



Available online at www.sciencedirect.com

SciVerse ScienceDirect

Procedia Engineering 15 (2011) 4126 – 4130

Procedia Engineering

www.elsevier.com/locate/procedia

Advanced in Control Engineeringand Information Science

Higher vocational talents training scheme reform research

and practice

XuePing-Chen*

Chongqing College of Electronic Engineering Chongqing 401331, China

Abstract:

this paper briefly introduces the higher vocational talents training scheme research status and research background, and put forward higher vocational talents training scheme reform and practice of research contents, purpose, and to solve the problems in teaching, and gives the research method and procedure and result had anticipated.

© 2011 Published by Elsevier Ltd. Selection and/or peer-review under responsibility of [CEIS 2011] Open access under CC BY-NC-ND license.

Keywords: working process, talent cultivation, curriculum system, work-integrated learning

I. Higher vocational talents training scheme reform the present situation of the research

This year the state into the 3rd batch demonstration of higher vocational colleges acceptance stage, from the first demonstration vocational and the second demonstration vocational, to the 3rd batch demonstration of higher vocational colleges, the arrival of acceptance work during this period, all higher vocational colleges in nervously demonstrations of higher vocational colleges construction work, demonstrativeness colleges construction work all higher vocational colleges should according to oneself colleges area for construction, to their own construction environment and construction foundation was analyzed, and then engaged in the following construction work: of talent training mode reform and innovation, the curriculum system construction and the reform of teaching contents, professional teachers and industry staff part-time combination of teachers in the building, and YuanNaWai practice bases of construction, the vocational guidance system construction, social service ability construction, the construction of campus informatization, etc. However, in these aspects, in order to earnest effort to do good education, vocational all higher vocational colleges will always cultivation plan of construction

^{*} Corresponding author. Tel.: +8613108981102. *E-mail address*: yuanju01@163.com.

and reform in priority. Because, the light construction good practice base, to build up good teaching environment, but the talent training scheme are still without reform, course system are old, how can do good vocational education? The answer is negative.

Therefore, for higher vocational colleges for, the talent training scheme is the school implementation of talent fostering work guiding document, reflecting the school in the talent training on the job of guiding principles and overall design ideas, to improve the quality of talents cultivation has important guiding role. Meanwhile, by understanding every vocational college demonstration construction documents knowable, in the talent training scheme of reform and the research work, the most important is professional and professional group of construction, the construction of course system, these are the talent training mode reform the object of study and connotation.

2. Higher vocational talents training scheme research ideas and methods

We prepared under electronic and information engineering professional talent training as an example the talent training scheme reform and practice research. From the target of talent training, mainly in the following methods:

- (1) surveys. Through the related enterprise cooperation of experts from enterprise, expert, skills, general practitioners superior technical personnel, investigation, interview and questionnaire investigation mainly related industries need knowledge and skills, for curriculum system construction and curriculum, the curriculum standards provide basis.
- (2) action research. After a full investigation, compiling professional ability list, post group, related courses and standard meter, teaching, teaching plan, in during the thorough investigation on the basis of practice to add a research way subject of adjustment.
- (3) comparative research. In the revised the talent training scheme, don't negate before the talent training scheme, for the talent training mode should pass the authentication, exactly is 2.5 + 0.5 mode, or 2 + 1 mode, or 2.0 + X + 0.5 mode, these need through reasoning, summarizes the original talent training mode in about learning stage division of the rationality and irrationality, in addition to see the talent training mode, will see and talents training mode relevant curriculum system construction, when set course whether reasonable, namely the course arrangement of the semester (time) whether reasonable, course setting knowledge of skills standard to be whether appropriate, and it is also related to this course teaching materials and teaching auxiliary material whether appropriate, because course is a name, through the course with the name of enterprise survey results are getting related tasks associated, get courses in typical tasks, a typical work situation, learning areas, learning situation, thus developing teaching materials, generally suit oneself to schools and industry the teaching material is rare, need their own school related professional teacher, and the talent training scheme research team members, plus a industry experts together for development and the course of supporting kindergarten-based curriculum teaching material, after a trial, revision, again complement, again again deleted.

3. Higher vocational talents training scheme the research contents and concrete analysis

3.1 The higher vocational talents training programme research content

Higher vocational talents training plan of work is the first to determine the personnel training mode, determine the talent-training objective, exactly is to cultivate what level, what level, what type of person, such as: students of electronic information, exactly is to cultivate welding assembly technology talents,

trained product testing debugging personnel, or product post-sale maintenance personnel, or product development design personnel, of these different professional subdivision of training target is different.

According to the training goal, undertake post job analysis, such as the need to cultivate a welding assembly technical personnel, exactly want what knowledge, master skill points? Teachers years of experience in teaching must know something, but now the enterprise of real work environment with our school learning may vary further, if some schools of welding assembly, or install a small circuit, or to install a radio, but now high-tech enterprises is mostly adopts mounter, match with artificial plug-ins, make automation welding, meanwhile, welding also mostly patch components welding, this needs to businesses to investigate, visit the real work environment, undertake post job analysis, get some typical tasks, then form task list. The teacher in class, can use tasks 1, task 2 form to carry on the teaching, task 1, the specific task 2 content, specific knowledge and skill point, also with enterprise combining get. May a large professional is dozens of tasks, a course inside is several typical small tasks, now the department of education in higher vocational education committee has been engaged in the talent training scheme formulation, is to make each college teacher to industry laison, get a specialized tasks, get a course tasks, and collect the national parliament.

Through the investigation, the enterprise can identify professional categories and small kinds of core professional courses, and other public professional courses, basic courses, is mainly to define a core curriculum, determine the core curriculum is the specialty of the most important, and employment direction closely aligned with the need of knowledge and skills, knowledge and skills promotes practice and become the core curriculum, core curriculum determined, then according to the knowledge and skill points, and formulates the core curriculum teaching, Learning standards, such as network security integration "maintenance" tasks can be according to the description of the table 1 to design task.

Table 1	Each task	of standard	set pattern
---------	-----------	-------------	-------------

content	explain	
Task description	Network security system and stable operation	
Teaching goal	Familiar with security principle, according to industry characteristics determine later period maintenance	
	projects	
task	Designed a different industry's later maintain project table	
teaching method	Project teaching/mission driving method/teaching do together	
Teaching resources	Teaching material/practice instruction/technical manuals/case/network equipment	
Teachers' ability	IT certification qualification certificate/engineer's qualification certificate	
Students' ability	Have engaged in enterprise network security system integration engineering design ability of practice	
students testing	Professional knowledge/skills/method ability/professional quality/team cooperation	

Every door core curriculum and the basic courses standards, will determine the teaching schedule and teaching plan operation table, be sure to open a course in which semester, open many lesson, theoretical classes, how much training class, how much are we going to take a full week training, whether the aid-the-poor programme, etc.

3.2 the talent training scheme analysis

According to the above, know in formulating the talent training scheme, the first step is to confirm the talent training mode, namely at various stages of learning time allocation, namely over a three-year vocational study time, such as teaching and learning stage divided into teaching to integrate phase, engineering alternate penetration stage, aid-the-poor programme stage. All phases of specific learning contents and learning courses, according to communicate with enterprise industry for typical task survey conducted after professional post group of analysis, post ability analysis, the curriculum system construction, to determine the core curriculum, determine the curriculum standard, the teaching activity time distribution and teaching plan etc.

(1) .The talent training mode reform and construction

According to the above, in the talent training scheme formulated and revised, the first thing to do is to talents training mode and revision of the sure, we of example school is adopted is mentioned above 2.0 + X + 0.5 form, as Fig 1 shows.

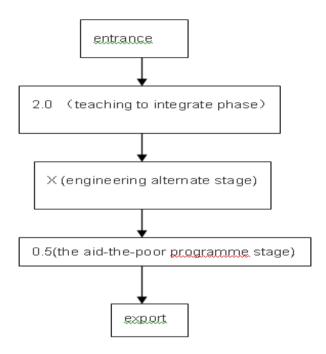


Fig 1 work-integrated learning the talent training mode

In this diagram has clearly revealed that some information, is the three-year vocational study divided into several stages, one is to integrate with teaching stage 2 years, and the second is with half a year's time to undertake the aid-the-poor programme, this I think most colleges and universities is doing, just have a plenty of 1 year aid-the-poor programme, but we need to be aware of is X stage, the X stage may not only half a year, is penetrated in three years of higher vocational in learning, because he requirements through various ways to engineering alternate penetration study, such as: now ordering cultivation, approved by the ministry of education of the means such as part-time, there is a certificate of authentication (double skills authentication and various rewards credits substitution, etc).

(2) .Curriculum system reform and construction

Determine the talent training mode, the need according to the talent training mode determine the time periods, construct curriculum system. According to the enterprise survey, define the industry industry

Post group, according to post group, capacity is analyzed and the basic qualities and general ability, post basic ability, post comprehensive abilities.

(3) . Core curriculum and curriculum standard affirmatory Such as: digital circuit Objective: let students understand all kinds of digital unit circuit principle and characteristics of digital circuit, learn to analysis method, simple circuit design.

Content: logic gate, the assembly logic circuit, trigger circuit, sequential circuits, programmable arrays, memory circuit, AD/DA conversion, pulse signal generation and transformation.

(4) . Determine the teaching schedule and teaching schedule

4.Expected effect and concrete results

Expected effect is: the basis of investigation to first identify task analysis form and then determine curriculum standard, then determine the course contents, the final project, partially form to projects for the carrier of school-based materials. From the theory study Angle, in practice to develop the working process of the orientation method as the main characteristic talents training mode. Formation of the reconstruction of the talent training scheme system, electronic and information engineering major is mainly the talent training scheme as example to illustrate.

Concrete fruit: higher vocational talents training program of reform and practice research report, Formation of electronic information engineering mainly of the talent training scheme, The publication related the talent training scheme reform papers.

References

- [1] . The higher vocational education the talent training scheme of exploration, journal ChenYuTao wang gang, in 2007 the 35 period
- [2] . The higher vocational education talent cultivation idea SunFuRen XuYingWen, journals, explore core journal in 2005 the first 09 period
- [3] . Quality education in the vision of higher vocational education talent training mode to explore ChenXiangPing, periodicals vocational education communication 2006 first 11 period
- [4] . The talent training scheme of higher vocational education and explore the idea WuHuiHui, journals core journals hubei radio and television university journal 2009 first 04 period