Since 1979, education has had a key role in promoting social change in Nicaragua. Toward that end, the education system is expected to contribute to: (1) the formation of a "new person," a more critically conscious and participatory citizen who is motivated by collective goals; and (2) the transmission of the skills and knowledge to overcome decades of underdevelopment and set the nation on the path of self-sustaining growth. This paper is a survey of education in Nicaragua before and after the revolution that overthrew the Somoza dynasty in 1979. During the Somoza period, half the nation was illiterate with more than three-fourths of rural populations unable to read or write. Like most Latin American countries, Nicaragua under Somoza provided extensive education at public expense to urban elites, but failed to provide more minimal primary education or even basic literacy to a majority of its citizens. The new regime, despite setbacks, constraints, and challenges posed by intensified external aggression against the Sandinista regime, has nevertheless carried out a successful national literacy crusade and a followup program of popular education for newly literate adults and youths. It still remains to be seen, however, whether the newly acquired skills and knowledge will contribute substantially to increasing economic productivity, better health, more adequate housing, and effective communal action. The reconstruction of the Nicaraguan education system is only beginning. (TE)
EDUCATION AND REVOLUTIONARY TRANSFORMATION IN NICARAGUA

Robert F. Arnove

Paper prepared for the MALAS Conference
Bloomington, Indiana, October 22, 1988

School of Education
Indiana University
Bloomington, Indiana
Education and Revolutionary Transformation in Nicaragua*
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Since 1979, education has been called upon to play a key role in promoting social change in Nicaragua. Toward that end, the education system is expected to contribute to 1) the formation of a "new person," a more critically conscious and participatory citizen who is motivated by collective goals, and 2) the transmission of the skills and knowledge to overcome decades of underdevelopment and set the nation on the path of self-sustaining growth.

The Sandinista regime that came to power in mid-July 1979 faced formidable challenges in redirecting the education system towards new goals. Not unlike the economy, schooling was characterized by years of distorted development and dependency on foreign models and resources.

Further, the education system was a reflection of the dynastic rule of the Somoza family which, in conjunction with the National Guard, had governed the country either directly or indirectly from the mid-1930s. A mass system of public schooling that would foster the education of critical, inquiring citizens made little sense in a society characterized by limited opportunity in the modern sector of the economy and constricted opportunity for political participation. Educational statistics in 1979 reflected this situation.

The Somoza Period: Underdeveloped and Dependent Education

Half the nation was illiterate, with more than three-fourths (76%) of rural populations unable to read or write. There were under 25,000 students enrolled in adult education programs, the
great majority the responsibility of the private sector and church groups. Primary education reached only 65% of the relevant age groups, preprimary education was available to a mere 5% of children, mostly in private, fee-paying centers. Of those entering the school system, 22% completed the sixth grade—34% in urban areas and 6% in rural areas. Women and the indigenous populations of the Atlantic Coast Region were the least schooled of all.

By contrast, the higher education system was relatively large. According to the Encyclopedia of the Third World, Nicaragua, in 1976, ranked 86th among nations in adjusted school enrollments for primary and secondary education, but 61st in per capita university enrollments. (1) Like many Latin American countries, Nicaragua under Somoza provided extensive education at public expense to urban elites, but it failed to provide more minimal primary education or even basic literacy to a majority of its citizens.

If Nicaragua, under the Somoza family, could be characterized as an underdeveloped and dependent capitalist society, the new regime quickly delineated a different path to development. According to Valerie Miller:

Concerned with more than simply equity with growth the leaders of the Frente Sandinista shared a general development orientation that was socialist in character. Although interpretations of the precise meaning of this orientation were rich in variety and number, FSLN members did agree on certain common points. Development and transformation, they believed, depended in the short run on national reconstruction and in the long run on a transition to socialism. ... According to this view, attainment of such a society required economic growth, extensive redistribution of power and wealth, and broad-based
Congruent with this model of development, the new guidelines of educational policy set forth these principles:

- The emergence of the great majority of the people formerly dispossessed and socially excluded, as the active protagonists of their own education.

- The elimination of illiteracy and the introduction of adult education as priority tasks of the Revolution.

- The linking of the educational process with creative and productive work as an educational principle, leading to educational innovation and promoting the scientific and technical fields.

- The transformation and re-alignment of the education system as a whole, as to bring it into line with the new economic and social model.

The new system of "popular education" as current Ministry of Education publications note "is essentially and necessarily linked to the strategic political project of the FSLN. What is fundamental in it is the fact of being part of that political project for the building of a new society. Popular education is not a new form of teaching. It is not an innovation either, or a modern technique of education or a mere act of political will, but an overall notion of education in keeping with a Weltanschauung and a political project. It is this political project of ours that lends it its full significance."
with the Revolution the leadership of the Ministry of Education has envisioned the expansion, improvement, and transformation of education as, respectively, contributing to the democratization of basic social services, the independence of the Nicaraguan economy from foreign domination and the development of a new model of capital accumulation based on different social relations of production and forms of public and cooperative ownership. The overriding goal of education has been to contribute to the formation of the "new man ((and women)) and the new society." (5)

These are lofty ideals, indeed. It would be totally unprecedented if the Nicaraguan education system, in the brief period of 9 years, were able to make a substantial contribution to achieving these goals. The experience of other revolutionary societies indicate that change in school systems typically lags behind economic and political changes; the recruitment and training of teachers and the revision of curriculum takes years, and does not always lead to the desired outcomes. (6) The schooling process itself usually involves a minimum of six to nine years to provide both a basic education and rudimentary technical/vocational skills. In the meantime, society is in upheaval, with pressing demands to be satisfied.

As isso frequently the case in societies undergoing radical change, the solution of one set of problems leads to the emergence of another set. Revolutionary situations where sweeping changes are made in telescoped periods are often characterized by contradictions. If dialectical materialism involves the search for unity in contradictions, then the revolutionary situation in Nicaragua has provided abundant
opportunities for decision makers to engage in dialectical analysis. In addition to a focus on contradictions and tensions generated by attempts to bring about radical transformations in schooling and society, I have found world-systems and historical perspectives useful to an understanding of the sources, trajectory, and fate of reform efforts in revolutionary societies, for the past and present position of a country in the global economy and its relation to super-powers or regional hegemonic nations set the conditions—the opportunities and constraints—within which change can take place. Revolution always engenders counter-revolution from those national elites and their international allies who benefited from the old order. Such is the case in Nicaragua, and throughout the paper, I will address some of the setbacks, constraints, and challenges that the Nicaragua education system has faced these past 5 years with the intensification of external aggression against the Sandinista revolution.

The value of these perspectives—dialectical, historical and global—to understanding the relationship between educational and social change is revealed in an examination of Nicaragua's most singular (and innovative) achievements in the field of education—the 1980 National Literacy Crusade and the follow-up program of popular education for newly literate adults and youths.

1980—The Year of Education and the National Literacy Crusade

Within 15 days of coming to power, the new government announced that among other sweeping reforms there would be a
national literacy campaign. Widely acclaimed as the most important educational event in the history of the country, the crusade was viewed as a second mass uprising: a "cultural insurrection" that was a sequel to the armed struggle against the Somoza family dictatorship.

To the question "Why literacy?" the Ministry of Education has responded that the high illiteracy rate that characterized the country—and particularly the rural areas where illiteracy ranged from 60 to 90 percent of the population—was an outcome of the feudal system of the Somoza dynasty, one that kept the vast majority of the population ignorant. As the Ministry of Education's description of the Great National Literacy Crusade (Cruzada Nacional de Alfabetizacion) notes, "to carry out a literacy project and consolidate it with a level of education equivalent to the first grades or primary school, is to democratize a society. It gives the popular masses the first instruments needed to develop awareness of their exploitation and to fight for liberation. Therefore, literacy training was something that the dictatorship could not accept without contradicting itself." (7) Extending education to the vast majority of the people represented symbolically and substantively a conferral of the rights of citizenship. The campaign constituted a fundamental mechanism for mobilizing the population around a new set of national goals.

The literacy campaign has been described vividly and at great length by Valerie Miller and Sheryl Hirshon. (8) Suffice it to say, between March 23 and August 23, 1980, the campaign mobilized 55,000 brigadistas (literacy workers), mostly high
school students to go to the countryside to work with, learn from, and teach the largely illiterate peasantry. In the cities, some 26,000 youths and adults participated in the campaign as People's Literacy Teachers.

The achievements of campaign have been widely heralded. A total of 406,056 Nicaraguans had learned to read and write. The illiteracy rate had been reduced by more than half to under 25% of the population over 10 years of age. In addition, a follow-up campaign in the indigenous languages of Miskito, Sumo, and Creole English extended literacy skills to another 12,664 between October 1980 and March 1981. These achievements occurred in a war-torn and economically devastated country.

Beyond the number of people who learned to read and write, the literacy campaign contributed to a number of fundamental changes. Among the outcomes of the campaign must be included the winning of youth, particularly those students who worked as bridgadistas to the cause of the revolution; integrating rural populations into national life; improving the status of women who viewed the campaign (in which they comprised the majority of instructors and staff) as vindication of their formerly discriminated status in education and public life; the strengthening of mass organizations, in particular the Sandinista Youth Association (JS-19 J), the National Educators' Association (ANDEN), and the Nicaraguan Women's Association (AMNLAE); and helping to bridge the social and cultural gaps between the Atlantic and Pacific Coasts. Finally, the crusade established a new model of social change based on substantial devolution of
decision-making powers to the grass-roots level. It demonstrated that communities through their own effort, and in conjunction with the government, can provide essential social services.

More than commitments were awakened by the CNA. The crusade also contributed to expectations of expanded national services in previously neglected areas such as health and to demands for consumer products that were unfamiliar to most rural households prior to the arrival of the brigadistas. The brigadists were provided with two rations of basic food commodities to feed themselves and to assist their host families. One unforeseen result of the CNA was a substantial—and inflationary—increase in the rural demand for such products as refined sugar, salt, cooking oil, and poultry products. Not unexpectedly, the crusade also led to a tremendously expanded demand for further education. Part of this demand was to be met by a dramatic expansion of the formal education system. But much of the demand was to be met by a system of nonformal and popular education that was already being designed and being put in place at the end of the literacy crusade.

Nonformal and Popular Education

The follow-up program of adult basic education (Educacion Popular Basica, EPB) began on October 1980 under the auspices of the newly created Vice-Ministry of Adult Education (VIMEDA). The organizational form that EPB took was that of educational collectives (Colectivos de Educacion Popular, CEPs). EPB relies principally on Sandinista mass organizations and nonprofessionals as the agencies of continuing education. Many of the more than
15,000 (at its peak, 18,000-20,000) teacher-animators of popular education are graduates of the literacy campaign, with approximately one-half of CEP instructors having less than a complete primary school education. The majority of teachers are under 25 years of age.

This volunteer and youthful teaching force, using inexpensive print material in a variety of classroom settings, by 1984, had enabled basic education to reach approximately 190,000 Nicaraguans in some 17,000 educational collectives. As many as one-fifth of students are under 15 years of age, with close to another one-fourth between 15 and 19 years old. The reasons for this situation are the poverty of the country and the need for children and youth to help sustain their families and assist with household chores during the day. Without EPB, many youth would not be able to attend any form of systematic education. In many CEPs, it is not uncommon to find children learning along with adults, and in some cases several generations of the same family work together by day and study side-by-side at night.

In addition to the educational program of VIMEDA, many of the state and mass organizations have instituted their own education divisions to upgrade the level of technical knowledge and organizational skills of their staffs and membership, or raise their political consciousness. Almost all are involved in training popular educators who serve as change agents (community and union organizers) involved in disseminating vital information on a mass basis in the areas of health and nutrition, women's and workers' rights, occupational safety, land reform and cooperatives, civil defense, and current events of national
import. These state and mass organizations, following the model of the literacy crusade, use some pyramidal form to train, from the national level down to the municipal and community levels, progressively larger numbers of people. For example, beginning with a group of approximately 15 high-level technical staff in Managua, the National Union of Farmers and Cattle Ranchers (UNAG) eventually reaches and imparts knowledge about the philosophy and practice of cooperatives to representatives of hundreds of cooperatives throughout the country.

Despite what would appear to be exciting, innovative, and well coordinated efforts at popular education, there are very serious problems facing the continued vitality and success of EPB. I will spend some time to discuss tensions and contradictions in the program because both the strengths and limitations of a radically reformed education system are found in the microcosm of nonformal and popular education.

Briefly, the constraints include the poverty of the country, which means that even the most basic educational supplies, as well as equipment like Coleman-type lanterns for nonelectrified rural areas, are lacking. Material limitations, however, are exacerbated by the U.S.-supported contras have selected as prime targets of attack education and health workers, and rural educational and health centers. As of September 1988, some 350 popular educators had died in combat or had been assassinated while teaching. Over 450 CEPs are not functioning as the result of direct sabotage or because of the displacement of populations and the danger to students attending evening classes in areas of
intensive counter-revolutionary activities. In this context, enrollments in EPB have declined to approximately 72,000.

Problems further inhere in the process of a revolutionary government attempting to accomplish a lot in short periods with limited resources. What has been viewed as a strength of popular education--thousands of minimally schooled volunteers serving as teachers--may also be a serious shortcoming. Many instructors, in fact, are only one step ahead of their student neighbors and friends. At the upper levels of EPB, the abilities of popular educators appear to be stretched beyond the breaking point. Moreover, despite claims of using participatory teaching-learning methods, most teachers without adequate preparation, simply resort to traditional methods of instruction. Another concern is high dropout and burnout rates for both students and teachers, with less than half the students completing the third level of EPB and one-fourth of teachers annually leaving the program (this figure has now risen to over one-third).

Besides the problem of substantial attrition and disruptions in regular attendance wrought by defense and production mobilizations, EPB has begun to manifest the problems of more traditional adult education programs around the world. Sustaining the interests of learners five nights a week, week after week, over a number of years is extremely difficult--particularly in a revolutionary society in which extraordinary demands are placed on ordinary citizens to participate in a variety of community and national tasks.

That part of adult education which appears to be still growing and showing signs of vitality is the accelerated primary
education program (with some 20,000 students) that offers a degree in a reduced period of time for supposedly older individuals (over the age of 16)—but which is not a formal part of literacy and post-literacy instruction (EPB). Similarly, many younger students view EPB as a stepping stone to further formal education and certification, which will place a heavy load on the already over-taxed secondary education system. Nonformal and popular education, like the literacy crusade, has been viewed by the Sandinista leadership as a political project with educational implications—the nature of adult education never being very clearly defined. The lack of clear definition and design has resulted in what was supposed to a parallel education system closely tied to community and workplace needs gradually beginning to resemble in some respects traditional schooling—namely, a bureaucratic, centralized, credentialling system not closely tied to local circumstances and learner needs.

The nature and future direction of adult education, therefore has aroused serious concern among members of the Ministry of Education, the Ministry of Planning (which oversees educational policy in relation to economic and social plans of the nation), and the leadership of the FSLN. Reforms in adult education, however, are now taking place. Plans are now under way to reduce the program from 6 to 3 levels of instruction, which will facilitate graduates entering technical training sooner. Adult education teachers are being trained through their inservice workshops to add a general technical content at even the initial introductory (literacy) level. In 1987, the Ministry
of Education (MED) and the Sandinista Workers' Central (CST) also reached an agreement by which CEPs will be organized in the major factories of Managua. MED will supply materials and teacher training and CST will design the factory-specific technical content to be included with the language and mathematics instruction.

Some of the more promising efforts at post-literacy instruction involve the National Union of Ranchers and Farmers and the Ministry of Agricultural Development and Agrarian Reform, in which literacy instruction is in relation to the specific skills needed to govern and conduct the activities of a cooperative or to increase agricultural production. Examples of experimental work-site experiments include that of the state-run Benjamin Zeledon Sugar Mill in Carazo, where workers who had completed the first two levels of EPB were enrolled in a 45-day course of full-time study with pay which was designed to enable them to complete the third through fifth levels of adult education; at other MIDINRA centers, training courses of short duration take students with advanced levels of EPB and impart specific technical skills that accord with national economic priorities.

Having briefly summarized some of the strengths as well as difficulties of EPB, I would like to now focus on what I consider to be potentially the most contradictory aspect of popular education. The contradiction pertains to notions of empowerment— to the thesis of individual and collective empowerment within a political project that is defined by a vanguard party. An October 26 document of the Ministry of
Education entitled "Popular Education: Theory and Practice in Nicaragua clearly reveals these tensions. As the document notes:

"One of the fundamental points (concepts) of popular education fully coinciding with the project of the Sandinista Popular Revolution is that of 'participation'.

This participation is not assumed as a form of demagogy making the workers believe that they are participating. The aim is to ensure that they are genuinely the protagonists of the process and that they become educated and grow politically to exercise popular power and, under the guidance of their vanguard ((emphases mine)) to be the subjects of their history. The requirement is that within this outlook the working class and its members individually shape themselves in a critical, like-minded and combative manner as Sandinistas and also prepare themselves at the highest scientific and technical levels." (11)

The strain between people determining their own goals and course of action, as against that decided by a vanguard that already knows what is in the best interests of the collectivity is also found in this passage:

"Participation gathers, stimulates and develops all the experience, capacities and potentialities of working people for their own growth (cf. Insurrection, National Literacy Crusade, defense). Participation should also be understood as joint action with mass organizations (ORMAS) and other institutions. Practice has demonstrated that the people in arms, organized in a structured manner and taking its own decisions under the guidance of the vanguard, is invincible (my emphases)." (12)
One problem is that the mass organizations, which are the mechanisms for mobilizing the population around the tasks of the revolution, are in many instances little more than forums for transmitting the political line being propounded by the FSLN at any given moment. This is not always the case, and there are also numerous cases of the mass organizations openly debating if not opposing the Sandinista leadership position on such delicate issues as abortion (when AMNLAE wanted the FSLN to pursue a more aggressive policy in favor of women's rights over their bodies) or with regard to women's participation in the military; and there are many instances of mass organizations representing the workers, such as the Rural Workers' Association (ATC) organizing sit-ins at government offices of state-run enterprises, when it felt that workers' rights were not being honored or promises being fulfilled. In 1985, in a series of national forums designed to elicit public input on the working of government institutions and the mass organizations in the revolution, the neighborhood Sandinista Defense Committees (CDS) came under intense criticism for their tendency to dictate to people. Nonetheless the tension between the State and party on one hand and the mass organizations on the other hand is there and as Fisk notes: "the interaction is a dynamic one that, if it doesn't develop in the direction of greater power for the mass organizations, will revert to a vertical relation of both party and state to the masses." (13)

Within the formal school system, where there is now an attempt to systematically implement notions of participatory education, it is not uncommon to find teachers who use the
concepts and terminology of Paulo Freire's pedagogy for critical consciousness and liberation, but who use this method so that students adhere to the correct political line being propounded by the FSLN; whereas, others, who are militants of the FSLN, and often traditional, if not authoritarian, in their approaches to teaching do not believe that there should be any imposition of political ideas, and that people may legitimately differ in their political interpretations of the current situation in the country.

To summarize these two sections on the literacy campaign and follow-up programs of adult education, despite notable achievements in literacy and post-literacy provision, it still remains to be seen whether or not the newly acquired skills of literacy and the knowledge gained through follow-up programs of adult basic education will contribute substantially to increasing economic productivity, better health, more adequate housing, and effective communal action. With fewer than half the students who participated in the CNA entering and completing even the first two levels of EPB, and with constant disruptions in education program (largely due to the aggression against the country), as well as the high dropout rate, a significant number of adults may, and actually are, lapsing into illiteracy or simply achieve a minimal level of literacy that is not adequate to the increasing demands placed upon the Nicaraguan citizenry. The Ministry of Education has announced that the illiteracy rate has increased by some 10 percentage points since the end of the CNA, and since 1985 the need to attack illiteracy has being a high
priority of the MED, with various mini-campaigns being launched in both rural and urban areas with some dramatic examples of success. It also must be kept in mind that because of the demands for more skilled, informed, and participatory citizens—and because of the opportunities opened by the revolution—it is very much the case that tens of thousands of previously illiterate and poorly skilled individuals are now playing important roles at all levels of the society, from co-op to national legislative bodies.

A final set of questions relates to the impact of popular education on the formal education system: to what extent have the innovative practices of the literacy campaign and EPB influenced the new school system that emerged in the fall of 1980. And to what extent has schooling changed in Sandinista Nicaragua?

Reforming the School System: Challenges and Constraints

The Nicaraguan literacy crusade and programs in adult education have received widespread international attention for their innovative characteristics. As in other revolutionary societies, however, formal education appears to be intractable to radical change. Yet the Nicaraguan school system, based on new notions of the relation between education and national development, since 1979, has been expanded, improved in many respects, and generally reordered.

Time does not permit me to describe in any detail the dramatic expansion of the school system, notably at the primary and secondary levels. Suffice it to say that if the democratization of education is equated with the provision of basic schooling to the vast majority of Nicaraguans, then the
system has been definitely democratized since 1979. The data in Table 1 document these increases as well as the commitment of the Sandinista government to make preprimary and special education a public function. By 1984, over one-third of the Nicaraguan population was enrolled in some form of publicly-supported instruction. As of August 1988, over one million (1,044,425) children, youth, and adults were enrolled in educational programs.

<table>
<thead>
<tr>
<th>Year</th>
<th>Preprimary</th>
<th>Primary</th>
<th>Secondary</th>
<th>Special Ed</th>
</tr>
</thead>
<tbody>
<tr>
<td>1978</td>
<td>9,000</td>
<td>369,640</td>
<td>98,874</td>
<td>355</td>
</tr>
<tr>
<td>1987</td>
<td>76,635</td>
<td>590,906</td>
<td>161,280 ('86)</td>
<td>2,292</td>
</tr>
</tbody>
</table>

The external aggression against the country, however, has very deleterious consequences on the ability of the country to reach and provide basic education to entire school age population. In 1984, there were 75,000 children without access to schooling. By 1987, the number had increased to over 149,000, and as of August 1988, it is estimated that 200,000 children remain outside the education system—due to destruction and damaging of schools, dangers of traveling to schools in war zone, displacement of rural populations, and the economic necessity for children to work.

Due to the military draft higher education enrollments have decreased from a high of 35,000 in 1983 to some 25,000 in 1988; the number of secondary students, similarly, has declined by more than 10,000 to under 150,000.

The quality of education has suffered as well, with the
Ministry of Education not having the funds to produce (or the means to distribute) basic educational texts and school throughout the entire national territory. In 1984, because of the war, allocations to the education and health sectors were essentially frozen. In 1987, these two sectors accounted for 24.8 percent of the national budget, with over 50 percent going to defense. Prior to the external aggression, the military received only 18 percent and the social sector's more than 50 percent of the budget. (14)

Despite these setbacks, there also have been notable improvements in the quality of education and in the functioning of the educational apparatus. Among the major improvements in primary and secondary schooling have been the establishment of a national textbook industry, the revision of curricula, and the introduction of new methods of instruction, particularly in the language arts and sciences. For the 1987 school year, despite a chronic shortage of paper goods, 3.7 million texts were produced. The reformed school system encourages students to apply their knowledge to the solution of everyday problems. National science fairs with prizes awarded by top government leaders further encourages students to solve real-world problems (although the war also has begun to diminish the possibility of holding national level fairs, due to transportation and related costs).

Organizationally, while MED plays a central role in long-range planning and in the formulation of coherent policies for the entire system, there has been a significant decentralization and regionalization of administrative services, including greater autonomy for the Atlantic Coast. Efforts are underway to
implement a 1980 decree, which for the Atlantic Coast, "authorizes instruction at the pre-primary and the in the first four grades of primary in the Miskito and English languages." Oral histories have been gathered to serve as the basis for the development of reading materials.

With regard to transformations in teaching-learning processes, the MED has envisioned education as contributing to the preparation of a new work force for an economy governed by the "logic of the majority," in the significantly expanded public and cooperative sectors of the economy. New social relations of production are to be mirrored in new social relations of learning. The education system is expected to overcome the gaps that traditionally exist between theory and practice, intellectual and manual work, school and community.

Since 1979, transformations in teaching and learning have centered on fostering more collective, participatory, inquiry-oriented, and work-related approaches. For example, beginning in the upper grades of primary and continuing on through higher education, study circles of approximate 5 to 10 students are formed and a monitor usually a superior student, is selected by the group to assist learning. A number of classroom assignments involve group efforts, and a certain percentage of a students' grade will reflect group performance. Major steps also have been taken to involve schools more directly in their surrounding communities, with credit being given for service activities.

At the higher education level, the most striking changes involve the close integration of admission policies, faculty and
curriculum development with national economic plans, and the inclusion of a significant work component in all study plans---e.g. five weeks per semester are devoted to field work and practice experience. Examples of socially valuable and professionally relevant training include social science students conducting housing surveys and recording nutritional deficiencies in school children, law students helping establish and run legal aid clinics for low-income people and engineering students working in sugar mills.

The role of youth in assuming major responsibilities for defense as well as the success of the educational enterprise marks a change in political culture. During the Somoza period, youth were often considered enemies of the state.

A new spirit pervades even the once elite bastions of private secondary education, such as the Colegio Centroamerica, where many youth have volunteered for military service and production brigades. There may not be a totally different Nicaraguan youth, but there are more opportunities, as well as increased expectations, to act in new, more socially conscious ways.

Teachers comprise the single group upon whom the greatest demands are placed for transforming the education system. It is with regard to the expectations for teachers that we find many of the tensions experienced by the Nicaraguan system---tensions experienced in other societies that are attempting to bring about a radical transformation of political culture. Teachers are expected to possess extraordinary qualities---not only with regard to knowledge and pedagogical ability but with regard to
political awareness and ideological correctness—qualities that will inspire their students. To cite a document of the National Association of Educators (ANDEN): "Teachers have an important mission in our society because of our politico-ideological role, because we ought to be agents of transformation, leaders in the community and of the classroom, who forge by example patriotic and revolutionary values in the formation of the high level human resources required to develop the country according to the Strategic Project of the Revolution . . . ." The document continues concerning the role of teachers in participating "... in our strategic defeat of the counterrevolution, strengthening our patriotic consciousness in order to convert the classroom in a bastion where we work to improve the quality of teaching, the patriotic formation of students and elevate academic retention and productivity and promotion rates, teach student discipline, and our integration in the tasks of the revolution—battling belligerently and opportunely ideological diversionism and its concrete expression in vandalism which impede the consolidation of our Education Project as a great investment in the socioeconomic development of our revolution." (15)

Attracting and retaining committed and capable teachers, of this stripe, has been a major challenge to MED. Simply to augment the supply, the number of teacher training institutes has been increased from 5 to 14. To improve the status of teachers, MED, in June 1984, made an historic announcement: for the first time in the country's history teachers' salaries would be equivalent to those of comparable professionals. The salary
agreement between ANDEN and MED essentially doubled the salaries of teachers. Moreover the work load for primary school teachers was reduced to 25 hours per week, and for secondary teachers from 40 to 34 hours. Since then, inflation, running over 200 percent in 1985 and 1986, and as high as 1,200 percent in 1987, has seriously eroded teacher wages—despite subsequent wage hikes and the several more rounds of increases in 1987 and 1988. Street vendors of uncontrolled items like cold water often make in a week what a teacher makes in a month. Teacher salaries currently are insufficient to live on—even with basic commodities (10 pounds of rice and beans each, and 5 pounds of sugar) provided by the government at prices way below those of the marketplace as part of the basic social wage. To survive economically, many primary school teachers have to now teach two or more turns, while secondary school teachers are allowed to teach another half-turn. Transportation expenses alone may consume as much as three-fourths of the daily income of a teacher.

Large-scale exodus of teachers therefore continues. During the first seven months of 1988, 5,000 (out of a total of some 34,000) educators left the teaching profession. Some left, because of administrative streamlining that occurred (so-called "compactacion" to reduce the number of public employees), but most departed because they could not live on their salaries and the frustration of teaching were too great.

As against the high turnover, the inadequate preparation of the majority (over 60 percent of the teaching force is not certified), and the political unreliability of many, there are also numerous examples of extraordinarily committed and effective
teachers, working under extremely difficulty situations. Some three thousand youths (some of them graduates of the literacy program and EPB) who (after intensive training in Cuba) have served for periods of one year or more in various brigades in the most isolated and dangerous areas of the country. Several hundred secondary teachers (university-level students) have performed their social service in impoverished and remote areas like Rio San Juan, where they formed the backbone of a literacy brigade the reduced that the illiteracy rate from 36 percent to under 4 percent, and where, together with parents and community members, they have built all the new schools in the region, including a normal school (made of bamboo). Furthermore, the difficulties have fueled local initiatives to pool resources and labor to resolve educational problems and to provide material assistance to teachers—examples of cooperatives providing land and produce to teachers or parents groups negotiating with transportation companies to reduce bus fares. As one Vice-Minister noted: "If you look at all the difficulties that educators have encountered, and the lack of resources they have—it's a miracle that things are going as well as they have." Or, as Minister of Education, Padre Fernando Cardenal observes, while it is possible to focus on the number of teachers who have abandoned the occupation or who complain about their situation, attention also has to be given to all those who have stayed in their posts, who have continued to serve under trying and dangerous circumstances. (16)
The reconstruction of the Nicaraguan education system is only just beginning. A new direction has been articulated to make education a reality coherent with the revolution, but many of the announced reforms still exist largely on paper. It may be that with more time and with the consolidation of the present political regime, Nicaragua will be able to fulfill tangible--and modest--goals such as providing a minimum of four years of basic education to its entire population, ensuring that no school child has to sit on a mud floor, and that every student has a textbook. With time and resources, it is possible that a basic education of 9 or 12 years will be available to every youth, and that an education will be in place that develops the talents of individuals and also satisfies the economic requirements of the country. But time, resources, and political latitude are precisely the factors and conditions that are not now available, for the Sandinista government is presently involved in a life and death struggle that will determine its own survival and whether or not the revolution will continue along the trajectory demarcated in 1979. While education has contributed to the consolidation of the revolution, it is also a subsystem of the larger society that necessarily reflects its tensions and contradictions, both its promise and limitations--and the constraints imposed on Nicaraguan society by the U.S. sponsored counterrevolution and the economic warfare waged by our government against the people of Nicaragua.
REFERENCES

* This paper draws upon my previous writings, *Education and Revolution in Nicaragua* (New York: Praeger, 1986), and "Education and Revolutionary Transformation," *Nicaraguan Perspectives* 14 (Fall 1987): 29-36, + 42, co-authored with Tony Dewees. I also wish to acknowledge the valuable assistance of Mr. Dewees in obtaining, in Nicaragua, current information for this paper.


3. Ibid.


8. See Valerie Miller, Between Struggle and Hope, fn #2; and Sheryl Hirshon with Judy Butler, And Also Teach Them to Read (Westport, Conn.: Lawrence Hill, 1982).

9. MED claims that the illiteracy rate was reduced to 12.96%,
but it should be noted that this figure is based on the decision to subtract from the target population of illiterate adults approximately 130,000 individuals who were considered unteachable or learning impaired. If this population is included in literacy statistics, then the illiteracy rate was reduced to approximately 23% by the end of the campaign.

10. For further discussion, see Rosa Maria Torres, *De Alfabetizando a Maestro Popular: La Post-Alfabetización en Nicaragua* (Managua: Institute of Economic and Social Research, INIES, 1983), p. 24.


12. Ibid., p. 5.


16. Interview of 8/19/1988 with Minister of Education Fernando Cardenal, Managua, Nicaragua.