

## Revolution in Education

# Worker-Peasant-Soldier College Graduates Welcomed

**I**MPLEMENTING Chairman Mao's proletarian line and repudiating the revisionist line in education, Nankai University in Tientsin has trained students who are acclaimed by the workers and peasants.

The university has enrolled over 3,800 students from among workers, peasants and soldiers since 1971. Those enrolled in 1971 and 1972 have graduated and returned to their production posts.

Before entering the university, these students have generally tempered themselves for several years in the countryside, factories or army units, and they have attained a relatively high level of consciousness of class struggle and the two-line struggle. Over 90 per cent of them are members of the Communist Party or the Communist Youth League.

Giving first place to adhering to a firm and correct political orientation in school, they conscientiously study Marxism-Leninism-Mao Tsetung Thought and criticize revisionism, the bourgeoisie and the doctrines of Confucius and Mencius. In this way they constantly receive class education as well as education in line, revolutionary traditions and revolutionary ideals.

Through open-door education, the students maintain close contact with the workers, peasants and soldiers and consciously resist bourgeois ideology, thus retaining and carrying forward the fine political qualities of the working people.

Among the students are several middle school graduates from cities who had settled in villages in Kirin Province and were later recommended by local

poor and lower-middle peasants to study in Nankai University. With their own money these students have bought 300 copies of works by Marx, Engels, Lenin and Stalin and by Chairman Mao and mailed them to the poor and lower-middle peasants in Kirin. During summer and winter vacations they always return to Kirin to join in the farm work and report to the peasants the progress they have made in study and ideological-remoulding.

All this is in sharp contrast to the days before the Great Proletarian Cultural Revolution when the revisionist line dominated the universities. In those days, a saying about the students ran like this: "The first year they are still country folk, the second year they are tainted by the bourgeois style of life and the third year they turn their backs on their parents."

The changes in the department of biology in Nankai illustrate the enormous difference between students trained under different lines in education. Before the Great Cultural Revolution, although this department had a number of specialities directly related to agricultural production, the students' knowledge of insects was limited only to some specimens in the classrooms. When they went to the countryside, they could not tell wheat shoots from leek and frequently mistook destructive insects for beneficial ones. In the ten years before the Cultural Revolution, the faculty and students specializing in genetics failed to cultivate a single improved seed strain for agricultural production. Thus the old department of biology was ridiculed as a "department for the study of dead things."

Today, this department has taken on an entirely different look. The worker-peasant-soldier students specializing in genetics study agriculture, cherish it and participate in farm work, determined to promote the rapid development of agricultural production. In the past few years they have evolved three improved wheat varieties after experimenting with radiation, laser; sexual hybridization and haploid breeding by pollen culture.

Students of liberal arts have rapidly raised their Marxist theoretical level as well as the levels of their specialities by taking part in class struggle, the struggle for production and scientific experiment. Before the Cultural Revolution, Nankai students majoring in philosophy studied Marxist philosophy, but they were divorced from the actual struggles of the proletariat. During the Great Cultural Revolution, they have taken an active part in the movement to criticize Lin Biao and rectify the style of work, the movement to criticize Lin Biao and Confucius, and the movement to study the theory of the proletarian dictatorship. Students enrolled in the years 1971 to 1974 have gone to work in the factories and villages on 14 occasions and conducted open-door schooling in 160 industrial and agricultural units. They have run 130 short-term courses of various kinds and trained some 10,000 activists who have become the backbone force in theoretical study. In addition they have written more than 2,000 articles, lecture notes and other materials, carried out propaganda work and helped the workers, peasants and soldiers in their studies. In this way they have brought the militant role of Marxist philosophy into full play.

In the past, in the department of mathematics, the teaching and research work were done behind closed doors. Some people claimed that mathematics was a highly abstract science and, as such, could not be integrated with practice and was beyond the reach of those born in worker or peasant families. Many of the students trained in that way could only memorize some formulae but were incapable of solving practical problems.

Today, students of mathematics have their classes in factories and on work-sites. This helps them grasp the basic mathematical theories more rapidly and enables them to apply what they have studied to solving practical problems.

Students enrolled in 1973 in the speciality of computing went to the work-site of Tientsin's New Harbour which was in its third stage of expansion. Classes were conducted in conjunction with the urgent problems that needed to be solved. With the help of the workers, engineers and the faculty, the students worked out 11 computerized programmes in less than six months. Their calculations were of great help in accelerating the building of the project and proved valuable scientifically.

Students of different specialities in the natural science enrolled in 1971 and 1972 completed 239 research items for their graduation papers. Among these, 89 items have been adopted in production, some of which are up to advanced world standards.

When the revisionist line was predominant in the old university, students were divorced from the working people and they regarded themselves as intellectual aristocrats. Today, they volunteer to work in the countryside and in places where they are needed most and where difficulties are the greatest.

Kao Kuei, a biology student who enrolled in 1971, and Chen Shu-min, a chemistry student who entered

Nankai in 1972, applied to the university Party committee to work as peasants in their home villages upon graduation. They were determined to contribute their share to the consolidation of the dictatorship of the proletariat and the development of socialist agriculture. Their applications were approved and they have returned to their home villages and are now taking part in the mass movement to learn from Tachai.

At present, the faculty and students of Nankai University are continuing the criticism of the revisionist line in education. They are determined to carry the proletarian revolution in education through to the end.

## Schools Are Factories, Factories Are Schools

THE Talien Engineering Institute and the Talien Hungchi Shipyard in northeast China's Liaoning Province have through joint efforts achieved remarkable successes in the revolution in education by following Chairman Mao's instruction that schools are factories and factories are schools.

In close collaboration with the workers and peasants and with the guidance of their teachers, over 720 worker-peasant-soldier graduates of the Talien Engineering Institute last year undertook and completed 150 research and innovation items, 11 of them have filled in the gap in China's engineering and technology. They have contributed to the modernization of China's industry, agriculture, national defence and science and technology.

To run this institute in close co-operation with the shipyard is the result of the deep-going criticism of the revisionist line in education. When the revisionist line held sway in education before the Great Proletarian Cultural Revolution, the Talien Engineering Institute was a tool of the bourgeoisie in exercising dictatorship over the proletariat. Mass criticism during the Cultural Revolution helped the teachers and students raise their consciousness in carrying out Chairman Mao's line in education. In 1969 the teachers and students began going out of the campus to conduct classes in factories and villages. In summing up their experience later on, they found open-door schooling had many advantages. Further study of the teachings of Marx, Engels, Lenin and Stalin and of Chairman Mao helped them understand that in the revolution in education, it was necessary to have working-class leadership and to change the old educational system. Workers of the Hungchi Shipyard were also aware that they had responsibilities in expediting the revolution in education.

With this understanding, it was decided to move the hull-building speciality of the institute's shipbuilding department to the hull shop of the Hungchi Shipyard. In this way, the school became a factory and the factory a school, and a leading group in charge of the work was set up, comprising workers, cadres and students. Of the members of this group, 60 per cent are workers and



A worker of the Talién Hungchi Shipyard gives a lecture to students of the Talién Engineering Institute at the work-site.

cadres of the hull shop. Political work, teaching programme, curriculum and method of study are all discussed, decided upon and carried out by the masses under the guidance of the leading group. A large number of workers have become members of the workers' Mao Tsetung Thought propaganda team and part-time teachers at the institute.

The Party committee of the institute makes it a point to educate the students with Marxism-Leninism-Mao Tsetung Thought, and it puts changing the ideology of the students in the first place and makes class struggle the main subject of study. The students join the workers in political and theoretical study and in criticizing revisionism and capitalism. Bold changes have been made and a new system that combines teaching with productive labour and scientific research has come into being. Based on the Marxist theory of knowledge — “practice, knowledge, again practice, and again knowledge” — the teaching programme of a three-year course has been worked out. In the first year, the students take part in the entire process of building a ship, from converting designs into patterns, preparing the needed materials, to completing the hull construction, and at the same time they study ship structure, shipbuilding technology and other related basic theoretical knowledge. In the second year, the students take part in designing a ship and study related principles and designing work. In the third year, they take part in technical innovations and scientific research and study mechanical and electrical engineering and other courses. During these three years, the students spend two-thirds of their time in study and practice at the shipyard.

Before the Great Proletarian Cultural Revolution, there were more than 30 courses in the hull-building

speciality, now they have been cut down to 12. The arrangement of the courses and teaching contents concentrate on the most essential and useful aspects. In the past, the teachers and students converted designs into patterns on the blackboards and built model ships in the classrooms. Students of six classes who had graduated did no more than design half a ship, none ever took part in building a ship from beginning to end.

But after the Cultural Revolution started, students of the four lately graduating classes built six ships together with the workers and took part in designing another six, including oil tankers, freighters, crane floats and fishing boats. Last year, the students of this speciality successfully carried out 22 research items and innovations in the shipyard, and they used the

institute's laboratories to make 15 experiments for the shipyard, including modelling, remodelling and ship structure. Many students can participate in production right after graduation.

The other 20 specialities of the institute are also co-operating with related factories, mines and work-sites in running classes.

Since the establishment of this new teaching system, a large number of workers with socialist consciousness and culture have been brought up. Of the 13,000 students who graduated from this institute before the Cultural Revolution, none applied to be a worker or peasant. Today, armed with the theory of the dictatorship of the proletariat, the students have changed greatly in their ideology. Many graduates have gone to the factories and villages to be workers and peasants.

The new teaching system has also helped the teachers change their world outlook. Educated by the workers, they conscientiously study works by Marx, Engels, Lenin and Stalin and by Chairman Mao, take part in the three great revolutionary movements of class struggle, the struggle for production and scientific experiment and make serious efforts to remould their world outlook. Some have become members of the Chinese Communist Party. Combining theory with practice, they are bold in trying out new teaching methods. In a little over a year, the institute has compiled around 180 kinds of teaching material.

The Hungchi Shipyard has turned to advantage the teachers and teaching material provided by the institute. Last year 23 of its workshops set up spare-time workers' colleges with an enrolment of more than 2,000 workers majoring in 27 specialities. Equipped with general and scientific knowledge, the workers will play a still better

role in shipyard management and in technical innovations.

## New Teaching Material

PRIMARY and middle schools and colleges in China have compiled new teaching material which is different in its political orientation, its content and its system from that before the Great Proletarian Cultural Revolution. It helps train students to become successors to the revolutionary cause of the proletariat.

The new material has been compiled under the guidance of Chairman Mao's instruction that "education should be revolutionized" and that "the teaching material should be thoroughly transformed."

In the colleges of arts, science, engineering and agriculture and in medical and teachers' colleges, new teaching material compiled since the start of the Cultural Revolution is used for every course. This is also the case for all subjects and all grades in the primary and middle schools.

The aim of China's educational revolution is to ensure that education serves proletarian politics and is combined with productive labour so that the students become workers with socialist consciousness and culture. Hence the reforms in the educational system, the way schools are run, the enrolment system, teaching methods and teaching material.

In sharp contrast to the bourgeois political orientation in the old teaching material before the Great Cultural Revolution, the new material is compiled from the Marxist viewpoint to eliminate feudal, bourgeois and revisionist poison.

This can be seen in the *History of Chinese Philosophy* newly compiled by the faculty and students of the philosophy department of Peking University in co-ordination with workers, peasants and soldiers. The old teaching material advertised historical idealism that heroes are the makers of history, whereas the new material affirms the status of the labouring people in the history of philosophy. The old material extolled the Confucianists who advocated restoration and retrogression in Chinese history, and opposed the Legalists who stood for reforms and played a progressive historical role. Now the Marxist point of view is used to give a proper evaluation of the Legalists and to criticize the Confucianists sharply. Philosophical concepts were

formerly taught piecemeal without linking them with the struggles between political lines at that time. Now the relationship between the struggle in philosophy and the struggle in politics is expounded better. Historical experience is summed up to serve present-day struggles in accordance with the principle of making the past serve the present, instead of putting the stress on the past and not the present.

Textbooks used in teaching the Chinese language in the old middle schools were full of decadent bourgeois ideas preaching such trash as "studying in order to become officials" and "seeking fame and gain." In the new textbooks there are selections from works by Marx, Engels, Lenin and Stalin and by Chairman Mao as well as articles by workers, peasants and soldiers in praise of proletarian heroes and socialist new things. They keep to the principle of serving proletarian politics and teach the students to serve the people wholeheartedly.

Dialectical materialism is applied in presenting the new teaching material for natural science courses, and idealist and metaphysical conceptions are eliminated. Peking University translated and published the *Mathematical Manuscripts* by Marx. On the basis of their study of this book and Engels' *Dialectics of Nature*, the teachers and students of Peking University and their counterparts in Shanghai, Sian and Talien made changes in the teaching material for higher mathematics. They applied the viewpoint of the unity of opposites between positive and negative and between quality and quantity to elucidate the dialectical nature of differential and integral calculus and eliminate the metaphysical influence in this branch of mathematics. This has increased the effectiveness of lectures on mathematics in



Teachers of Shanghai's Fudan University discussing the prevention of insect pests on rice with commune members.

raising the students' ability in analysis and calculation, and helped them develop a dialectical materialist world outlook.

Most of the old textbooks used in China before the Great Cultural Revolution were based on foreign textbooks and were to a serious degree divorced from practice in China. The new teaching material has summed up and made use of the rich experiences and innovations of workers, peasants and soldiers in the three great revolutionary movements—class struggle, the struggle for production and scientific experiment—and serves the needs of socialist revolution and socialist construction.

In the revolution in education, Professor Huang Kun of Peking University went with the other faculty members and students among the masses to make investigations. He learnt much from the workers and revolutionary technicians with practical experience and read a great amount of technical literature. Afterwards, he wrote *Semi-Conductor Physics* and seven other textbooks. They are closely related to the development of the semi-conductor industry in China, sum up the

experience of the working class and provide theoretical analysis and research. They are widely commended by the students, workers and technicians.

Faculty members and students of the department of chemical engineering of Tsinghua University joined the workers in designing a chemical engineering project, the first of its kind in China. Having summed up the workers' practical experience and their innovations, the teachers and students raised them to the theoretical level and wrote two new textbooks, one of which was entitled *Designing a Chemical Workshop*.

To serve the development of socialist agriculture in a still better way, textbooks on natural science for middle schools have added such contents as farm machinery, rural power supply, surveying water conservancy projects, soil analysis, crop cultivation, animal husbandry, chemical fertilizers and pesticides, and medical and hygienic information.

The new teaching material avoids such shortcomings of the old as scholasticism and separation of theory from practice. This suits the new system of combining

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