

Some time ago, the ministry of education, in an attempt to speed up compulsory education, decided to order the primary schools to have their classes so arranged that those students who attend the morning classes, need not attend the afternoon classes, and vice versa. This is a worthwhile attempt, as it will not tax too much of the students' energy so necessary for their physical development. But what is more, in rural districts this system will allow the students more contact with the farm life to fit themselves for farm work after graduation. It is a pity that this decision has not had a chance of a trial.

Concerning discipline, we admit that it is lax and that the students should go through sterner training. But the situation is such that stern measures and strict enforcement will more likely than not cause immediate revolt against them and make conditions still worse. We do, however, maintain that youths are not quite so unmanageable as most people take them to be and that if our educators have ideals which are sound and convincing to them, they would even wax enthusiastic about these ideals and devotedly follow their "masters," and their energy may be directed toward constructive works, instead of being spent on impossible ideals, day dreams, bombastic talks, or strikes. While we are not in position to supply these ideals, it is hoped that some educators will attempt to tackle the problem from this angle.

There is no doubt that the need for technical and professional men is great. But the fact remains that many a technical or professional man is today employed in other lines. On this question we cannot go into details here; suffice it to say that "pulls" and "connections" seem to count more than professional attainment in our society. So long as this is the case, youths will choose courses more adapted to general use. It is futile to induce them to take up the technical

and professional courses, unless they can see for themselves that these studies offer them better prospects in life. Conversely, when this is done, we need little worry about the number of students who study sciences or arts.

Train specialists by all means, but before we make them specialists we must first make them human beings, knowing all the intricacies of our group life and capable of fulfilling their duties as members of a complicated society. Viewed in this light, our primary school curriculum is highly deficient. There are, to be sure, "social study" and civics. But the contents of these courses certainly call for radical revision. Before the pupils have studied geography, they are taught the importance of Wu-Han considered from the viewpoints of communication, commerce, and strategy! Without teaching them the primary group life, such as that of the family, play groups, they are taught that the 1911 revolution was started because our former form of government (政體) was no good, because we want to resist foreign aggression and economic penetration and to have better distribution of wealth! And all these for the students of grade three!

Regarding nature study, despite the recognized fact that the fauna and flora of South China are radically different from those of Central or North China, all textbooks for this course are the same and as a result the students in South China are taught many kinds of plants and animals, which they have never seen nor will come to know later. How our educators and textbook compilers have never thought of this is something beyond our understanding.

There are, needless to say, brighter aspects of our education, but it is by concentrating our attention on these anomalies of the educational system that we may hope to improve upon it.

## A New Deal In Education

By EDWARD Y. K. KWONG (鄭耀坤)

MY dissatisfaction with education in this country commenced while I was attending a higher primary school. It was some twenty years ago, but I notice that things have changed but very little since then. The school curriculum bore no earthly relation to the pupil's intelligence or use in later life. For instance, many a successful business man would have difficulty in giving a sensible definition of compound interest or in knowing how the compound interest rates are computed. Yet, when I was about fourteen years old, I was required to delve into the intricacies of calculating compound interest in my arithmetic class. Since then I had to take this subject at least five times—once in the higher arithmetic class in high school, once in algebra, once in business arithmetic in college abroad, and once in connection with accounting. Did my training in the primary and high schools help me

any in the subsequent understanding of the subject? No. The former training had become nothing more than a name by the time I had sense enough to understand what the subject was all about and consequently I had to learn it again. All this means a duplication of effort and waste of time and energy. Nor is compound interest or arithmetic my only *pons asinorum*. There are others, drawing, for instance. I am one of those who are not destined to be artists or likely to make my living by paint and brush. In fact I cannot learn to draw even if my life was to depend on it. But I was given instruction in drawing twice a week and expected to spend much more time in home work. It gives me a certain amount of pleasure to recall that I was not the only pupil that showed deficiency in this subject. The majority of my classmates showed but scant interest and less aptitude in the art of drawing. Otherwise, this

land would have now been flooded with pictures and artists. The mere fact that good painting still commands a good price in this country and artists are few and far between shows the failure of requiring every child to learn to draw.

In the high school there were just as many fooleries in the curriculum as in the higher primary. I can definitely recall that throughout my high school years, much of my time and attention was used in trying to dodge the subjects that I did not like and look forward with eagerness the classes in which I showed some interest. Now, when I look back, I am definitely convinced that quite a number of subjects are absolutely of no use to me. Prominent among these are botany, biology, drawing, geometry, trigonometry, and descriptive geometry. I think at least 50 per cent of the high school students, no matter whether they would go on with their education or not, does not need training in these subjects. Yet they were and still are given in practically all the high schools two to three hours a week for each subject. That means cost all around. It means cost to the schools in maintaining courses for students who cannot be benefited by them. It means cost to the parents and students in the way of time and money wasted. Above all it means cost to the country in thus dissipating its resources and man power.

There were also classes in high school which could have been more useful to the students, had they been undertaken in the right spirit and by the right persons. Of these I should like to mention in particular military training partly because of its bearing on what I have to say later on and partly to show the necessity of overhauling the present educational system—in method as well as in principle. Whatever else military training may mean, it means at least this much, that it trains people to kill the national enemies and avoid to be killed. It means this or nothing. But what a joke this military training class was to us all—teacher as well as students! The teacher had not seen a day of military service and did not know the rudiment of military science. The students straggled into class with or without uniform. We were congregated in a big yard. We were told to line up two deep. Then we were marched back and forth the square, talking and joking the while. The teacher did the best he could to mark time. Our method of training was so childish and discipline so slack, that even a street rowdy would be ashamed to command an "army like ours." Yet we were required to attend this class simply because it was set in the curriculum. I notice that there has been marked improvement in this score, but there is still a long way to go if we want to bring military training in the schools to the dignity and usefulness that it deserves. Now the question before the country is whether we want to have military training in the schools or not. If we decide on the affirmative, then a great deal more attention should be directed toward the improvement of methods of training. Of this more later.

The trouble with our educational system is that we copy the methods used in the Western countries without regard to whether such methods will suit our country or not. Now the educational methods in the Western world

date as far back as Aristotle. It is imaginable that a group of intelligent Greeks were gathering around a savant all the time, and, as they were a selected group, all the master knew was given out *ad libitum* to his pupils.

And, as human knowledge was then but very limited, it is also imaginable that the master may one day discourse on the secrets of astronomy and on another day instruct the students in the solution of difficult problems in mathematics. The students meanwhile were supposed to master everything or as much as they could. It would not be strange for them to mumble verses while watching Jupiter sparkling on the milky-way. Nor is it inconceivable that they have to discuss the principles of metaphysics while waiting for the change in alchemy. This, by the way, was the method of teaching used by our Confucius whose instructions ranged from the deciphering of the classic "Yih" to the lowly pursuit of driving and archery. Though some twenty three centuries have intervened between Aristotle and us, the world has not greatly changed in its educational methods. The attitude of the modern educators, no less than that of the ancients, is still for comprehensiveness instead of specialization, especially in the primary and high schools. The result is that when a boy finishes school, he has a smattering of many things that bear no relation to the trade or profession that he is to join. In other words, the years that he has spent in school are as good as wasted so far as helping him to get along in a trade or profession is concerned. At the present time, a boy will have to be sixteen to eighteen years old when he finishes high school; and twenty-two to twenty-four when he finishes college. According to the mortality tables in use in the Western countries, the average life span is sixty-five years, and in China, which is regarded as among sub-tropical countries, the average life span is fixed by the insurance companies at fifty-five. This means that a man spends anywhere from 30-43 per cent of his life in education during which he is nothing but a parasite. And what miserable result after such a long period of preparation! In such cities like Shanghai, an average high school graduate earns about \$30-\$60 a month; and a college graduate, \$60-\$100. More often than not he is lucky to get any position at all. The return therefore is entirely inadequate for the expense and trouble. But more than that. Usually a high school or college graduate—unless he is from a technical school of which we have but very few—is good for nothing. If he did not enter school, he might be willing to work on the farms or start apprenticing in the family workshop and do the work that his father has been doing. After school he looks on manual labor with disdain and would not work on the trade or profession followed by his father or perhaps his father's father. And the sad thing is that he cannot do much of anything else. Therefore the more we extend our present system of education, the more misfits we create for society.

Our present educational methods will not work even in a country that is enjoying peace and prosperity; but in a country that is facing a serious crisis, their adoption can bring nothing but calamity. A re-orientation of our educational policy is absolutely necessary not only to improve the present condition but also for our very national exist-

ence. The next ten years or so will probably decide whether we as a people have the right to exist. While there is time, we must make a supreme effort to save ourselves from perdition. There are many ways to do this, but I can think of no other efficient way than education. By education, I do not mean the kind we have been receiving but something radically different, some system of training good and useful citizens by the millions each year. For a country which is suffering from humiliations and living constantly at the mercy of a militaristic and ruthless neighbor, what can be better for it to do than train its citizens to become first-class fighters? Let all the schools be transformed into military training camps where active mimic warfare is taught. Let the few technical and engineering schools we have be transformed into places for training military engineers and into experimental arsenals where ammunition, gas and other war necessities can be manufactured. Our classes will not be given in expensive and

stately school buildings but will be given either on the drill ground or in camps. Like the Spartans, we must accustom our boys and girls to military life while they are young. The first ideal in our education is to transform the present weak and cowardly people into a strong fighting race. After this has been taken care of, our next aim in education is to give our boys and girls a vocational training that will help them make a living. Our object in this connection is to transform the people who are on the whole easy-going, afraid and ashamed of manual labor into skillful laborers, artisans and mechanics. We have been humoring our youths by telling them that they are the leaders of the future. Without knowing it we have inculcated in them vanity and unjustifiable craving for high positions in the government. From now on we need to tell them that they are the future laborers, builders, and, above all, soldiers and protectors of the country; and our educational system must be arranged accordingly.

## China's "Productive" Education\*

By HUANG YEN-PEH (黃炎培)

NEAR the end of the Ching dynasty, there were schools of agriculture, technology and business, and these schools were divided into elementary, secondary, and higher grades. During the first years of the republic the three grades were known as the A, B, and C grades, and one additional category made its appearance, the girls' vocational schools. Both before and since the advent of the nationalist government, there have been colleges and schools or departments in universities devoted to agriculture, technology, and business. Besides these, there are vocational schools which are of the middle school standard, and special vocational schools which give special courses to suit the needs of the students. All these are included in the term "productive" education.

The following figures may help to present the development of "productive" education for some two decades:

(A) The Number of Schools:

Year	Category	Number	Total
1907	In Capital	3	
	In Provinces	137	140
1908	In Capital	3	
	In Provinces	189	192
1909	In Capital	2	
	In Provinces	254	256
1912-13	Boy Schools	399	
	Girl Schools	46	445
1913-14	Boy Schools	448	
	Girl Schools	56	504
1914-15	Boy Schools	498	
	Girl Schools	52	550
1915-16	Boy Schools	568	
	Girl Schools	42	610
1916-17	Boy Schools	521	
	Girl Schools	26	547

1928-29	Universities with		
	Dept. of Agriculture	11	
	" Technology	13	
	" Business	13	
	Vocational Schools	156	193
(B)	Number of Students:		
Year	Category	Number	Total
1907	In Capital	142	
	In Provinces	8,693	8,835
1908	In Capital	162	
	In Provinces	13,616	13,778
1909	In Capital	174	
	In Provinces	16,649	16,823
1912-13	Boy Students	28,937	
	Girl Students	2,678	31,615
1913-14	Boy Students	31,645	
	Girl Students	3,127	34,772
1914-15	Boy Students	32,779	
	Girl Students	3,644	36,423
1915-16	Boy Students	33,172	
	Girl Students	2,849	36,021
1916-17	Boy Students	31,695	
	Girl Students	1,866	33,561
1928-29	In Agriculture Colleges	574	
	In Univ. Dept. Agriculture	180	754
1928-29	In Technical Colleges	2,180	
	In Univ. Dept. Technology	165	2,345
1928-29	In Business Colleges	1,501	
	In Univ. Dept. Business	82	1,583
1928-29	Boys in Vocational Schools	10,860	
	Girls in Vocational Schools	5,781	16,641

Near the end of the Ching dynasty, the schools of "productive" education did not exceed 300, and the number of students, less than 20,000. In the first year of the republic there were over 400 schools, and their number increased to more than 500 for the next two years, and to over 600 in 1915-16. The number of students was over 31,000 in 1912-13, and increased to 34,000 in the next year and to 36,000 in 1914-16. The number of both schools and students showed a drop in 1916-17, because the figures are not all available. However, in 1928 there were less than 200 schools of this

\*This article is condensed from an original one published in Chinese in a recent issue of the "Jen Wen Monthly." The author is an outstanding advocate of vocational education in China—Editor.