

Some thoughts on vocational education

-- Learning in Singapore

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Abstract: First describes the Teaching Factory The concept and connotation of the vocational education model , after discussing our country Engineering Combination mode and Teaching Factory Similarities and differences of , and explore our country's

The direction of career education needs reform .

Keywords: teaching Factory engineering combined with vocational education reform

this year 8 Month , I had the honor to go to Nanyang Institute of Technology, Singapore (NYP) learning , all known , new Caroline's "" teaching factory "" mode is a model for vocational education , for Singapore Economic Take-off plays an indispensable role , comparing our vocational education , The author has the following thinking .

a , Teaching Factory concept An elaboration of the

1. The concept of a teaching factory

' Teaching Factory is the Nanyang Institute of Technology in Singapore learning , Use the for reference to German vocational education , " dual system " The essence of is based on , combined with the actual situation of its domestic industrial enterprise A teaching idea , The main idea is the cultivation of vocational skills in schools and the actual production of enterprises ,, op Battalion process closely combines , Put a top priority on student skills , by participating in the enterprise actual project or enterprise specific day-to-day operations rather than simple impersonation for future work skills and Working ability and certain practical experience .

2. Main features of the teaching factory

2.1 indicates the nature of vocational education and its importance to the country

Vocational Education has its own unique distinctive features , compared to traditional disciplinary education , on the one hand vocational education invests large in infrastructure and teaching facilities , on the other hand its business cut related , away from Enterprise's needs , education becomes a source of nothing ., Leave vocational education , Enterprise The talent reserve of the industry will fall into a state of difficulty . so , Vocational education must follow the development of the Enterprise Footsteps ,on this basis to lead the trend of production technology reform in enterprises , Send a large number of employees to the Enterprise .

2.2 attaching importance to the practical properties of vocational education , and has a certain degree of foresight

According to the relevant introduction of Nanyang Polytechnic Institute Teaching Factory mode , students in the third year , will divides one year's study time in half , _half the time to learn the practical application course for this

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major , another half the actual technical transformation in the enterprise production or related courses under the guidance of the teacher Topic . Technical improvements made by , Project by school teachers leading students to work together tackling , Because the students are working on industrial projects designed to accept the Enterprise , in production and issues that need to be addressed urgently in the Operation , the product that it is developing can even apply for a specific Benefit , become the domain frontier of the Enterprise , and Advanced technology , The school became the technology of the Enterprise Research Center , students involved in technical research to enter the enterprise can be in the shortest possible time to become familiar with and merge into production and development of the Enterprise . summary , on ' Teaching factory "' Singapore Vocational Education in this mode not only caters to the needs of the economy, delivering a large number of qualified technicians to the Enterprise , at the same time , to Enterprise Actual production , Operation Advanced Guidance .

2.3 Emphasizing the practicality and effectiveness of vocational education

' Teaching Factory this _ The teaching thought attaches great importance to the teaching of students ' practical links . Nanyang Rationale the College students have every semester 8 Weekly to Enterprise in practice , Enterprise to each student performance in enterprise is evaluated according to Enterprise standards , and each semester is done by the enterprise

The assessment of the will have a significant impact on students ' future career direction and employment situation . this outside , Nanyang Institute of Technology will also arrange for teachers to each graduate for a duration of 6 Enterprise projects for the month Design Guidance . in the project design for the 6 month ,, requires students to use not less than a week , small completes the Enterprise project design . View entire 3 Year in school course design , Practice Teaching Links The number of hours in the is accounted for in the total session 70%, theory courses only account for the total class 30%.

b , consists of the Teaching Factory Some thoughts raised by

1. The difference between two modes of teaching factory and engineering combination

looks at the surface of , teaching plants in Singapore and China's engineering combine two types of vocational education in the is somewhat similar to a certain extent ,But if we look closely we'll find , there 's still a lot of difference. , The is mainly in the following areas :

1.1 Professional Settings

' Teaching Factory this _ Professional settings in instructional mode , is completely market-oriented ,, forecast by country and enterprise on the trend of future economic form and adjustment of industrial structure , This is The kind of professional setting went to the forefront of national economic development , and schools will not always be based on the market . conditions are adjusted .

along with the rapid development of our economy , A huge change in the traditional industrial structure , causes the The Professional setting of our higher vocational colleges is not satisfactory .. According to Professor Wang Boqing _ investigate, _ A student who is has 32% reflects work and professional misalignment . The result is that there are often market-needed personnel. school cannot produce A major that is saturated and even saturated is still graduating every year. live ,, cause some professional students to find employment difficulties .

1.2 Course Architecture

actually , in Teaching Factory Course Systems developed under Mode , by various means , guarantees that the Employer's important position in curriculum construction system , and have decision rights .

and our current higher vocational colleges have little control over the course setting. , Although with closer Annual development of vocational education , with course system based on work process , make course system leather made

great progress and development . but , still exist such as the course system setting up is inconsistent reason , course content repeat , overemphasis on " project " The knowledge system that the brings is fragmented, and so on. questions .

Look at the overall , implements the based on the course settings for the work process ' Engineering Combination But from the bureau View , still have class categories such as refactoring , Course Structure , How course content tends to fit in ,, How the new evaluation system is established _ Series Issues .

2. Promotion of teacher vocational competence

2.1 "" teaching factory " " The teaching staff in the mode

Singapore in ' Teaching Factory in the mode of , Teacher configuration is market-oriented , The most for teachers Important professional qualities are highly consistent with the professional courses that you open , For teachers at least five years business work requirements , make its teachers naturally ' Double-type for , Teachers have extensive work experience

practicality , and advances in science and technology , Enterprise Requirements , also effectively promotes teachers ' continuous learning , does not break factory " meltdown The has formed a virtuous circle of continuous improvement in teacher quality .

2.2 Our country Double-type Build the teacher team

recent years , The is accompanied by the state's increasing emphasis on vocational education , China's active exploration in many ways new ideas and new approaches to the construction of teachers in vocational schools , through vocational colleges ' ' Double Division type " faculty reform " , All over the country began to guide the adoption of the concept of , Policy Security Support , Whole-party bit , Multi-level Innovative practice in the construction of a dual-teacher faculty , Has a good effect . same as when Implementing the mode of school-enterprise cooperation , shortening the teacher's graduate from disciplinary mode to Double-type training time for teachers , a large number of on , to go for ' Double-type teachers are constantly grow .

2.3 Teaching Factory Teacher Building inspiration for us

In recent years , accompanied by the expansion of the scale of higher vocational colleges , especially those upgraded from secondary to high Post Colleges , Faculty Building becomes an important issue in school development .

Some colleges encourage teachers to lower enterprise , Skills Training Course , But because the teacher evaluation mechanism has not yet been Healthy , the demand for skills from a large number of young teachers stays in the ' Forensics Low-level phase of , and more energy on education , degrees . at the same time , teachers work long hours only for teaching move , without going to Enterprise _ Line exercise , even go to Enterprise , It is also difficult for enterprise technicians to treat the same as partner , causes the next factory exercise to float on the surface .. at the same time , Professional College fancy Enterprise talents in when introduced to the school, it encounters a problem such as "System" ' Treatment and many other issues , causes the original Enterprise technicians who are interested in teaching in vocational colleges The school staff does not go. " vs " School foreign talent not coming "" These two problems have become the two difficult problems restricting the construction of teachers in vocational colleges . I think , break through these difficulties , first , The state should give support to the Institute's policy funding . its no . Double-type "" The construction and cultivation channels of teachers should be based on modern enterprise , in local governments in the coordinated , encouraging business to collaborate with schools through various administrative means , Establish a practical Double master "" Teacher Practice Base . Establishment ' Access engineer Incentive and evaluation mechanism for ,encouraging teacher as engineer under the Enterprise , participate in the whole process of enterprise operation , and improving in this procedure Perfect yourself . set up in the Enterprise ' ' freelance teacher System , Foster a batch of technologically advanced , Team Stability , teaching time is guaranteed "" Professor Senior Engineer "" attract more business people to participate in teaching Reform , To form a school in the factory , The situation of

factory-school Unity , to make the faculty build a benign loop .

3. from ' Teaching Factory look at higher vocational skills training

3.1 Current status and shortage of skills training in vocational colleges in China

Currently, there are three types of skills training in vocational colleges in China .

_ type , is in-school training mode . in recent years , as the country invests more in vocational education , Many vocational colleges set up their own simulation factory in the campus , The establishment of these intramural training plants , very Strengthening students ' professional ability training , from work , from specific work set off ,emphasizing capability-oriented , to put theoretical knowledge and practice through mission-led training projects , consolidate , through teacher guidance , students to complete a complete , has real work Background training projects to complete teaching activities . But at present most vocational colleges have a number of units not

(up to 544 page) Students meet the , To grow , This is an interest to inspire students , Developing students math capabilities accumulate positive Energy , for student sustainable development reserve chips . within the limits of The Learning difficulty control the limit of , The more creative the math problem is, the ,, exploratory , The more it gets to the top of the art degree , giving artistic charm to people .

six , Epilogue

New Course standards emphasize , focus on students ' overall development , focus on student innovation , hands-on Ability and the cultivation of knowledge application capabilities , promoting communication and cooperation , It proposes a new for junior mathematics teaching , also inject new energy into junior mathematics teaching . so ,Junior maths teacher to adhering to students ' development "" core philosophy , stimulate students ' enthusiasm for learning math , Good

Foot , _ Body lack of teachers , Training Textbook construction outdated issues .

The second , is Works alternately mode of running . " Works alternately " " All around the school of Discovery " make " works together " The result of _ the teaching method of materialization , is a step in the process of school - level cooperation between the two sides of the joint . What it means is to break the whole learning process into school . Learning theoretical knowledge and practice in the enterprise to exercise two processes and alternately . its various forms , to effects vary , also has many problems , involves government , law , School , Enterprise , Student family situation all aspects .

The third type of , is the top post trainee order form training . This is after the student completes the school theory teaching , Rotations _ practice in factory production position _ , It's the buzz of the media today . " student worker " Internship , more problems , the is mainly for students after the top post , School , home , Enterprise LAX admin, causes A partial student to have a mental deviation from the , the skills regress . send , This mode requires wants us to constantly explore and fix the .

3.2 " teaching factory " give us Revelation and reflection

in the context of the current low country investment , How to get out of a skills training program for China Practice Road , is the question we should be thinking about . I think , We should draw the full reference to the teaching worker factory Advanced in , on-campus training as the main body , Use the engineering alternate as the training path for complementarity , we should strengthen the construction of the training room , Note the advance of practical training project development , training textbook practicality , Focus on training a group of solid-Foundation , Skilled Double-type teacher . We first select technology advanced , The process has typical enterprises as our internship base outside of school . Practice of Off-campus Internship as supplemental to school training , and time should not be too long . encourages project research ,experienced ' double-type " teacher leads student under enterprise , Quality control and supervision of the entire process for teachers and students . make A amount to persuade the enterprise to cooperate with the school to supervise the students under the factory practice , provides as many as possible for the enterprise

Technical Services, intellectual support , for enterprise support , Realize the purpose of college enterprise double win .
Learn House to be aware of coordinating enterprise , Government , All aspects of student family , Continuous summary ,
get better effect .

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