

DOCUMENT RESUME

ED 216 960

SO 014 059

**AUTHOR** Chen, Kuan Yu  
**TITLE** Chinese Education: Old and New, Radical and Reformed. World Education Monograph Series, Number Two.  
**INSTITUTION** Connecticut Univ., Storrs. Thut (I.N.) World Education Center.  
**REPORT NO** ISBN-0-918158-21  
**PUB DATE** 81  
**NOTE** 37p.; A Centennial Colloquium Presentation at the School of Education, University of Connecticut (Storrs, CT, November 18, 1980).  
**AVAILABLE FROM** I.N. Thut World Education Center, Box U-32, University of Connecticut, Storrs, CT 06268.

**EDRS PRICE** MF01 Plus Postage. PC Not Available from EDRS.  
**DESCRIPTORS** Adult Education; Communism; \*Comparative Education; Educational Change; \*Educational History; Educational Innovation; Educational Policy; \*Educational Practices; Elementary Secondary Education; Foreign Countries; Higher Education; Vocational Education  
**IDENTIFIERS** \*China

**ABSTRACT**

This paper examines education in China from 1949 to 1979. Education plays a key role in Chinese society. The main goal of Chinese educational policy is to produce workers with both socialist consciousness and culture. The Chinese conception of education is very broad and includes the regular school system, work-study education, and informal mass education. The paper quotes significant points from the "Common Program," the first tentative constitution adopted in 1949. The educational achievements in China between 1949 and 1966 are then reviewed and assessed. In 1949 China declared war on illiteracy. Efforts were undertaken to make the Chinese written language easier to learn. Romanization was used as a tool to aid pronunciation of the Chinese characters. The written Chinese characters were also simplified by reducing the number of strokes. Nurseries, kindergartens, and primary and secondary school education were expanded. Vocational and specialized schools were opened. In 1949 there were 207 higher educational institutions. By the mid 1960s there were 400. On May 7, 1966, Mao issued the famous "Directive on Education" which has served as the basis for all subsequent revolutionary activities in education. The reforms and innovations which occurred between 1966 and 1976 are described. For example, the down-to-the-countryside program was launched in 1968 and continues to be one of the key policies of China. The dilemmas encountered during the Cultural Revolution decade are also examined. The paper concludes with a description of the contemporary revised educational approach, 1977-1979, and the national emphasis on the "Four Modernizations."  
(RM)

\*\*\*\*\*  
\* Reproductions supplied by EDRS are the best that can be made \*  
\* from the original document. \*  
\*\*\*\*\*

THE I.N. THUT WORLD EDUCATION CENTER

Centro de Educacion Mundail I.N. Thut

BILINGUAL - MULTICULTURAL - INTERNATIONAL - GLOBAL



APR 5 1982

ED216960

CHINESE EDUCATION: OLD AND NEW, RADICAL AND REFORMED

by

Kuan Yu Chen  
Central Connecticut State College  
New Britain, Connecticut

U.S. DEPARTMENT OF EDUCATION  
NATIONAL INSTITUTE OF EDUCATION  
EDUCATIONAL RESOURCES INFORMATION  
CENTER (ERIC)

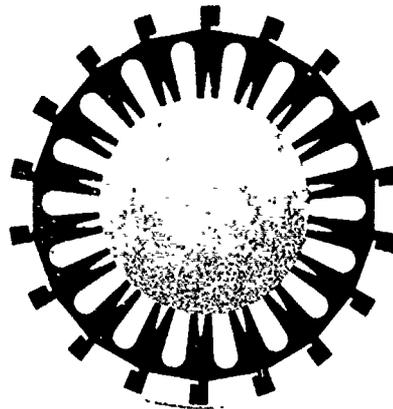
X This document has been reproduced as received from the person or organization originating it. Minor changes have been made to improve reproduction quality.

• Points of view or opinions stated in this document do not necessarily represent official NIE position or policy.

"PERMISSION TO REPRODUCE THIS MATERIAL IN MICROFICHE ONLY HAS BEEN GRANTED BY

Dr. Frank A. Stone

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."



50 014 059

A Centennial Colloquium Presentation at the School of Education,  
The University of Connecticut, on November 18, 1980

1980-1981

WORLD EDUCATION MONOGRAPH SERIES

Number Two

## CHINESE EDUCATION: OLD AND NEW, RADICAL AND REFORMED

Kuan Yu Chen

The task of national development in China is unprecedented in scale, scope, and intensity. In scale it involved more than 800 million people, i.e. one-fifth of the human population. In scope development is conceived of in the broadest sense. It is not confined to economic development only, but encompasses reconstruction in the political, social, cultural, and personal dimensions as well. The degree of intensity in carrying out the development task may be best characterized by the Chinese slogan of "going all out, aiming high and achieving greater, faster, better, and more...results in building socialism." These words are being actually practiced in the daily purposeful but frenzied endeavors of the hundreds of millions of Chinese. What is of interest to us as educators is that China has designated to education the key role to achieve the mammoth task. Thus education becomes the focal point of the "two-line struggle" within the Chinese Communist Party leadership. Educational policies fluctuate as one or the other faction takes power. Nevertheless, it should be made clear that both factions are dedicated to the same national goals for China. Both embrace the same general educational aims, only their approaches are different.

### China's National Goals

China's first goal is to attain purity in ideology with Marxism-Leninism as a theoretical base and Mao Tsetung Thought -- as the practical ideology in guiding the implementation of national policies. She wants to bring about a moral and psychological transformation in her people through socialist ethics and education. Her second goal is to achieve a balanced economic development with agriculture as the base and industry as the leading factor. Her third

goal is the sophistication of a defense system which can assure national security and sovereignty. Science and technology are the means to achieve comprehensive modernization of the above factors and to take China to the front rank among the world's nations by the end of this century.

### Mao Tsetung Thought

Mao's practical ideology provides norms of behavior and guidelines for actions to attain these national goals. There are several basic notions which need to be understood before the panorama of China can be comprehensible:

(1) Egalitarianism, which is an ideal in the utopian classless society, is believed to be really desirable and achievable. (e.g., pay differentials, hierarchy in status of occupations, gaps between rural and urban development should be reduced to a minimum).

(2) Based on Marxist dialectic principle, all concrete contradictions could be resolved by the "unity of the opposites." (e.g., the contradiction between the cost and quality in the production of bicycles to be resolved by a technical innovation which takes the two factors into consideration.) Hence, this principle becomes an important motivating force to overcome the plethora of obstacles to reconstruction for the Chinese people. Daily the masses try to bring from it solutions to their concrete problems.

(3) Insistence on adhering to the "mass line" is characteristic of Mao's way of implementing democratic centralism. Within the framework of a single, correct ideology and central planning, the masses at the lower levels should be seriously involved in participatory planning, governance, and evaluation. (e.g., the Revolutionary Committee which was the administrative body of all units in society during the decade of the Cultural Revolution was composed of

representatives of people at the grassroots as well as of professional personnel and Party branch cadres).

(4) Self-reliance is another important category in Mao's Thought. It stems from the necessities of the Yenan period down to the present day's material constraints on development. (e.g., the Production Brigade, a subdivision of the commune, should develop its local resources to feed its small scale rural industry in support of agriculture. External aid from higher levels should be only subsidiary.)

(5) The slogan of "walking on two legs" is also central in Mao's thought. It means balanced development by making use of all available and useful resources. It can be applied to all fronts. (e.g., educationally, formal balanced with informal education; industrially, state-run heavy industry balanced with local light industry; medically, traditional Chinese medicine balanced with western medicine.)

(6) The need for continuous renewal and raising of consciousness in the realms of ideology and behavior is couched in Mao's familiar phrase: "continuous revolution". The battles have to be fought in the individual's mind, values, world view, human relationships, and patterns of behavior through group dynamics. Hence, there are constant study and discussion groups criticism and self-criticism meetings, mass demonstrations and rallies related to ideological and practical policy campaigns.

#### The Chinese Conception of Education

The term "education" is given the most comprehensive interpretation. Besides the regular school system, there is a large alternative system of spare-time and work-study education. Moreover, informal mass education is of paramount

importance. It includes all of the mass media, all forms of art, all group activities and mass movements as mentioned above. Productive labor is an integral part of the educational process. It is inclusive of all people, old and young, men and women, the schooled and unschooled, the employed and unemployed. It is closely integrated with the official ideology and development goals. Its role is to serve the people in their socialist reconstruction. It short, education is life itself in China.

### Professed Educational Policy

Chapter 5 of the Common Program, the first tentative constitution adopted in 1949 delineated the educational policy in nine articles. The following are excerpts of significant points:

"Article 41. The culture and education of the Chinese People's Republic are...nationalistic, scientific and popular... <sup>sp</sup>

"Article 43. To develop rigorously the natural sciences, to serve construction in industry, agriculture and national defense.

Article 44. To promote the application of the scientific historical point of view in the study...of history, economy, politics, culture and international affairs...

Article 45. ...to awaken the people's political consciousness, and to encourage the people's enthusiasm for labor.

Article 46. The educational method...is the unity of theory and practice...to reform the old educational systems, educational contents and teaching methods.

Article 47. To carry out universal education...to reinforce secondary and higher education; to put emphasis on technical education, and to strengthen spare time education for working people as well as education for cadres in service, and to provide young as well as old intellectuals with revolutionary political education."

### Achievements in Education Up To 1966

China lost no time in declaring war on illiteracy through a pervasive system of spare-time adult literacy programs. Prior to 1949 over 90 percent of the population was illiterate, and among the industrial personnel it was about 80 percent. By 1966 the estimated national illiteracy dropped under 60 percent, urban illiteracy under 20 percent, and among industrial personnel it was about 10 percent.<sup>1</sup> The nature of the Chinese written language makes it more difficult to acquire basic literacy than phonetic languages. The leadership tried to combat this problem by two means. One was romanization, used as a tool to aid pronunciation of the Chinese characters. The other was to simplify the characters by reducing the number of strokes. A list of 2,328 simplified words was published in 1964. A citizen is considered to be basically literate if he has acquired about 1,500 to 2,000 characters which would enable him to read ideological posters, newspapers and directives.

For the very young, nurseries and kindergartens were operated by practically all units of enterprises and neighborhoods. Group activities were emphasized, and basic socialist values such as sharing, cooperation, self-denial, love for working people, and pride in their achievements were inculcated. Visitors to China are usually impressed by the spontaneous liveliness and evident health of the children. Childhood probably has never been so happy before for the masses of Chinese children.

Major effort was made in expanding primary school education, especially during the Great Leap Forward of 1958. By the eve of the Cultural Revolution 84.7% of all school-age children (116 million) were enrolled either in the regular or alternative primary system as compared with 25% (about 17 million) in 1949.<sup>2</sup> Rural areas remained the underprivileged sector.

The length of primary schooling was six years. Ideological moulding permeated all the regular subjects. Children in the upper grades begin to take a foreign language, with English being the most popular. After 1958 productive labor was added to the curriculum. Efforts were made to familiarize pupils with agricultural and industrial life through contacts, visits, and even by working briefly at the production sites.

At the secondary level, there were general and specialized full-day schools, supplemented by part-time programs. Prior to 1966 the six years of secondary education was divided into three years each for the junior and senior middle schools. The general secondary schools offered an academic program with political education and productive labor as important components. Emphasis was more on mathematical and scientific subjects than on humanities and social sciences. The great majority of junior middle graduates had to go to work and continued their education in spare-time programs. Enrollment in general secondary education jumped from 1 million in 1949 to 23 million in 1965, not including the number enrolled in spare-time programs which reached 5 million in 1958.<sup>3</sup>

A major source of skilled manpower was the system of specialized secondary education. There were two basic types, i.e. the vocational and the normal. The vocational schools offered specialized training in hundreds of fields of concentration which were directly linked to industry, business, and agriculture. The graduates were semi-professionals or technicians manning the intermediate level jobs. The majority of them were in the technical and industrial specialties. The normal schools were engaged in training teachers who were in great shortage. Junior normal schools took elementary graduates and prepared them to teach the four lower primary grades, while senior normal schools trained teachers of all grades of the elementary school and kindergarten. The enrollment of specialized

secondary education jumped from 228 thousand in 1949 to 1.4 million in 1959, without including the number enrolled in spare-time programs which stood at 588 thousand in 1957.<sup>4</sup> In spite of the expansion the goal of universal junior middle school education was far from being realized even in relative large cities by 1965.

Institutions of higher learning included comprehensive universities, polytechnic universities, specialized professional and technical institutes, and research institutes. The comprehensive universities were interdisciplinary institutions offering a general education to produce researchers, scientists, and educators of high calibre. However, they tended to be somewhat specialized and applied in nature. Polytechnic universities typically offered five to ten specialties related to different branches of industry. These institutions were an important source of manpower. The specialized professional institutes, predominantly engineering schools, were the major source of manpower for industry with a higher education. Their courses were more specialized and applied, relating to only a particular branch of industry. The smaller number of finance and economic institutes provided an important but limited source of high level managerial and white collar manpower for business and industry. In the mid 1960's China was the third largest producer and consumer of engineers in the world, after the Soviet Union and the United States. The weakest link in Chinese higher education was and is in the social and behavioral sciences.

Before 1949 there were altogether only 207 higher educational institutions in China. By the mid 1960's there were about 400 regular institutions which included 20 comprehensive and 15 polytechnic universities, and the rest were professional and technical institutes.<sup>5</sup> There was also a spare-time program with an enrollment of 400 thousand in 1960.<sup>6</sup> Ninety percent of China's

higher-educated engineers and scientists have been trained since 1949. Despite the expansion higher education was inadequate to meet the demands of large number of urban youths. On March 1, 1966 the editorial of the People's Daily recommended the solution of "sending them to the rural areas in planned migration."

Graduate education was and is in its infancy conducted by leading universities and the research institutes of the Chinese Academy of Science. In 1965 only one percent of the total number of college graduates were involved. Ninety-nine percent were assigned jobs to serve the state. A small number of selected graduates were sent abroad to study, earlier to the USSR, and later to sixteen countries, including 102 to France and 25 to England.<sup>7</sup>

The highest organ responsible for research on a national scale was the Commission of Science and Technology which coordinated all research, oversaw the Academy of Science and supervised important classified projects such as nuclear weapon development. Dr. Arne Tiselius, Nobel Prize winner for chemistry and president of the Nobel Foundation for years, made the following comments after a visit to China in 1966:

"What I saw led me to believe that in many places the Chinese are doing excellent work in bio-chemistry and fundamental medical research. They are making impressive efforts to build up and intensify scientific research in general and they are also paying great attention to practical application of their research to agriculture, industry, and public health."<sup>8</sup>

#### An Assessment

It is appropriate to stop at the juncture of 1966 on the eve of the Cultural Revolution to review the educational achievements of China after seventeen years under Communism. The record was truly impressive for a developing nation contending

with overpopulation, devastation from wars, poverty, illiteracy, and century-old traditions. Education was realistically planned and practically carried out on all fronts and at all levels within the material constraints. It reached the broadest masses of people, unparalleled in Chinese history, and provided the majority of them with at least literacy and rudiments of skills. The expansion of secondary and higher education produced a relatively large number of intermediate level and sophisticated personnel to meet the urgent needs of national development as well as long term goals. Much was borrowed from the Soviet Union, but selectively adapted to Chinese conditions. Generally speaking, Chinese education had basically progressed along the lines laid down in the Common Program. However, there were characteristics inherent in the system which led to the drastic educational reforms during the Cultural Revolution.

1. By the early 1960's a two-track system had been developed, with the regular full-day schools on the one hand, and the alternative work-study schools on the other. The former were concentrated in the cities, producing the nation's educated elite. Financially speaking, the two-track character could also be symbolized by the state-run schools as opposed to the schools run by the local collective units such as the neighborhoods and villages with state subsidies. Invariably the facilities of the latter kind were inferior to the state-run school.

2. Moreover, the full-day schools were further differentiated into a hierarchy with the "keypoint" schools at the apex closely followed by schools which primarily catered to the cadres' children. The keypoint system channeled the best students from the best primary and secondary schools, or to the best colleges on the basis of unified entrance examinations at each level. The criteria for admission were: entrance examination score, class background, and

the student's own political record. This system received more funds from the state than ordinary schools, and enjoyed the highest teacher/student ratios, best facilities, and the most qualified teachers.

3. Hence college students in the 1960's primarily came from urban and white-collar families, although the proportion of students from worker-peasant background did rise steadily but gradually.

#### Education and the Cultural Education

Mao was dissatisfied not only with the non-egalitarian and elitist nature of the pre-1966 educational system, but also with a number of other aspects of it. Firstly, the emergence of an educated elite who used their schooling for self-advancement reminiscent of traditional scholar-gentry aiming for officialdom. Secondly the curricular content, heavily dependent on pre-revolution and translated materials, was in many ways not only irrelevant to China's needs, but also contradictory to socialist ideology. Thirdly, the methods and process of education were still very traditional, characterized by rote memorization, blind acceptance of the authority of the written word, separation of the mind and hands, emphasis on examinations and selections, and authoritarian relationships between the teacher and the taught. Finally, academic and professional leadership, especially in higher educational institutions, was still mostly in the hands of intellectuals trained before the revolution. Their concern for academic scholarship and theoretical studies collided with the practical emphasis on "learning first what is most needed."

..... Hence, when Mao launched the great Cultural Revolution (1966-68), education was a central issue. On May 7, 1966 Mao issued the famous Directive on Education which has served as the basis for all subsequent revolutionary activities in education, for a decade:

"...While their (students') main task is to study, they should, in addition to their studies, learn other things, that is, industrial work, farming, military affairs, and also learn to criticize the bourgeoisie. The period of schooling should be shortened, education should be revolutionized, and the domination of our schools by bourgeois intellectuals should by no means be allowed to continue."<sup>9</sup>

The Revolution began with the attack on the president of Peking University, who represented the "bourgeois leadership." College enrollments for 1966-67 were suspended by stopping the entrance examination which allegedly discriminated against youths of peasant/worker/soldier backgrounds. This marked the beginning of a two-year period during which Red Guard student activists of all ages took to China's streets. In early 1967, three successive calls were issued by the central leadership, exhorting activist students and teachers to return to their schools to make revolutions there. They were told to do three things, i.e. "struggle, criticism, and reform." The first was to struggle against the "reactionary academic authorities" in the schools and to depose them. The second task was to expose and criticize the defects of the pre-1966 system. Finally they should reform the system under the guidance of Mao's Thought and his May 7 Directive. The revolution in the schools stalled at the first two phases of "struggle and criticism." It was not until May, 1969 that a draft outline of reformed rural primary and secondary schools appeared in The People's Daily.<sup>10</sup> The severe struggles among the feuding Red Guards delayed the re-opening of colleges and universities until 1970, after a four-year suspension of classes.

#### The Reforms

By 1972 a general pattern of the reformed system began to emerge, but it was never officially adopted. The leadership seemed intentionally to let it be experimental, allowing considerable latitude for local variations:

(1) Within the period of the Fourth Five Year Plan (1970-75) universal five-year primary education, and seven-year education where possible, would be introduced into the rural areas as quickly as possible. All state-run primary schools were transferred to production brigade management, thus eliminating the distinction between state-run and people-run schools. Keypoint schools were abolished. Poor and lower-middle peasants were represented on the Revolutionary Committee, which became the administrative body. Teacher shortage would be ameliorated by recruiting resettled urban secondary school graduates, and other relatively skilled people. Children would attend primary school within the area of their own production team, junior middle school students would attend school in their own production brigade, and senior middle school students in their own commune. State subsidies would be available for the construction of new school buildings in some areas, while the principle of "self-reliance" would be strictly observed.

(2) In the towns universal seven-year education, and nine-year education where possible, would be introduced. The latter comprises five years of primary education, two years of junior middle and two more years of senior middle school. Hence the 5-2-2 system of primary and secondary education would be the target to be universally institutionalized.

(3) Higher education was shortened from 4-5 years to 2-3 years. There was nation-wide recruitment of students with worker-peasant-soldier background for enrollment in universities. Thirty leading universities have been designated as national universities whose new body of students would come from all over the country, each province receiving a fixed quota. Students at lesser institutions would come from within the province where the school is located. Under the new selection procedure, the candidate must have at least two years of working

experience and a junior middle school academic preparation. He first submitted his application for consideration and recommendation by the grassroots people of his working unit. Class background, political record, and labor performance were primary factors for consideration. The college entrance examination was abolished. The next step was the approval by the county leadership, followed by interviews with the recruiting teams sent out by the colleges. As a result, the composition of the student body in higher education was drastically changed in favor of those who came from families of workers and peasants. The graduates were expected to return to their original working units after completion of study, or to be re-assigned to jobs according to societal needs.

(4) The curricula were revised at all levels, with an increase in political content, extension of productive labor and military affairs. Peking University served as a reformed model for comprehensive universities. All departments followed a general course plan: Marxism-Leninism and Mao Tsetung Thought, social and political economy, history of the Chinese Communist Party, international studies (history and politics of the Third World), composition, productive labor, and specialized subjects. Unlike technical students who could apply their theoretical knowledge in workshops and factories, students of liberal arts were told to take the whole society as their "factory", a truly "school without walls" concept. The Chinese call it "open-door education" Tsinghua University served as the reformed model of polytechnic universities. To integrate theory with practice, professors and students had to go through actual engineering or construction processes to get first hand knowledge. Such knowledge would be summarized later back in the classroom and supplemented with a theoretical framework which would then be written down as instructional material produced collectively. The student's time schedule was divided as follows: 75 percent classroom and theory, 15-20 percent political education, 5-10 percent productive labor.

(5) Management of schools was to be the responsibility of a Revolutionary Committee consisting of representatives of the Party, the professional and staff, students, and workers/peasants. Participatory planning, governance and evaluation were practiced. The positions of principals and college presidents were abolished, so were the titles and ranks of the professionals.

(6) Theoretically the most dramatic change was to take place in the educational process. The teacher's role was to guide and facilitate inquiry and learning on the part of students. There should be "reciprocal learning" between them, hence eliminating their century-old "feudal" relationship. The teacher was also to be held "totally responsible" for his students and measured by their "total collective progress." Since most of the new crop of university students had inadequate academic backgrounds, teachers were expected to give them special individual attention and remedial help. (A true concept of accountability) Teaching methods were to combine theory with practice and to develop analytical and problem-solving skills in the students. Thus lectures were limited, Take-home or open-book examinations were used to identify those in need of help. Marks were to be de-emphasized. Teachers were to be "re-educated" under the guidance of peasants/workers by taking turns to do labor, together with their students, in the farms and factories periodically.

#### Other Socialist Innovations

The above reforms were mostly connected with formal schooling, but the Cultural Revolution brought about other innovations which are educational in nature.

(1) The down-to-the-countryside program was launched in 1968 and continues to be one of the key policies of China. It concerns with the resettlement of urban middle school graduates in the vast rural areas. From 1968 to 1975 over

twelve million people were resettled.<sup>11</sup> This program is aimed at absorbing the greatly increased number of educated youth into the reconstruction efforts in the countryside. All kinds of measures have been tried to make the resettlement program work and to make it more palatable to the urban youths and their parents. Different kinds of incentives are provided for them: multiplied correspondence courses run by regular universities, better eligibility for membership in the Communist Youth League and the Party, and promotion to local leadership positions. They are encouraged to make use of their education in meaningful work such as teaching in rural schools, running political study classes, or organizing experiments in scientific farming. When they have achieved the status of peasant with a few years of labor, they may apply to their communes for recommendation to the universities. However, higher education is not necessarily a way out of the countryside, since university graduates were expected to return to their communes. As long as reconstruction of the vast countryside and development of socialist agriculture are priorities in national policies, educated youths are needed there until expanded industrialization in urban centers calls for additional manpower.

(2) Another innovation was the Worker and Peasant Colleges. The Urban model was referred to as "July 21st" College. The best example was found in the Shanghai Machine Tool Plant. Its previous spare-time middle school was transformed into a technical college to train advanced-level technicians from among its own work force. New recruits were selected from those who had at least twelve years of experience. The worker-technician was trained specifically in terms of the needs of his factory. It was a kind of intensive in-service training to upgrade the cultural and technical level of existing personnel. In the curriculum, besides politics, productive labor and military affairs, 80 percent

of the time was devoted to technical studies. A final examination required actual designing of one of the more complicated machines from drawing board to production line. Technicians in the plant and professors from nearby polytechnic universities served as instructors. The length of the program was about three years.

The rural examples were the "May 7th" Colleges which might specialize in agriculture, rural technology, health care, or teacher training. They aim to upgrade a large number of local leadership of the communes. After one year of study, they return to their posts to do leavening work among their comrades. This kind of college is modelled after the famous self-reliant Kang Ta (the former Anti-Japanese Military and Political College at Yen-an, the basic pattern of Maoist conception of all-round education.)

(3) In in the field of medicine and public health, the slogan was "medicine to face the countryside." About 80 percent of all Chinese doctors have spent some time in the rural areas. Ordinarily, 15-20 percent of all hospital professional medical staff were working away from their base hospital at any one time, on a rotation basis. A specialist would usually stay for eight to ten months in a commune, practicing his specialty and teaching his special skills to the doctors in the commune hospital. When his time was up, a specialist of another field would replace him. Many teaching hospitals would adopt a commune as an area of special interest. Great emphasis was placed on combining Chinese and western medicine with a 40-60 split respectively between them in the medical college curriculum. The schedule of the shortened three year course was divided as follows: after the first four months spent in college, the whole class with teachers went to the countryside in groups for the rest of the first year and most of the third year. The emphasis was on the study of rural diseases. The

second year was spent mostly in the city at hospitals and factories. Thus, the work of the college was integrated with the wider system of public health services, especially at the production brigade level. Medical services at this level relied greatly on the work of the celebrated "barefoot doctors." According to official definition, they are "peasants trained to give medical service locally, without leaving their farm work;" thus they are very close to the peasants, knowing their ailments and health hazards. They are usually peasants with primary and middle school education who receive two or three months of elementary training at the county or commune hospital with refresher courses from time to time. They play a major role in health education against prevalent diseases, in raising the level of community hygiene, in giving minor treatment and providing first aid. Their contribution to the successful family planning education is inestimable. Hawkins, in his insightful article on this topic, points out not only the impressive decline of birth rate and general population growth rate in China (estimated 1.0 percent compared with near 3.0 percent in the Third World) but also the effectiveness of using educational alternatives to achieve such a goal.<sup>12</sup> China has successfully found solutions to the central, hard-core problem, i.e. overpopulation, in her national development through a network of non-formal educational efforts comprising the principles of the mass line, the raising of political consciousness, and the complementary development in the socio-economic-cultural sphere.

#### An Assessment of the Educational Revolution (1966-1976)

Post-Mao China is left with a mixed legacy of revolutionary educational practices. Many of them are very significant politically and socially, but others are questionable in terms of sound educational policy.

1. Based on the Maoist notion of egalitarianism, the goal of universal primary education is almost achieved (95% of all school-age children<sup>13</sup>), and secondary education is now available in the rural areas. However, the emphasis on equalizing educational opportunities for the disadvantaged masses may have been carried to the point of denying opportunities to the urban youths and children of former "bourgeoisies" at the high school and college levels. Roadblocks such as entrance examinations, academic standards, and grades were removed from the way of the masses. The hierarchical structure of the educational system was broken, so that resources could be spread more equitably. Reducing the length of schooling from primary to university levels was still another means to solve the problem of limited resources. Its natural corollary was the condensation and dilution of course contents. Thus the price for expanding the educational base was sharply cutting off the top and nationwide lowering of standards.

2. The policies of "ending the domination of schools by bourgeois intellectuals" and of urging students to "learn to criticize them" led to the transfer of educational governance from the hands of the professional to the non-professional (Revolutionary Committee). In the atmosphere of "politics in command" and "red in ascendancy" (red vs. expert), China's small pool of highly trained professionals and even the rank and file of school teachers were regarded as adversaries of the revolution. Countless of them were indiscriminately attacked and even physically assaulted by frenzied Red Guard students. They were so intimidated and demoralized that they were unable to contribute effectively to the "reform" of education. This accounts for the phenomenon of the stalling of the educational revolution at the "struggle and criticism" stages without progressing to the "reform" stage for several years. In such an atmosphere of anti-intellectualism, basic academic and theoretical studies were

down-graded, while the political and practical were greatly emphasized. The Maoist notion of "unity of theory and practice" reinforced the "open-door" approach to education by sending students out to factories and communes to study and work. In many instances, this was carried to the extreme.

Undoubtedly the students have gained much insight of the exploitive nature of the old society from the sharing of bitter experiences by the workers and peasants who were brought into the rostrum of the classrooms and into the administration of the schools. Their political consciousness was definitely raised by having participated in the "great revolutionary storms." Such experiences were intended for them to "gain the revolutionary character of their predecessors" so that they might become worthy successors of the revolution.

3. The Maoist notion of "self-reliance" obliged each unit or locality to come up with its own solution for the provision of education within the framework of the guidelines. In adapting to local realities and needs, the system became extremely decentralized. Arrangements, practices and emphasis varied widely over time and place. In addition, the political tug of war between the two lines within the central and local leadership aggravated the situation further. There were continued vacillation in educational emphases. What was revolutionary and correct at one time or place might be anti-revolutionary and wrong at another. Under such confusion excesses and cynicism grew among students and teachers. Discipline became a problem in schools.

The above are just a few indications of the dilemmas encountered in the implementation of the ideals of educational reform during the Cultural Revolution decade.

Contemporary Revised Educational Approach: 1977-1979

With the passing of Mao and the downfall of the radical "Gang of Four" in 1976, China has ushered in a new era with the "pragmatist" faction in command. The national emphasis is shifted to the "Four Modernizations", i.e., in agriculture, industry, defense, and science and technology. The Chinese refer to this endeavor as the New Long March which will take China to the front rank among nations by the end of this century. Again, education is asked to play a significant role.

The key slogan that emerged in early 1977 was "respect teachers, love students." It implied the restoration of teacher authority. Other new themes for education appearing in the press emphasized student discipline, teaching of basic knowledge, and regular examinations. During the summer of 1977, decisions governing the new school year 1977-78 began to be announced.

1. The length of primary and secondary schooling is not to be extended. The goal is to standardize the full-day primary and secondary schools on a nationwide basis with 5 years at each level, i.e., a ten-year system. Acknowledging the necessity of "walking on two legs", the current 9-year rural system together with the alternative work-study schools will have to continue until resources are available for a universal 10-year system. At the higher education level, schooling has been extended back to 4-5 years.

2. Basic curricula, teaching materials, textbooks, and teaching outlines both for primary and secondary schools have been standardized. "Open-door" education is proportionately reduced. Individual schools are no longer allowed to interrupt classroom instruction at will. Centralization is now underway.

3. In early 1978 the Ministry of Education issued a communique, calling upon educational units at all administrative levels (i.e., provincial, prefectural,

municipal, and country-wise) to do a good job in operating "keypoint" schools by the opening of the fall semester, 1978. It specified that consideration should be given to both urban and rural areas. The "key point" schools run by enterprises (such as petroleum, metallurgy etc.) should emphasize specialized basic knowledge needed by them. While enjoying priority in resources, the "keypoint" schools should also operate under the principles of "self-reliance and thrift." The communique designated twenty schools as "national keypoint schools" to be run directly by the Ministry.<sup>14</sup> Since then, different administrative levels have continued to announce their "keypoint" schools. These schools will recruit students throughout the entire administrative areas to which they belong, as opposed to the ordinary schools which will enroll students on a neighborhood basis.

In higher education 88 universities and colleges have been designated as national keypoints as compared with 60 before the Cultural Revolution. These institutions constitute the apex of the educational pyramid. Besides teaching, their research functions are being strengthened and expanded. Each institution has its own "keypoint research topics" and will develop its specialized research centers.<sup>15</sup> Over 200 institutions of higher education, as well as research institutes of the Academy of Science and government departments began to enroll graduate students after a rigorous examination" in 1978.<sup>16</sup>

4. Unified national entrance examinations to the universities have been reinstated. Eligible applicants should be senior middle school graduates or equivalents, between ages 20 to 25, unmarried, and in good health. Exceptions are allowed for graduates from the classes of 1966 and 1967 when the universities were closed down. They can be 30 years old and married. In addition, outstanding middle school graduates recommended by their schools can sit for the

examination without the usual two years of working experience. Criteria for selection are: examination score, the candidate's political record, and result of a physical examination. The latter two assessments are undertaken only for those who have passed the written examination. Official media are non-emphasizing the line that family background (such as former landlord, bourgeois intellectual classes) should not be allowed to affect the lives of the younger generation, particularly in connection with college enrollment.

Altogether 5.7 million young people took the entrance examination in December 1977; only 278,000 were admitted for the spring semester of 1978. Some 290,000 freshmen were enrolled in October for the academic year 1978-1979.<sup>17</sup> Nevertheless these are stupendous figures compared to those of the Cultural Revolution decade when enrollment was drastically down. The number of places falls far short of demands.

A solution to shortage of places is to set up "affiliated day colleges." They are housed in primary and secondary schools whose pupils have been reallocated to other schools. Facilities for higher education are added. Qualified staff are seconded from regular universities and colleges to operate them. Students attend TV lectures with teachers to help. This idea was originated from the industrial port city of Tientsin whose municipal bureau of education takes up the responsibility of financing eight affiliated colleges which enroll an additional 6,600 students. Its example is followed by other cities such as Peking, Shanghai and Canton. The Ministry of Education has now decided that wherever feasible such colleges should be set up. Hence, it is expected that 110,000 more students will be enrolled this year than the state has planned.<sup>18</sup>

Another innovation reported is the Central Broadcasting and Television University inaugurated in Peking on February 6, 1979. It offers courses in

mechanical engineering and electronics, covering a period of three years. The teaching of basic courses such as mathematics, chemistry and English are already underway. The credit system has been adopted. Recipients of diplomas issued by this TV university will be recognized as college graduates by the state. The TV University in Peking will provide syllabic and textbooks for similar universities in other parts of the country. The Shanghai TV university which offers six specialties has already given courses in mathematics, physics, chemistry and medicine for one year. Now it has added mechanical engineering and electronics as the Peking TV university. It is reported that students enrolled this year are mainly workers of factories, mines and other enterprises, middle school teachers and military personnel.<sup>19</sup>

5. Policy toward intellectuals has changed. It is pointed out that many fundamental changes have taken place in the ranks of the intellectuals. The ones from the old society have been severely tempered and tested during the Cultural Revolution, while 90 percent of all intellectuals are "proletarian intellectuals" trained in the new society. Hence they should be regarded as members of the working class and be given "position, authority and responsibility."<sup>20</sup> In the educational field, positions of chancellors of universities, principals of schools, academic titles and ranks of the faculty have been restored. Revolutionary Committees have been abolished. Teachers are guaranteed more time for their academic pursuits (5/6 of their working time), increased supply of up-to-date reference materials and laboratory equipment, more research assistants, better housing, promotions and pay increases, some of which have been abolished as early as 1958 at the Great Leap Forward.<sup>21</sup>

6. To learn advanced science and technology from abroad and strengthen international scientific exchanges are being actively pursued. There is a

concerted effort to tap the talents and resources of the Chinese of Hong Kong and Macao and Overseas Chinese in more distant places. It has been planned to send 10,000 students abroad to various countries to learn. An initial 500 students will be coming to the United States this year. This trend has been under---ded by the recently signed scientific and technological agreement and cultural agreement between the U.S. and Chinese governments during the historic visit of Vice-Premier Teng Hsiao-ping to this country. The emphasis on science and technology are amply reflected in the curricula. Mathematics, the three branches of basic science, and foreign languages are given great attention. A nationwide Mathematics contest for middle school students was held in the spring of 1978. 200,000 applicants entered the preliminaries, and 350 contested in the final. 57 winners were honored in a ceremony in Peking in June.<sup>22</sup> A young niece of this author's, (a 4th year middle school student), reports in a recent letter that she had succeeded in passing a test qualifying her to be enrolled in the scientific track. In her weekly schedule, there are 8 periods of mathematics, 6 periods of physics and 5 periods of chemistry. There is also mention of homework after supper till 11:00 p.m. Proudly she writes that her school has just been approved as a municipal "keypoint" school of Shanghai.<sup>23</sup>

7. The policy of sending urban middle school graduates to the countryside is to be continued with adjustment. The young people will no longer stay in the production teams in order to alleviate the extra burdens on the peasants. They will work on the state farms or collectively owned farms specially set up for them. The state will pay special attention to their continued education and training, and help them to raise their scientific and cultural levels. It is envisioned that the number will be gradually reduced after a few years as modernization of agriculture advances, and as opportunities for work in industry and

trade expand in the cities. Also more branches of universities will be started to provide them with continued education.<sup>24</sup>

8. As to ideological education, the Third Plenary Session of the 11th Central Committee of the Communist Party of China clarified the new leadership's stance toward Mao Tsetung Thought as follows:

The session emphatically pointed out: Comrade Mao Tsetung was a great Marxist. The lofty task of the Party Central Committee on the theoretical front is to lead and educate the whole Party and the people of the whole country to recognize Comrade Mao Tsetung's great feats in a historical and scientific perspective, comprehensively and correctly grasping the scientific system of Mao Tsetung Thought and integrate the universal principles of Marxism-Leninism-Mao Tsetung Thought with the concrete practice of socialist modernization and develop it under the new historical conditions. (the underlines are the author's).

So Mao's position in the Marxist camp is confirmed. His great achievements (feats) are given recognition. His Thought will continue to serve as theoretical guidelines for the current program of modernization.<sup>25</sup>

Another article in Beizing Revism (formerly Peking Review) criticizes the misuse of Mao Tsetung Thought by radicals. It is alleged that the most serious mistake is fragmentation and oversimplification of Mao's system of thought. Excerpts and sentences were "truncated" out of context to serve the purposes of the radicals. People were forced to commit them to memory and to accept them on blink faith as "Holy Writ." The article goes on to blame the radicals for creating false dichotomy between "politics and economics", between "revolution and production" etc.

Hence currently in ideological education, the call to grasp the comprehensive system of Mao Tsetung Thought in a scientific and wholistic manner. It emphasizes that "the sole criterion for testing truth is practice", not written words. It also stresses the dynamic and relative nature of any system of thought, including Marxism and Mao's Thought. As new historical conditions emerge, development of Mao's system of thought is possible and necessary.<sup>26</sup>

Another new theme is "to each according to his work" as a correct socialist principle.<sup>27</sup> This justifies the reinstated examinations, grades, "merits", "awards" and ability grouping etc.

Attempts have also been made to educate the people to differentiate between academic excellence and intellectual elitism, between professional leadership and "bourgeois domination", between excessive egalitarianism and equal opportunity etc.

#### What Actually is Happening in A Primary School

For a glimpse of what actually is happening in a primary school, the author is glad to share with the readers a primary source, i.e., a self-evaluation by a 10-year old, 4th grade nephew written at the end of last semester (January, 1979) required by his school. A copy of it reached the author in family correspondence without any preconceived intention of using it for this article. The original and its translation will be found in the appendix.

#### Conclusion

As for the domestic and foreign policies of China's new leadership are being made known one by one to the outside world, the cliches of "de-Maoization" or "Revisionism" (implying Soviet-Union's style) began to appear in western media. The general impression is a clean break from the recent past. In reality, China has never deviated from any of her national goals. As to educational policy, the final aim of producing workers with both socialist consciousness and culture remains the same. The only differences lie in the emphasis and approach to achieve those goals and aim. If readers would check against the section on "Professed Educational Policy" on page 5, they would find certain elements were emphasized during the Mao era while others are now being picked up by the new leadership.

Article 41 - The "nationalistic" and "popular" aspects were emphasized by Mao, while the new leadership is now emphasizing "scientific" approach to ideological study as well as to practical solution of problems in construction.

Article 43 - "Natural science" was definitely not "rigorously" developed under Mao, while the new leadership is concentrating its great effort in science and technology to serve the Four Modernizations.

Article 44 - Social sciences such as "history, economy, politics, (political science), culture (humanities) and international affairs" were the weakest link in Chinese higher education under Mao. The new leadership has now set up an Academy of Social Sciences. History and geography are again regular subjects in school curriculum. In the great push for economic development, the scientific approach to studying economic laws is very much emphasized. With China's outreach to the world, foreign languages and international studies are given great attention. A recent visitor to China reported that he was "pleased and surprised to find so much coverage of global happenings" in the Chinese TV evening news.<sup>28</sup>

Article 45 - People's political consciousness was definitely raised, and people's "enthusiasm for labor" was painstakingly cultivated by Mao. The new leadership considers the former as a continued necessity, but regards mental activities just as much labor as manual tasks. It believes that the time and talent of the small pool of intellectual resources should be put into better use for the Four Modernizations.

Article 46 - "Unity of theory and practice" as the educational method was emphasized by Mao. However, it was skewed to empirical practice to the detriment of theory, hence there was no real unity of the two. The new leadership also endorses the principle. However, it emphasizes basic and theoretical knowledge to be supplemented by practice in the campus workshops, and by carefully planned and reduced "open-door" education in the factories and communes.

Article 47 - Mao made great efforts to achieve "universal" primary education. Under his era "spare time" education for workers, and "political education" for intellectuals and cadres were emphasized. Now it is left for the new leadership to expand and "reinforce secondary and higher education," and to put emphasis on technical education."

In conclusion, this author is of the opinion that there has not been any reversal of policy or goal. All efforts made in the two eras are within the framework of professed commitments. Neither faction ever thinks in terms of "either, or", but only in terms of "priority and precedence." The tug of war between the two lines can be boiled down to two questions: What should be done first for the good of China's national development? Hence, whom should education serve first

in order to achieve the developmental goals? Power struggle, personal rivalries and excesses aside, the Chinese experiments mirror in sharp focus the dilemmas faced by all developing countries in a magnified scale. What is most significant in the Chinese case is the fact that China from the start has incorporated into her development strategies not only economic considerations, but also equal emphasis on the ethical, cultural, and ideological transformation of the human individual in his social group by both factions in the leadership. And these strategies correspond with many of the theories advocated by world scholars of development.

(The original writing of Chen Lei, a 10-year-old, 4th grader. It is his self-evaluation, entitled "Ideological Summing Up" of a semester.)

## 思想小结

21号 陈雷

时间过得真快，一个学期又溜走了，现在我来回顾一下我在这学期的表现。我先讲讲我在《象征性长征》中的表现。在步行到长风公司的路上我能遵守纪律我还参加了队章小测验，测验的成绩是九十六分。星期天我也参加了义务劳动。我想虽然我们今天累了一身臭汗，但同学们来到宽敞明亮非常整洁的教室里，那该是多么好啊。我又收集了三个科学家的故事，三个现代化建设等材料，在班会课上我也进行了交流。我还做了九件小制作，我想，做小制作都要有极大的钻研精神，就拿机器人来说吧。我做的是实体机器人，可是我想要是能使机器很活跃地动起来那该多有意思啊。后来我就把一根铁丝和串着车的铁丝结连起来。只要车的铁丝一动手就会跟着转动起来。还有头，是用一个小盖子做的。可我找不到小盖子我就把一个纸的眼镜给它戴上，鼻子泥就把它画。然后我又拿起笔来把它打扮得非常美观。这次在科学月里我还被评上了班里科学积极分子。我在学习上每天能把老师布置的作业都能按时完成。就是有时写字马虎，我放学回家后就马上做作业。做完后吃晚饭。饭后休息一下就利用一半或两个小时的时间进行检查和复习。我在上课的时候对字和同学的讲话。平时我能积极举手发言。寒冬来临了我校发了《快马攀登科学高峰》的象征性长跑。每次气锻炼我都能行。

以上是我在这学期的表现，我一定要为祖国四个现代化贡献力量。

(Translation of Chen Lei's Self-evaluation)

Ideological Summing Up

No. 21

Chen Lei

Time passes very fast. The semester has slipped by. Now let me recall what I have done during the semester. First I want to talk about what I did in the "Symbolic Long March". During our walk to the Chang Feng Park, I observed discipline. I participated in the "barrier" test along the way. My score was 96. On Sunday I took part in voluntary labor. Although I was somewhat fatigued, but I thought how wonderful it would be for my classmates to return the next day to a spacious bright and very neat classroom. I collected three stories about scientists and materials on three modern constructions. In the homeroom period, I interacted. I also made nine small products. Making products requires great concentration and exploration. To use the mechanical man as an example, I made a solid mechanical man. I thought how meaningful it would be if I could make him move with lively motions. I used a piece of wire and connected it with the wire that strung his hand. When I pulled that piece of wire at his back, his hand followed to move likewise. So did his head. His nose should be made of a small piece of cork (or cap or a bottle?). But I could not find one, so I put a pair of paper spectacles on him and painted the nose. Then I used my painting brush to dress him up very smartly. During the Science Month I was designated as a science activist in the municipality. In my studies, every day I finished all the assignments designed by my teachers on time. But sometimes I did not do my best. When I returned home after school, I immediately worked on my assignments, and then I had supper. I relaxed a while after supper before I spent 1 1/2 to 2 hours to examine and review my studies. In class I sometimes talked to my classmates, but I often raised my hand and expressed myself actively. With the arrival

of winter, our school started the symbolic long distance run of "scaling the heights of science with speed." I improved my distance with every training session.

The above are my performances during the semester. I am determined to contribute to the four modernizations for the sake of our fatherland.

NOTES

- <sup>1</sup>Richman, Barry A. Industrial Society in Communist China, New York: Random House, 1969. p. 134.
- <sup>2</sup>Pepper, Suzanne, "Education and Revolution: The Chinese Model Revised", Asian Survey, September, 1978, p. 850; p. 847.
- <sup>3</sup>Richman, p. 143.
- <sup>4</sup>Ibid., p. 147.
- <sup>5</sup>Ibid., p. 162.
- <sup>6</sup>Ibid., p. 166.
- <sup>7</sup>Tsang, Chin-sam. Society, Schools, and Progress in China. London: Pergamon Press, 1968, p. 205.
- <sup>8</sup>Ibid., p. 211.
- <sup>9</sup>Peking Review, No. 20, May 17, 1968.
- <sup>10</sup>Hsuch Yu, "Educational Affairs of Communist China in 1969" China Monthly, No. 73, April, 1970, pp. 12-22. (Hong Kong)
- <sup>11</sup>Current Scene, Vol. XIV, No. 2, 1976. (Hong Kong)
- <sup>12</sup>Hawkins, John N. "Family Planning Education and Health Care Delivery in the People's Republic of China: Implications for Educational Alternatives." Comparative Education Review, 20 (2) June 1976, pp. 151-164.
- <sup>13</sup>Pepper, p. 858.
- <sup>14</sup>Guangming Ribao (Daily), Jan. 25, 1978.
- <sup>15</sup>Pepper, p. 879.
- <sup>16</sup>Ibid., p. 881.
- <sup>17</sup>Ibid., p. 884.
- <sup>18</sup>Beizing Review, No. 3, Jan. 19, 1979, p. 31.

NOTES (continued)

- <sup>19</sup>Ibid., No. 7, Feb. 16, 1979, p. 7.
- <sup>20</sup>Ibid., "On Policy Towards Intellectuals", No. 5, Feb. 2, 1979, pp. 10-15.
- <sup>21</sup>Pepper, p. 880.
- <sup>22</sup>China Reconstructs, "Middle School Math Contest," Vol. XXVII No. 9, Sept. 1978, pp. 30-32.
- <sup>23</sup>Chen, Tsui. Letter to author dated Jan. 1, 1979.
- <sup>24</sup>Beizing Review, No. 5, Feb. 2, 1979, pp. 6-7.
- <sup>25</sup>Peking Review, No. 52, Dec. 29, 1978, pp. 6-7.
- <sup>26</sup>Beizing Review, "Lin Biao's Anti-Marxist 30-Word Principle," No. 5, Feb. 2, 1979, pp. 16-19.
- <sup>27</sup>Ibid., pp. 8-9.
- <sup>28</sup>Woo, Jean and Franklin, "China: A View From Below", China Notes, Vol. XVI, No. 4 and Vol. XVII, No. 1, pp. 46-54.

BIBLIOGRAPHY

- Adams, Don and Robert M. Bjork. Education in Developing Areas, New York: David McKay Co., 1972.
- Barendsen, Robert D. Mao's Educational Revolution, HEW, Office of Education, Washington, D.C., 1972.
- Barnett, A. Doak "Round One in China's Succession: The Shift Toward Pragmatism". Current Scene. 15 (1) January 1977. Hong Kong. Beizing Review, Nos. 3,5, 7, 1979.
- Chen, Kuan-I. "Agricultural Modernization and Industrialization in China". Current History, September 1976. pp. 64-67, 81-83.
- Chen, Theodore Hsi-en. The Maoist Educational Revolution. New York: Praeger, 1974.
- China Reconstructs 24 (3), March, 1975 (special supplement). 27 (9), Sept., 1978.
- Chu, Chin-ping. "The Basic Policy for Socialist Revolution and Construction", Peking Review No. 12, March 18, 1977.
- Coombs, Philip H. The World Educational Crisis. New York: Oxford University Press, 1968.
- Current Scene "1975 Down-To-The-Countryside Program" 14 (2), 1976. Hong Kong. pp. 16-18.
- Current Scene "Education Debate Revived" 14 (1), January 1976, Kong Kong. pp. 17-20.
- Current Scene "Science and Technology Promoted", 13 (12), December 1975, Kong Kong. pp. 17-19.
- Eastern Horizon 12 (1), 1973. (special number: Medicine in China).
- Fraser, Stewart E., Ed., Education and Communism in China--An Anthology of Commentary and Documents. Hong Kong: International Study Group, 1969.
- Ginsburg, Philip E. "Development and the Educational Process in China", Current Scene, 14 (3), March 1976, Hong Kong. pp. 1-11.
- Greene, Shirley F. "What is Required to Feed 800 Million People?" China Notes, 14 (3), September 1976. NCC/USA, New York.
- Hallford, Scott S. "Mechanization in the PRC", Current Scene 14 (5), May 1976, Hong Kong. pp. 1-11.

BIBLIOGRAPHY (continued)

- Hanson, John W. and Cole S. Brembeck. Education and the Development of Nations. New York: Holt, Rinehart and Winston, 1966.
- Harper, Paul. Spare-Time Education For Workers in Communist China. Washington, D. C., Office of Education, 1964.
- Hawkins, John N., Mao Tse-Tung and Education--His Thoughts and Teachings. Hamden, Conn.: Shoestring Press, 1974.
- \_\_\_\_\_, "Family Planning Education and Health Care Delivery in People's Republic of China: Implication for Educational Alternatives", Comparative Education Review, 20 (2), June 1976.
- King, Edmund J. Education and Social Change. New York: Pergamon Press, 1966.
- Mao Tsetung. "On the Ten Major Relationships". Peking Review, No. 1, January 1, 1977.
- Nee, Victor. The Cultural Revolution at Peking University. New York: Monthly Review Press, 1969.
- Needham, Joseph. The Past in China's Present. (a reprint from Far East Reporter, March 1973).
- Neef, Kenneth L. National Development Through Social Progress: The Role of Education. Washington, D. C., Office of Education, 1963.
- Pepper, Suzanne. "Education and Revolution: The Chinese Model Revised", Asian Survey, Sept. 1978. pp. 847-891.
- \_\_\_\_\_. "Communique of the Third Plenary Session of the 11th Central Committee of the Communist Party of China", Peking Review. No. 52, December 29, 1978.
- Rawski, Thomas G. "Chinese Economic Planning". Current Scene 14 (4), April 1976, Hong Kong. pp. 1-15.
- Richman, Barry M. Industrial Society in Communist China, New York: Random House, 1969.
- Seybolt, Peter J. Revolutionary Education in China: Documents and Commentary. White Plains, N.Y.: International Arts and Sciences Press, 1973.
- Tsang, Chin-Sam. Society, Schools and Progress in China, New York: Pergamon Press, 1968.