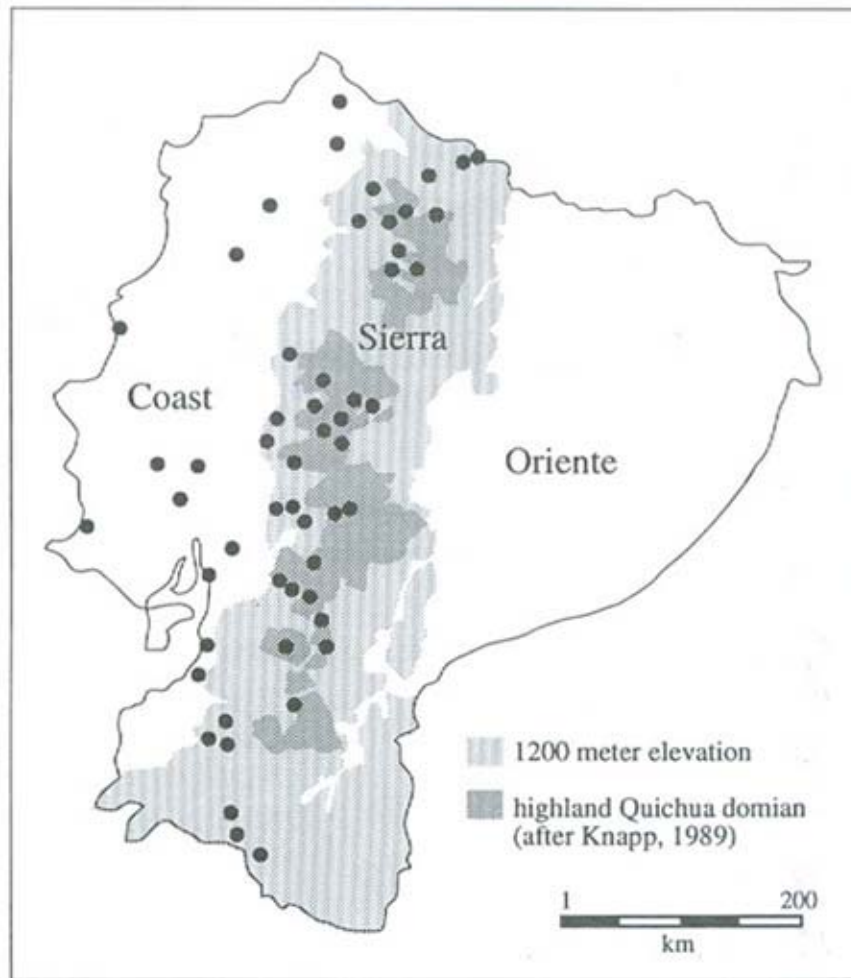
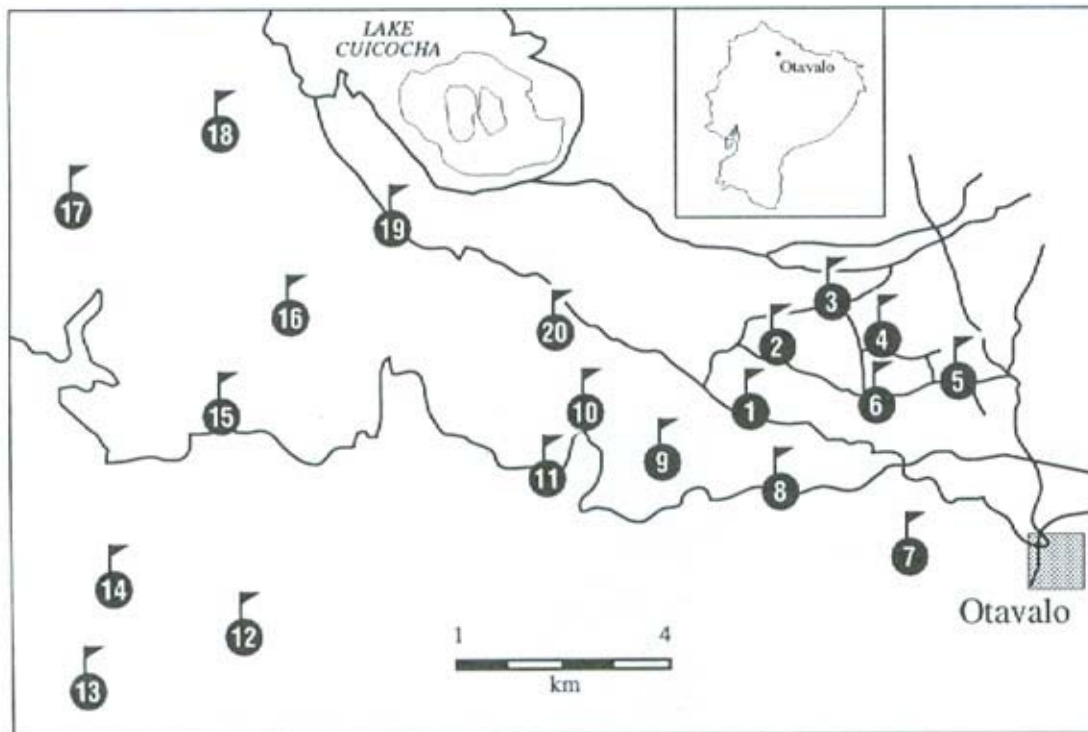


Figure 2. Map of CEMs established in Ecuador, May 1992. Dots indicate the locations of the 56 CEMs that had been defined as of May, 1992. This map shows that the majority of CEMs are located in the Sierra, with a preference for traditional highland Quichua parishes. Sources: Gómez 1990; Ministry of Education and Culture 1991b, 1992a, 1992d.

### STUDY AREA PROFILE

The central school of the CEM network which was visited for this study is located in the village of Gualsaquí, in the Parish of Quichinche, Otavalo County, Imbabura Province, Ecuador. Gualsaquí lies eleven kilometers northwest of Otavalo, a small city of approximately 17,000 people. From the CEM's central school, a network of twenty schools extends through Quichinche parish, some as far as twenty kilometers from the *plantel central* (Figure 3). According to the community history prepared as part of the CEM program, Gualsaquí had 983 residents living in 230 homes, with a total of 214 families recorded in the 1990 census (CEMG/l). According to an analysis of the last census for which data is available (1950), seventy-nine percent of the population of the parish understood Quichua, solidly situating this area as part of the Quichua domain of the northern highlands (Knapp 1987).



- |    |                        |    |                     |
|----|------------------------|----|---------------------|
| 1  | Alejandro Chávez       | 11 | Prov. de Tungurahua |
| 2  | Sgundo Luis Moreno     | 12 | Cacique Titarco     |
| 3  | Alzamora y Peñeherrera | 13 | Quisquis            |
| 4  | Abelardo Moncayo       | 14 | Prov. de Tungurahua |
| 5  | Carlos Almeida         | 15 | Marco A. Subia      |
| 6  | Ecuador                | 16 | Galo Larrea Torres  |
| 7  | Panecillo              | 17 | Huayrapungo         |
| 8  | Fernando Daquilema     | 18 | Huayna Falcón       |
| 9  | Dolores Quilo          | 19 | Anibal Buitrón      |
| 10 | Duchicela              | 20 | Estuardo Jaramillo  |

Figure 3. Map of CEM Gualsaquí Network. See Table 1 for names of communities in which schools are located. Only major roads are indicated. Distances may be longer than they appear because of mountainous terrain. Sources: IGM 1982; CEMG/10; Ministry of Education and Culture n.d.

The area around Gualsaquí was formerly part of a hacienda belonging to Nicolas Granja, a native of Cotacachi. The hacienda was broken up in the late 1930s or early 1940s. The original inhabitants were Quichua Indians, with the first *mestizos* arriving around the time of the hacienda's dissolution (CEMG/1, 13). Approximately ninety percent of the community's land is cultivated, and about eight percent is forested. [end p. 111]

The primary economic activity in Gualsaquí is agriculture, and almost all families own some land. About twenty percent of the families produce crops specifically for market, while the majority are subsistence producers who sell a portion of their crop for cash when necessary (CEMG/1, 16). Livestock are almost exclusively raised for commercial purposes, most often sold at Otavalo's animal market (CEMG/1, 19). While most of the textiles and artisan work produced in Gualsaquí are sold within the community, some pieces are taken to market in Otavalo and San Roque (CEMG/1, 22).

Residents of Gualsaquí generally eat only one meal daily, with little variety in the cuisine. Because of the poor quality and quantity of the community's diet, nutrition is a problem (CEMG/1, 34). In an effort to combat malnutrition, PROENCA, a project of the Catholic Church, provides children with a daily breakfast at school (CEMG/1, 25).

There is a small health clinic in Gualsaquí that is staffed by a nurse throughout the week, and a doctor, dentist, and dental assistant visit twice weekly (CEMG/1, 28). However, community members most often seek treatment for ailments from traditional sources—the midwife, the *brijo*, the *curandero* using herbal remedies (CEMGII, 34).

The community has access to running water via faucets along the streets and, in some cases, within the homes (CEMGII, 28). However, potable water remains a problem (CEMGII, 28; Rivera 1992). In response to this shortage, community members and teachers have built several large filters and storage tanks at the central school (Andrade Lema 1992).

The main road to Otavalo is paved and others are of cobblestone and dirt; all are in fair condition and accessible by motor vehicle. Since 1990, the main street through Gualsaquí and a majority of houses have received electricity (CEMG/1, 28). Most families possess a radio, and approximately 30 own television sets.

Of a population that is approximately ninety-five percent native Quichua-speaking, almost all of the adults in the community of Gualsaquí and throughout the CEM network are bilingual (Andrade Lema 1992; CEMGII, 23).<sup>8</sup> Approximately eighty percent of pre-school age children are bilingual, as are eighty-five percent of primary school students (CEMG/1, 23). Although bilingual education programs have been flourishing in Ecuador since the inception of the Ministry of Education's Division of Bilingual Education, instruction in the central and satellite schools of the CEM Gualsaquí network is carried out almost exclusively in Spanish (Andrade Lema 1992; Morales 1992).<sup>9</sup>

As mentioned previously, the central school of the CEM Gualsaquí network is situated in the community of that name, but the network includes nineteen satellite schools located in the surrounding region (Figure 3). Most of these schools existed independently before the establishment of the CEM network, but often were unable to provide students with an adequate primary education. Table 1 lists the schools of CEM Gualsaquí network, the communities in which they lie, and the numbers of teachers and students in each school.<sup>10</sup> Of the twenty schools in this network, only the central school in Gualsaquí is "complete" (having at least one teacher for each grade level), with twelve teachers. Seven schools have a single teacher. Of the remaining twelve schools, seven have two teachers, four have three teachers, and one has four teachers (CEMG/2; **[end p. 112]** CEMG/4). The staff is almost evenly divided between men and women (CEMG/5); this indicates that there are proportionally more male teachers employed at CEM Gualsaquí than at the provincial and national levels.<sup>11</sup>

SCHOOL	COMMUNITY	# TEACHERS	# STUDENTS
Alejandro Chávez	Gualsaquí	12	175
Segundo Luis Moreno	Cumbas Conde	3	61
Alzamora y Peñeherrera	El Punge	3	61
Abelardo Moncayo	Patalanga	1	25
Carlos Elías Almeida	Esperanza de Azama	4	93
Ecuador	Libertad de Azama	2	60
<i>sin nombre</i>	Panecillo	1	27
Fernando Daquilema	Perugachi	2	28
Dolores Cacuango Quilo	Cutambi	2	41
Duchichela	Guachinguero	1	33
Provincia de Pichincha	Tangalf	3	98
Cacique Titarco	Acilla Grande	1	18
Quisquis	Motilón Chupa	1	30
Provincia de Tungurahua	Padre Chupa	2	53
Marco Aurelio Subía	Inguincho	2	32
Galo Larrea Torres	Cambugán	2	43
<i>sin nombre</i>	Huayrapungo	1	19
Huayana Falcón	Muenala	1	27
Aníbal Buitrón	Achupallas	2	37
Estuardo Jaramillo	Moraspungo	3	62
<b>Totals</b>		<b>49</b>	<b>1023</b>

Table 1. CEM Gualsaquí schools, communities, teachers, and students, 1991–92. The schools are categorized into several types, based on the number of teachers in each: *unidocente*, in which a single teacher works with students of all grade levels; *pluridocente*, in which two to five teachers work with multiple grade levels; and *completa*, in which there is at least one teacher for each grade level. These figures include students in grades one through six at all twenty network schools, plus sixteen pre-school students, ten seventh-graders, and fourteen eighth-graders enrolled at Central School Alejandro Chávez. Sources: CEMG/3; CEMG/4.

In the first year of CEM Gualsaquí's operation (1990-91), 946 students were enrolled in grades one through six (CEMG/6; CEMG/7).<sup>12</sup> In the second year (1991-92), enrollment in the primary grades increased to 983 (CEMG/8).<sup>13</sup> In 1991-92, enrollment in the individual schools ranged from eighteen to 175 students. The average enrollment was fifty-one, although this figure is skewed by the high enrollment of the central school, which had almost twice as many students as the next largest schools. Enrollment drops significantly in the upper grades: of the 983 students in grades one through six, more than two-thirds (69 percent) were enrolled in the first three grades.

According to an investigation carried out by CEM personnel, there are 222 children of school-age and an additional 66 of pre-school age in the community of Gualsaquí (Andrade Lema 1992). However, only 159 of the former and sixteen of the latter attended school or kindergarten at Central School Alejandro Chávez during the 1991-92 academic year (Andrade Lema 1992; CEMG/8; CEMG/9). Retention of students is a problem in the [end p. 113] CEM Gualsaquí network and, indeed, throughout the country—particularly in rural areas. CEM Director Marcelo Andrade Lema attributes these low retention rates primarily to socio-economic factors.

In order to improve retention rates, the CEM program is focusing on providing students with an educational experience that will prove useful to them in their daily lives (Ministry of Education and Culture 1992a; Andrade Lema 1992; Morales 1992). This study elaborates on how the practice of community participation makes formal education relevant to the cultural and environmental contexts of students' lives in Ecuador. It appears that the CEM network of Gualsaquí is succeeding because it involves community members in the educational process, from the planning stages through implementation and evaluation of its various facets.

### **CEM GUALSAQUI IN ACTION**

According to promotional literature, the CEM central school should include classrooms, an administrative office, a library, science laboratory, a multi-purpose room, and a workshop for creating didactic materials to be used by all schools in the network (Ministry of Education and Culture 1992a). All of these structures were present in Gualsaquí by 1992, plus another structure which served as the school's-and community's-health clinic. This clinic and the introduction of electricity to the community, which occurred in 1990, are direct results of the establishment of the CEM central school in Gualsaquí.

Functions of the CEM ideally include a permanent seat for "capacitation" of teachers and the community; a center for production and distribution of didactic materials --such as texts, pedagogical bulletins, and audio-visuals-- for the network; development and implementation of the local and regional curriculum; a link between the network, the Pedagogical Institutes, and the Ministry of Education; and a plan to promote integrated rural development (Ministry of Education and Culture 1992a, 1991 b; Andrade Lema 1992). Field observations confirmed that CEM Gualsaquí was indeed performing these functions.

The CEM carries out a new type of technical, specialized program of supervision in the satellite schools, in which the CEM's director is in charge of all supervisory activities. This differs from the traditional system in that supervision is decentralized (Ministry of Education and Culture 1992a; Andrade Lema 1992). These innovations, though hardly considered "revolutionary" by North American standards, do represent a significant change from the Ecuadorian norm. Several of the teachers interviewed lamented the traditional system of supervision and support, which was minimal at best. Those who participated in CEMs or training programs offered by the *Centros Rurales de Educación e Investigación* (CREI) remarked that the new supervisory and support policies were a welcome change. Marcelo Andrade explained the system of supervision for the CEM networks as follows:

No longer does a supervisor come here from the Provincial Administration to supervise each of the schools. But rather, the director of the CEM ---in this case, myself-- goes to each school to do the supervision. But its not like the supervision there was before --getting books, things like that. The supervision is more friendly, providing more orientation, support. It transmits the pedagogical innovations of the Central School to the satellite schools.

The CEM also plays an essential role in the formulation and integration of local components into the curriculum. This is a significant break from the norm of adherence to the national curriculum proscribed by the Ministry of Education (for curriculum legislation and documentation, see: Ministry of Education and Culture 1992b; Marcillo Y. n. d.; Yáñez et al. n. d. a; Yáñez et al. n. d. b.; Yáñez et al. n. d. c).

In CEM schools, students do learn the basic subjects of language arts (Spanish), mathematics, social studies, and natural sciences; however, instruction is supplemented with examples drawn from the community, and thus education is more relevant to the students' own lives. The curriculum has been arranged so that part is "general" --that is, it conforms to the official program-and part "particular"-- generated in response to perceived local needs (Ministry of Education and Culture 1990a). In the words of CEM Director Marcelo Andrade Lema,

Now the curriculum is not one hundred percent official ... we have community assemblies in which members will stand up and say, "I want my child to learn such-and-such a thing." In turn, we group these basic educational needs that the community decided on, and come up with a good percentage--we're trying to get between thirty and thirty- [end p. 114] five percent ... of the contents from the

community's basic needs. Our aspiration is to have fifty percent official content and fifty percent [local content] ... We're not going to abandon the official curriculum entirely, though, because there are some contents that are universal ... We don't want to deprive our children of learning about scientific advancements. But that thirty to thirty-five percent of "educational needs" [allows parents to] say, "This is what I want my child to learn."

New textbooks called *Abramos Surcos* have been developed to address the educational realities of rural children (Ministry of Education and Culture 1989a, 1989b).<sup>14</sup> They are an outgrowth of Project AMER (Attention to the Rural Scholastic Fringe), the predecessor of PROMECEB discussed earlier. The books were to have been distributed to all rural schools, including CEM schools, beginning in October of 1992. A teacher who has used prototypes of the textbooks in a pilot project was highly laudatory of them:

These books are very practical. They talk about what our country is like, what are the political divisions by regions, what is cultivated in each region; they teach how to prepare the earth for tilling, how to plant seeds ... things about our own environment. For example, in the countryside there are no bathrooms, right, so they're taught about how latrines should be built and how they should be used ... Most books are written for children in the cities ... and more than anything, they confuse our children. But this doesn't book doesn't-- it's written especially for the child in the countryside.

A small garden in the school complex allows for practical application of the lessons and examples given in the *Abramos Surcos* text. In addition to fruits and vegetables to supplement their meals, students at Central School Alejandro Chávez grow medicinal herbs and learn about their uses from the local *curandero*.

Furthermore, PROMECEB has begun a series of "Pedagogical Bulletins" (Ministry of Education and Culture 1991a; Ministry of Education and Culture 1992c) that includes, among other information about current educational policy and general pedagogical techniques, sections on community development. For example, *Boletín Pedagógico* Number 1 (November 1991) contains a section on "Science, Technology, and Culture." Following a brief article, reprinted from a UNESCO publication, entitled "Introduction to technology in the early school years," there is a piece on applying processes of educational technology in community activities that provides instructions on building a filtered water tank. In a project facilitated by CEM teachers, members of the Gualsaquí community built such a tank, thus securing for the first time a consistent supply of potable water.

### ***Community Curriculum***

The CEM's treatment of community involvement in all aspects of education is based on a method called *Currículo Comunitario*. The methodology includes three phases. The crux of this method involves the *Taller Currículo Comunitario*, or Community Curriculum Workshop, which forms the basis of local curricular adaptations. Educators serve as facilitators of community action to assess the current situation and identify both problems and resources. In these workshops, information is shared in both Spanish and indigenous languages --in this case, Quichua --for the benefit of all community members. The workshop culminates in the preparation of a community history with both text and photographs.<sup>15</sup> The community history of Gualsaquí provided many of the details in the "Study Area Profile" section of this paper and is reflection of the community's perceived problems and needs, as well as of its strengths and resources. CEM Director Andrade Lema concluded that

Good things are happening because there is community participation ... Quality in education comes from the commitment of the teachers, participation by the parents, and participation by the community--that's quality, not things. We could have a school made of gold, but if the teachers do not take responsibility, if there is no community participation, we haven't gained anything. We are convinced that quality comes from the quality, integrity and dedication of the teachers, the participation of the students, the participation of the community --these relationships are essential to achieving quality.

Thus, it appears that the CEM program is, indeed, achieving community participation in its educational efforts.

## **EVALUATION OF THE CEM SYSTEM**

This study set out to examine Ecuador's primary education system in the context of local participation in an attempt to understand the degree to which formal education relates to the social, economic, and political realities of rural children and their families. I suggest that an "appropriate" educational program [end p. 115] could be characterized as one that empowers people to take increased control of their lives and to work towards solving those problems perceived by the community. I have used the term "community participation" to refer to the incorporation of local communities into the educational process. By focusing on community participation, the rural school can help students, families and communities to provide a "center for [their] life interests" (Buttimer 1980, 171).

In-service training for teachers at CEM schools is far more rigorous than at non-CEM schools. Since supervision is carried out by the CEM directors, it is more frequent and more supportive than that which is undertaken by the provincial directorates. Additional training and support are furnished by the Rural Centers for Education and Investigation (CREI).<sup>16</sup>

CEM schools are not required to conform to the national curriculum, and innovation is encouraged. The Community Curriculum approach fosters cooperation among students, teachers, administrators, and community in formulating an educational program that responds to the community's perceived needs. Pedagogical Bulletins provide suggestions for classroom activities that will benefit students and their communities. On a broader scale, a new textbook series is attempting to address basic concepts in a way that is relevant to rural children.

In a context where localization and community participation seldom occur, the Paramount Educational Center (CEM) project appears to be a promising initiative in improving the quality of primary education in rural public schools. It appears to be working precisely because of the concerted effort to achieve community participation through the Community Curriculum model discussed above. Although full participation of communities in the area of Gualaquí has not yet been achieved, as there are two remote schools which for bureaucratic reasons are not part of the CEM network (Andrade Lema, 1992), all of those interviewed --CEM personnel, non-CEM teachers, and community members-- believed the CEM project to be a significant step in the right direction. It appears to be a useful model for future programs, despite some limitations inherent in any model: coordination with other governmental and external initiatives, funding, technical support, and its status as a "special case" not available to all rural residents.

Assessing the impact of the CEM program would provide a fascinating and important topic for geographers and other social science researchers. The Ministry of Education and Culture's Executive Unit of Education and Development has published several interesting descriptions of Community Curriculum and experiences of the pilot study of Project AMER, the precursor to PROMECEB (Llanos Vega 1991a, 1991b; Cháves Granja 1991; Vergara 1991). However, larger-scale investigations of the CEM system--both within and among the various CEM networks--are necessary in order to more fully understand the dynamics of the initiative and to assess its effectiveness in improving the educational situation (and with it, the quality of life) of Ecuador's rural population. To date, no formal study of this program has been completed beyond the local level.

## **CONCLUSION**

The experiential nature of the community participation approach of Ecuador's Paramount Educational Center (CEM) system connects it to the larger realms of rural development and geographic education. By relying on elements of their social and physical environments, students, teachers, and community members use the world--*their* world, which may or may not extend beyond the boundaries of the local parish--as a classroom that can transcend the limitations of an inadequate infrastructure and a dearth of material resources.

Many of the curricular contents at CEM schools are inherently geographic, fitting into the five themes established by a joint committee of the Association of American Geographers and National Council for

Geographic Education (1985) in *Guidelines for Geographic Education: location, place, human-environment interaction, regions, and movement*. Application of these themes can achieve the goals of Pattison's three educational philosophies-to know, to do, and to be-brought to attention by Pemberton (1989), who relates them to Stapp's environmental education goals of "knowledge," "awareness," and "motivation." Through the community participation model practiced by CEM Gualsaquí, students learn through examples taken from their own community and their surroundings; **[end p. 116]** they work together with teachers and community members to develop skills and execute projects that will benefit the entire community; and, in doing so, they earn an education that will allow for an improved quality of life.

## NOTES

<sup>1</sup> According to translator Myra Bergman Ramos, *conscientización* can be defined as "learning to perceive social, political, and economic contradictions, and to take action against the oppressive elements of reality" (Freire 1985, 19-translator's note).

<sup>2</sup> *Reglamento Especial de Planteles Experimentales*, no. 222, enacted January 21, 1991 by Minister of Education and Culture Alfredo Vera.

<sup>3</sup> The names of teachers interviewed have been omitted in order to protect their privacy. All translations of dialogue and text are my own.

<sup>4</sup> In 1990, approximately 40 percent of the population of Latin America and 44 percent of Ecuador's population were considered "rural" (United Nations 1993,73-74).

<sup>5</sup> One of the innovations of CEM schools is that the school provides the raw materials with which to make didactic resources. The teachers and, often, community members work together on developing these materials, which remain property of the school even after the teachers move on (Andrade Lema 1992).

<sup>6</sup> CEM stands for Centro Educativo Matriz. It is an aspect of PROMECEB, the *Programa de Mejoramiento de La Calidad de la Educación Básica*.

<sup>7</sup> These homogenous zones were determined through a program of "Scholastic Mapping" (Mapa Escolar), a method of investigation and planning that examines the social, cultural, economic, and geographic characteristics of an area and groups schools with similar characteristics into a homogenous zone (Ministry of Education and Culture 1990b). Zoning of rural Ecuador for planning purposes was a popular project in the late 1970s and early 1980s (Knapp 1993).

<sup>8</sup> According to the community history, all of the men over age fifteen and all but five of the women of this age group spoke both Spanish and Quichua (CEMG/1, 23).

<sup>9</sup> Many of the network's teachers speak at least some Quichua and try to integrate that language into their instruction, especially in the lower grades, gradually increasing the Spanish content (Andrade Lema 1992). One network school, located in community of Cutambi, participates in Project EBI (Educación Bilingüe Intercultural), a government initiative with German funding.

<sup>10</sup> The data for this section derive from archival documents from CEM Gualsaquí's administrative offices (CEMGI2 through CEMGI9).

<sup>11</sup> In Imbabura Province, 61 percent of primary school teachers are female, while the national figure is approximately 66 percent (Ministry of Education and Culture, n. d.).

<sup>12</sup> At the central school in the community of Gualsaquí, an additional twenty-two students were enrolled in kindergarten and fifteen were beginning seventh grade as part of the new basic education program, PROMECEB.

<sup>13</sup> In this year, only sixteen children attended kindergarten. There were ten students enrolled in seventh grade, and fourteen had continued on to eighth grade.

<sup>14</sup> Literally, *Abramos Surcos* means "Let Us Open Furrows." This title is particularly appropriate for rural students who not only assist in tilling the earth, but are also opening their minds to the world around them.

<sup>15</sup> I had access to the history prepared for the community of Gualsaquí, the area in which the Plantel Central of the network is located. This document is a source of valuable ethnographic data on an area for which little exists. In addition, the Administrative Offices maintain scrapbooks that document events important to both the school and the community in general.

<sup>16</sup> The country's four CREI also offer various training programs for rural teachers in non-CEM schools, although these do not necessarily receive as much attention as programs for CEM teachers.

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CEMG/5 n. d. "Nómina de profesores del Centro Educativo Matriz Gualsaquí."

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## RESUMEN

La reforma educativa se ha venido convirtiendo en un tema importante en América Latina al igual que en el resto del mundo. Este estudio trata sobre un proyecto tocante al mejoramiento de la educación primaria en áreas rurales del Ecuador, propuesta que es totalmente diferente ya que trata de relacionar la educación formal con los contextos culturales y ambientales de la vida de los estudiantes, y que principalmente depende de la participación de las comunidades locales en el proceso educativo. El proyecto del Centro Educativo Matriz (CEM) autoriza a la población a tomar cada vez mayor control sobre sus vidas y cómo trabajar para resolver los problemas de la comunidad. La investigación sobre los esfuerzos para la reforma educativa en la sierra ecuatoriana rural, provee mecanismos para comprender las relaciones entre cultura, medio ambiente, y educación. **[end p. 119]**