Reflection on Teaching Reform of the Course of "College English" under Professional Teaching Reform Model Based on Working Process

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Abstract

Through reflection on the course reform of "College English" under the professional teaching reform model based on working process in the Electrical Automation Technology Major in Department of Automatic Control in Yibin Vocational and Technical College, this paper discuses problems existing in realistic teaching model in the course of "College English", talks about how to take the orientation of working process in combination of reality of teaching to seek to break through the tradition of establishing the discipline system, conduct course reform and propose specific measures and suggestions.

Keywords: Working process, Professional teaching model, Action orientation, College English, Course reform

The course model of working process orientation has been developed and conducted in a lot of higher vocational schools in China. However, what is much discussed at present is exploration of reform in all sorts of professional courses according to the idea of working process. Rapid scientific and economic development and profound social changes have made the traditional vocational education ideas and teaching means seem laggard, as course setting in vocational schools seems relatively single and different courses are not mutually connected. A large majority of vocational schools have not had enough knowledge in setting up courses about introduction to vocation and students have ambiguous knowledge in the occupation and the occupational quality and capacity required by the occupation. For a long time, course reform in vocational education has ceased to advance for the reason that design and compilation of micro content of courses has not jumped out of the discipline system. Under the reform of professional teaching model in all sorts of professional courses according to the idea of working process, it is an issue that deserves our reflection how the course of "College English" should be reformed to match up with the learning of professional course and the professional cultivation target.

1. Causes for proposal of the idea of reform in the course of "Collage English"

The course of "College English" belongs to the general public compulsory elementary course that is set up by higher vocational non-English majors in Yibin Vocational and Technical College and is studied for one year by all non-English majors, mainly for university freshmen. Learning of this course can improve students' capacity in listening, speaking, reading, writing and translating of English, make students communicate and acquire information with the simple tool of English, help students grasp good language learning method, lay solid English language foundation, enhance their cultural quality, and lay a foundation for their learning of subsequent professional courses. As an independent subject, the course of "College English" carries out the target of ultimate teaching management. Our college defines teaching of this course as follows: students are required to take part in Sichuan College English Test 2 and Sichuan College English Test 3 and their performance is regarded as one of the considerations for their graduation.

The traditional idea of "College English" in this collage has been deeply rooted in that the teaching of this course lacks particularity, the mode of teaching lags behind, ignores the effect of teaching and neglects cultivation of capacity, etc. The vocational teaching curriculum that is really connected with the working process and that is working process oriented has still been at an exploratory stage. Under the model of professional teaching reform based on working process, reform of curriculum teaching of "College English" ought to sufficiently learn from

foreign advanced experiences and advanced experiences of professional teaching reform in other domestic universities. Given the reform of the teaching model led by "international" universities and considering the background of trial of teaching reform in the project "Comparative Study on Traditional Teaching and Action-oriented Teaching Model in Electrical Automation Technology" that is conducted in Electrical Automation Technology Major of Department of Automatic Control in Yibin Vocational and Technical College, positioning of teaching of the course of "College English" and the teaching target should be changed too. The author of this article holds the view that reform of curriculum teaching of "College English" should be closely connected with professional cultivation target based on the practical competence and resolve how listening, reading, speaking, writing and translating of English should be connected with the working position, which constitute part of the overall vocational capacity of students. The teaching content of the course of "College English" should be embedded into the systematic curriculum teaching of the working process of Electrical Automation Technology Major of Department of Automatic Control. Meanwhile, as a public compulsory basic course, the course of "College English" serves for professional teaching and realization of professional cultivation target.

2. Basic thought for reform of the traditional curriculum mode of "College English"

2.1 Determining the direction for reform of the course of "College English"

2.1.1 Through study on establishment of working process systematization curriculum in the Electrical Automation Technology Major of Department of Automatic Control in Yibin Vocational and Technical College, survey on the occupational positions and analysis of occupational capacity, it is necessary to determine the cultivation target of working process systematization curriculum of "College English". That is, to cultivate students' college English knowledge that students are supposed to have and that is related with occupational skills and to confirm specific cultivation target according to classification of occupational competence. As an independent public compulsory basic course, "College English" has to take into account English level examination and cultivate students' initial openness and internalization competence.

2.1.2 According to the idea of working process, the course of "College English" should conduct modularization teaching based on the working process and conduct specific reform from the three aspects of teaching content, teaching process and evaluation system. It is necessary to construct the course of "College English" into a course that suits with teaching with the core of working process and with combination of theory and practice and that cultivates students' basic operational skills and comprehensive quality.

2.1.3 The course of "College English" will be closely connected with the professional cultivation target to combine teaching and actual working context and the practical training of learning fields to make the basic knowledge of students and their practical operational skills combined in an organic way, cultivate and occupational capacity of students, obtain the working process knowledge required by employment and lay a good foundation for learning of professional knowledge.

2.1.4 We should explore the teaching method of the course of "College English" under establishment of working process systematization curriculum of Electrical Automation Technology Major in the teaching reform in the project of "Comparative Study on Traditional Teaching and Action-oriented Teaching Model in Electrical Automation Technology" that is conducted by Electrical Automatic Technology Major in Department of Automatic Control.

2.2 Route of reform

2.2.1 Study and analysis of knowledge system in working process systematization curriculum of Electrical Automation Technology Major of Department of Automatic Control in Yibin Vocational and Technical College

Working process is the basic procedure to finish a working task with occupational knowledge and skills. The talent cultivation target of the Electrical Automatic Technology Major in Department of Automatic Control in Yibin Vocational and Technical College is to cultivate talents with high quality and high skills who are proficient in electrical technology, programmable control technology, industrial control network technology, familiar with relevant national electrical standard and technical standard and who are qualified for relevant occupational action fields and have good occupational transfer competence according to the industrial structure characteristics of regional economy.

The Electrical Automation Technology Major defines the teaching content and teaching target of curriculum for each learning field according to the five professional occupational action fields and the corresponding typical 40 working tasks (see Table 1).

<Insert Table 1 here>

2.2.2 Study on the structural relationship between the curriculum of "College English" and working process systematization curriculum of Electrical Automation Technology Major

Through study and analysis of the talent cultivation plan for the Electrical Automation Technology majors in 2011 and the professional teaching plan schedule (see Table 2 and Table 3) as well as the action fields of graduates of the Electrical Automation Technology (see Table 1), we should determine the curriculum positioning and teaching target of "College English". The curriculum system of "College English" should be combined together with the working process of Electrical Automation Technology majors to conduct the curriculum reform and generate an occupational, technical and applicable curriculum system.

According to the cultivation target of the curriculum of "College English" and the basic requirement of working process systematization curriculum in Electrical Automation Technology Major, we study establishment of corresponding knowledge and skill module of "College English", namely, curriculum content. First of all, we make a corresponding analysis according to the teaching plan and typical working content as well as action fields of students in Electrical Automation Technology Major, confirm the knowledge and skill module of the curriculum of "College English" and form teaching plan based on working process.

<Insert Table 2 and Table 3 here>

2.2.3 Study on the learning fields of the curriculum of "College English"

First of all, we study the professional learning field of Electrical Automation Technology Major (See Table 4: List of learning fields for Electrical Automation Technology students). In the learning fields, professional learning field is an important factor that is related with cultivation of students' occupational capacity. However, the following four learning fields are the most critical: "resetting and overhaul of instrument and process control system", "design, installation and debugging of low-voltage apparatus control circuit", " PLC control system design, installation and debugging" and " new construction, modified construction, running and overhaul of distribution system". Teaching module of the curriculum of "College English" is designed specially for the working task of Electrical Automation Technology majors. Previously, the curriculum of "College English" was only open to freshmen in non-English majors in the college, but is matched up with the working process systematization curriculum in Electrical Automation Technology major. Thus, we have to pay attention to studying content in the following five fields that is related with freshmen and sophomores: occupational basic learning field in the professional learning fields of Electrical Automation Technology Major, field of occupational transfer and learning, professional learning field, broadening learning field and comprehensive learning field. Then, we should study and confirm the learning fields for the curriculum of "College English" and process these working tasks by teaching. Through learning of a module, students are able to finish a professional working task.

<Insert Table 4 here>

2.2.4 Determination of the teaching project for the curriculum of "College English"

Teaching project for the curriculum of "College English" has its own context.

One teaching project is a learning context, which is to combine theoretical knowledge, practical skills and actual application environment together. A teaching project helps students to construct a psychological environment and cognitive environment that is helpful for their learning according to the physiological characteristics of students and their cognitive rules. Design of a context has to be based on a teaching target and closely connected with teaching content. In the working process systematization curriculum of College English", we have to classify English knowledge into several learning contexts according to the typical working content of Electrical Automation Technology majors, namely, several learning and teaching projects. (See Table 5. Teaching projects of the course of "College English" matching up with the typical working content of Electrical Automation Technology students in 2008)

<Insert Table 5 here>

2.2.5 Determination of the teaching method for the curriculum of "College English"

The teaching method for the curriculum of "College English" is centered by context, with the development direction of bilingual education in the working process. According to the typical working content of Electrical Automation Technology majors, we establish the teaching method for the curriculum of "College English" is the teaching method for the working process project, which requires students to determine the project task and carry out a plan on the precondition of making clear the working position flow and obligation and requires teachers and students to together carry out a complete project work. In the teaching of working process, teachers are

supposed to take into consideration of bilingual education, that is, students mastering English conversation knowledge at the time of learning professional knowledge of the working process. In that way, teaching of the curriculum of "College English" can be better integrated into working process systematization curriculum teaching of Electrical Automation Technology major.

2.2.6 Specific implementation of teaching

First of all, we should determine the teaching target for the curriculum of "College English" which is to be matched with the teaching target of the working process systematization curriculum of Electrical Automation Technology Major, determine the teaching method for the working process project and determine the teaching project for the working process systematization curriculum. Secondly, we should train English teachers and carry out curriculum teaching plan and teaching outline. We arranged the curriculum of "College English" as an independent subject for students of Class 1081 and Class 1082 in the Electrical Automation Technology Major in 2008 for specific implementation of teaching reform in the working process systematization curriculum. Students from these two classes were respectively 30 students. After having learnt the working process systematization curriculum of "College English" for two years, students from these two classes are also required to take part in SCET-2 and SCET-3 and they have more opportunities to take more exams.

2.2.7 Study on evaluation of teaching of the curriculum of "College English"

Teaching evaluation refers to the process of making an evaluation and judgment by people on the teaching behavior or outcome of teachers and on the learning behavior or outcome of students by means of theory and methods or means. Teaching evaluation is aimed to improve and enhance education and teaching effects and promote initiative, overall and harmonious development of students. As a part of implementation of teaching of the working process systematization curriculum, teaching evaluation is indispensable. We have to fully study the method of learning method and carry out a series of project teaching evaluation methods to regularly make teaching evaluation on students and to guide teachers' teaching and students' learning in the future.

2.3 Problems to be resolved by reform of the curriculum of "College English"

2.3.1 To break through the establishment model of the discipline system of "College English"

We should establish the cultivation target of the curriculum of "College English" by taking working process systematization as the center and set up a curriculum content system reform that is aimed at knowledge impartation and capacity cultivation. We disintegrate multiple projects by taking the working task as the core, analyze the necessary working duty requirement and the necessary supporting knowledge for each project, take into consideration of combination of learning and doing and the cooperative action mode of interaction between teachers and students and between students and students and conduct effective teaching of curriculum. As an independent subject, the curriculum of "College English" is not only opened for freshmen, but also continuously opened to sophomores to further match with the teaching target of working process systematization curriculum, to integrate with depth of professional curriculum, and, at the same time, strengthen the university students' opportunities to take exam in the college English level and finally achieve the purpose of cultivating people with initial openness and internationalization application competence.

2.3.2 To plan to resolve the problem of sequential structure of the content of "College English"

"The total amount of knowledge is unchanged and yet the sequential mode of knowledge takes changes". We make a sequence to knowledge according to the working process of Electrical Automation Technology Major, namely, by referring to the working process to integrate theoretical knowledge with practical knowledge and not to change the total amount of appropriate and enough knowledge, but to change the sequential mode of knowledge of college English in curriculum arrangement.

2.3.3 To plan to change the thinking way of students in learning the curriculum of "College English"

Yibin Vocational and Technical College is located in a relatively remote area, with bad sources of students which are much more complicated than the sources of undergraduates and which have even lower quality than other vocational and technical colleges. The sources of this college include both senior middle school students and secondary vocational students as well as technical secondary school students. Although these students all have certain English basis and knowledge, the whole English level of these students is low and is uneven. For a long time, what the students have received is the traditional teaching mode, namely, one book, one pen, lecturing and demonstrating of students and simulation and practicing of students. Students have already been accustomed to this sort of teaching mode and have formed their own fixed thinking mode. However, in the teaching of knowledge impartation which is centered by the working process, students are required to take part in the entire teaching process and cultivate their ability to cooperate with people in team activities. Therefore, in the process

of working process systematization curriculum teaching, students also have to face up with new difficulties and challenges and they also have to change the traditional thinking way in learning the curriculum of "College English" and accept the teaching method of working process project.

2.3.4 To plan to resolve the problem of integration of quality-oriented education

In the mode of teaching method of working process project, how to integrate quality-oriented education into the curriculum of students is a critical issue that we need to study and resolve. In the process of teachers implementing teaching of working process systematization curriculum, they ought to integrate occupational quality and moral quality that are required by modern occupational jobs to enable students to obtain correspondingly social skills and method skills at the time of acquiring college English knowledge so as to achieve the ultimate target of cultivating talents with high quality and high skills in occupational education.

2.4 Major characteristics of curriculum reform of "College English"

One important feature of "College English" in systematization curriculum teaching of working process is learning by doing (this feature of occupational education is especially emphasized in foreign countries). At the time of occupational orientation imparts knowledge and capacity, it also takes into an overall consideration of the systematicness of knowledge system and the cognitive psychological characteristics of people as well as the sequence of production flow and direction of occupational capacity. Content of the curriculum of "College English" requires teachers and training conditions to be supporting means and take into an overall consideration of cultivation of occupational morality, team spirit, healthy psychology and civilized behavior. The major characteristics are mainly manifested as follow:

(1) Closely connected with the cultivation goal of Electrical Automation Technology Major in Automatic Control Department of the college;

(2) Teaching content is performed for typical working task of concreate teaching in the Electrical Automation Technology Major;

(3) Teaching is designed with the center of context teaching;

(4) Bilingual teaching is the developmental direction of teaching;

(5) The learning process of students occupies a central role in the teaching;

(6) Teachers are organizers and coordinators of the learning process

(7) The professional capacity and comprehensive quality of students are developed simultaneously.

3. Conclusion

The teaching reform of "College English" under the professional teaching reform mode that is based on the working process seeks to break through establishment of the discipline system of the curriculum of "College English" and conducts reform on the content system of the curriculum that is centered by the working process to irradiate knowledge impartation and capacity cultivation. The main work is to re-organize content of theoretical and practical teaching of the curriculum of "College English" with the purpose of being qualified for the working task, to employ the teaching method of combination of learning and doing and integration of teaching integration, to adopt the means of combining exam and evaluation to achieve the purpose of cultivating students' application capacity and finally serve for professional teaching. Through reform of teaching of the curriculum of "College English", the teachers' team is built up and teachers are able to be qualified for teaching modes of the curriculum of "College English" in other majors with the carrier of occupational working task.

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Table 1. An analysis of action fields of graduates from Electrical Automation Technology

Number	Typical working content	Action fields				
		installation, operation and maintenance of distribution equipment	field installation, debugging and maintenance of electronic control system	operation and maintenance of instrument and automatic system	overhauling of electric automatization equipment	simple technical automatization improvement of traditional equipment
1	identify all sorts of electrical components	■	■	■	■	■
2	distinction and selection of performance of electrical components	■	■	■	■	■
3	identify and read control system diagram	■	■	■	■	■
4	draw control system diagram				■	■
5	read technical documents about electric appliance	■	■	■	■	■
6	wiring and installation of disk, box and cabinet in the control system	■	■		■	■
7	debugging of disk, box and cabinet in the control system		■		■	■
8	installation and debugging of field instrument and detecting element		■		■	■
…	…	…	…	…	…	…
…	…	…	…	…	…	…
39	working organization and arrangement	■	■	○	■	■
40	coordinating interpersonal relationship	■	■	■	■	■

Note: "■" indicates major working content and "○" indicates relevant working content

Table 2. Professional teaching plan process of Electrical Automation Technology students in 2011 (the first school year)

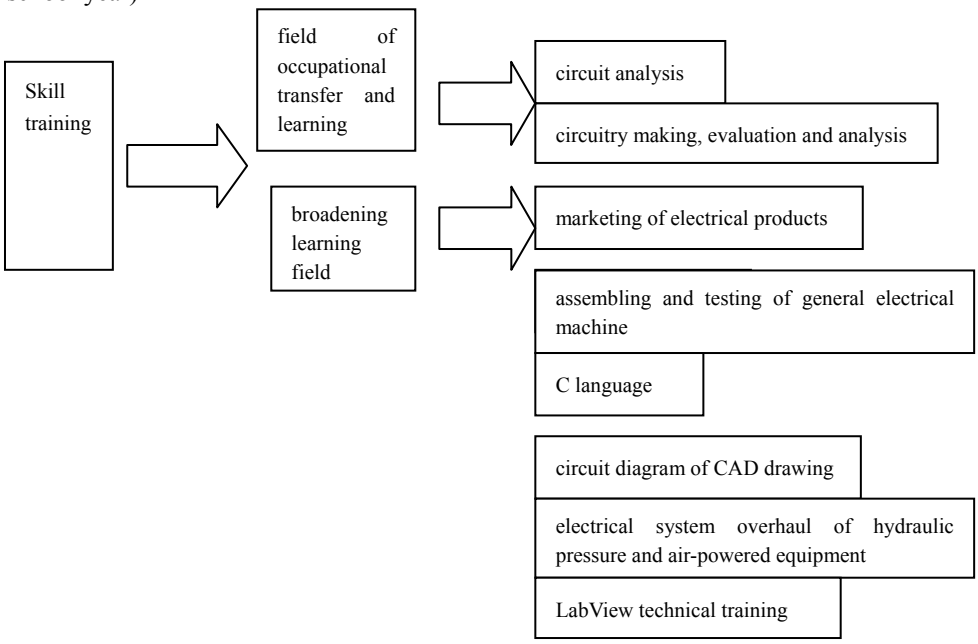

Table 3. Professional teaching plan process of Electrical Automation Technology students in 2011 (the second school year)

skill training	field of occupational transfer and learning	reading of simple machine drawing and dismounting and evaluating of typical mechanical drive mechanism
		simple mechanical processing (locksmith and welder), general-purpose machine tool structure and operation
		electrician technique, construction and evaluation of inside and outside connections
		analysis and application of typical control method
	professional learning field	PLC control system design, installation and debugging
		industrial network control system installation and debugging
		new construction, modified construction, running and overhaul of instrument and process control system
		design, installation and debugging of low-voltage apparatus control circuit
		new construction, modified construction, running and overhaul of distribution system
	broadening learning field	application technology of microprocessor (singlechip)
		project management
		installation, debugging and overhaul of DCS control system

Table 4. List of learning fields for Electrical Automation Technology students

occupational basic learning field			
1	military training	odd terms	2 credits
2	labor	odd and even terms	2 credits
3	situation and policy	odd and even terms	1 credit
4	ideological and moral cultivation and legal basis	odd terms	3 credits
5	General Discussion on Mao Zedong Thought, Deng Xiaoping Theory and the Important Thought of "Three Represents"	odd and even terms	4 credits
6	employment guidance	odd and even terms	0.5 credit
7	sports	odd and even terms	2 credits
8	College English	odd and even terms	8 credits
field of occupational transfer and learning			
11	circuit analysis	the 1st term	8 credits
12	reading of simple machine drawing and dismounting and evaluating of typical mechanical drive mechanism	the4th term	3 credits
13	circuitry making, evaluation and analysis	the 2nd term	6 credits
14	simple mechanical processing (locksmith and welder), general-purpose machine tool structure and operation	the4th term	2 credits
15	electrician technique, construction and evaluation of inside and outside connections	the3rd term	3 credits
16	analysis and application of typical control method	the3rd term	5 credits
professional learning field			
17	design, installation and debugging of low-voltage apparatus control circuit	the3rd term	7 credits
18	selection, operation and overhaul of transducer	the3rd term	4 credits
19	new construction, modified construction, running and overhaul of distribution system	the4th and the 5th terms	7 credits
20	new construction, modified construction, running and overhaul of instrument and process control system	the4th term	7 credits
21	PLC control system design, installation and debugging	The3rd and the 5th terms	12 credits
22	industrial network control system installation and debugging	the4th term	7 credits
broadening learning field (22 credits)			
23	circuit diagram of CAD drawing	the 2nd term	2 credits

24	installation, debugging and overhaul of DCS control system	the4th term	2 credits
25	electrical system overhaul of hydraulic pressure and air-powered equipment	the 2nd term	2 credits
26	electrical system overhaul of numerical control machine	the 5th term	2 credits
27	installation, debugging and testing of general electrical machine	the 2nd term	3 credits
28	equipment control	the 2nd term	3 credits
29	marketing of electrical products	the 2nd term	3 credits
30	project management	the3rd term	3 credits
comprehensive learning field			
31	graduation design	the 5th term	8credits
32	work placements	the 6th term	

Table 5. Teaching projects of the course of "College English" matching up with the typical working content of Electrical Automation Technology students in 2008

Number	professional typical working content	teaching projects of "College English"
1	identify all sorts of electrical components	English vocabulary project for identifying all sorts of electrical components
2	distinction and selection of performance of electrical components	project for distinction and selection of performance of electrical components
3	identify and read control system diagram	project for identifying and reading control system diagram
4	draw control system diagram	project for drawing control system diagram
5	read technical documents about electric appliance products	project for reading technical documents about electric appliance products
6	wiring and installation of disk, box and cabinet in the control system	project for wiring and installation of disk, box and cabinet in the control system
7	…	…