Abstract
Developing vocational education is an important strategy in current Chinese education. However, vocational teachers are in a shortage and there isn’t a sound system of training and cultivating these teachers. Especially, there hasn’t formed any effective standard of vocational teachers. These three factors are the main reasons to hinder the development and increase of its quality and level. Therefore, establishing national standard of vocational teacher training is becoming very necessary. In this paper the author explores the standard and system of vocational teacher training from two aspects, namely, grasping professional skills and professional teaching competence. National standard of vocational teacher training will become a basis for vocational teacher qualification. According to this standard, vocational teacher qualification curriculum will be built and implemented by vocational educational institutions. We will share our experiences and measures in building vocational teacher qualification system in China and explore some key issues.

Keywords: Vocational Teachers Training, standard, specialization, secondary vocational school/
A. Vocational education and teacher survey in China

In China, vocational education includes vocational school education and vocation training. Vocational school education is divided into primary, secondary and higher. The primary vocational school whose number is not large is equal to the junior middle school, which is only conducted in some countryside area as a part of the compulsory education. The higher vocational education is equal to 5B in ISCED, as a “more practically oriented and occupationally specific” category in higher education, it has developed very quickly in recent years, but it doesn’t have clear distinction with the general higher education. This article introduces only the secondary vocational school, which mainly recruits the junior middle school graduates who has finished 9-year compulsory education. The educational span is usually three years at school and the curriculums include the literacy lesson the same with the general high school and the specific professional curriculums. At school the students carry on the specialized practice in the last year. Meanwhile, the teachers are also divided into three kinds: literacy teachers, professional teachers and cooperating teachers. The literacy teachers’ teaching jobs are nearly the same as the teachers in high school. And the number of the specially appointed cooperating teachers is very small at present so the working staff in the practice place conducts most of the jobs, therefore, this article only involves the professional teachers’ training.

B. The source of vocational school’s teachers

China had the pedagogical activities with the writing records more than 3000 years ago, so teaching as a vocation is glorious with long history. But in the long ancient times, as a teacher there weren’t any strict professional standards. Generally speaking, as long as a man had not-so-bad character with certain knowledge and skills, he could be a teacher at that time. Moreover, there weren’t any organizations and systems cultivating and training teachers either.

In the second half of the 19th century, the western education came to China. In 1897, the earliest Normal school appeared in China. It was in 1904 that China began to adopt the modern school educational system in which the general education including the university, the middle school and the primary school ran parallel with the vocational school and the Normal school. Normal school’s duty is to train the teachers for general primary schools, middle schools and the kindergarten. However, there were no special training organizations and ways for the vocational school teachers and its source is the following:

The first kind was the related specialized graduates from College, which is still the main source of the secondary vocational school at present. They had good specialized competence levels, but lacked not only the knowledge and training in instruction and teaching, but also the occupational experience. The second was the vocational school graduates, whose professional skills were very good and fit this school specialized teaching even better than the university graduates, but whose diplomas were somewhat low, with further study to get the teacher qualifications. The third was the enterprise’s technician or staff as the teachers, who had both professional skill and experiences, but lacked the knowledge and training in instruction and teaching, together with the teachers’ qualification problem. The fourth was Normal school graduates or the vocational school’s literacy teachers as the related
professional teachers from transference, who had the knowledge and training in instruction and teaching, but were supposed to take advanced courses in the professional field. It is obvious that any kind of source has its flaw.

1. Teacher cultivating and training in vocational school

Since teachers in ordinary schools can be trained by teacher education system, the teacher training of vocational schools can also follow the example. In this line of thought, the administrative departments of education of the government have promoted more than ten Vocational and Technical Teachers Colleges since 1980s. For the merger and other reasons, now there are only 8 independent Vocational and Technical Teachers Colleges left. But there are some other Vocational Education Training Institutes subordinate to certain higher schools are also training teachers for vocational education.

Compared with 195 independent higher teacher schools, vocational institutes can hardly meet the needs of training vocational education teachers. Vocational education includes 13 main categories, more than 270 majors without the increasing new ones, while the much fewer majors in general teacher education can cover a full course of primary and secondary school. So it is impossible to train vocational school teachers, which covers all professional areas only by holding vocational normal college and universities. Therefore, the governmental departments of education began to focus on the retraining of in-service teachers. More than 60 state-level training bases and a number of provincial-level training bases have been set in higher schools, secondary vocational schools and some large enterprises from the late 1990s to the present. Each training base could set up the relative majors of training secondary vocational school teachers according to their own advantages, and in a whole, these majors cover the main majors of the vocational education. Notable effects have been achieved in these teacher-training bases by making full use of all the school resources and taking flexible training means. However, teacher training bases are not schools, the constructions (such as teachers, school buildings, curricula, teaching materials, laboratories and practice facilities, etc.) are not in good supply, so the bases can carry out special in-service teacher training only in a targeted manner due to the unqualified conditions. In fact, there is still no specific and effective way of cultivating secondary vocational school teachers to the present day.

2. Teachers’ qualification for vocational school

In China, teachers’ qualification has been prescribed in the *Law for Teachers* promulgated since 1993, in which the main points are the educational diplomas and the abilities of education and teaching. Secondary vocational teachers and high school teachers all “are supposed to have the diplomas above or of graduates from higher teacher schools or other universities. At present, all graduates of teacher colleges can directly get the appropriate teaching qualifications. But the graduates of non-teacher diplomas who want to apply for teacher qualifications must pass the test on education and teaching abilities, which includes written test, interview and teaching trial (attempt to teach). As the prescript in *the regulations of teachers’ qualification*, “high school teacher qualification and secondary vocational school teacher qualification have the same effect, so there is no specific requirement for secondary vocational teachers. However, the courses that the graduates of general teacher colleges studied are relative to general middle school curriculum.
That is not correspond with what was set in secondary vocational schools. And owing to the different kinds of teachers’ qualification test systems, the higher school graduates whose majors are coincidence with the curriculum of secondary vocational schools most take an examination on pedagogy and psychology, which were not directly related to the vocational education. Overall, no specific requirements and standards for the secondary vocational school teachers make the vocational teacher training lack rigid standards and evidence. It is not conducive to promoting the professional development of the secondary vocational teachers, and also the important reason of constraining the quality and level of the vocational education.

3. Two fields of the specialization of the secondary vocational teachers

Vocational education is aimed at training and cultivating workers with professional knowledge and skills who are engaged in certain specific job, which requires teachers must have the relevant professional knowledge and skills. This is also a basic condition for the vocational school teachers to undertake teaching tasks.

Unlike the general professional and technical workers, the main purpose of the vocational teachers to master professional skills is not for the practice, but for teaching the students. In order to facilitate the students to learn better, the teachers must also analyze the characteristics of students and master the principles and methods on education and teaching. So professional skills and teaching ability compose the two fields of the specialization of the secondary vocational teachers.

Generally speaking, the higher the educational levels of the students are, the higher professional skills of the teachers are required. For example, for higher schoolteachers, the teaching method is not the focus as students’ higher ability to accept more new things, but it cannot still be ignored, because a high-level expert or scholar is not necessarily a good teacher.

For the primary school teachers, the keys which can determine the effectiveness of teaching are the mastery and reasonable use of teaching methods in stead of the possession of too much professional knowledge. But for the secondary vocational teachers, professional knowledge and teaching abilities are at the same important position. Because the students in vocational schools are generally had poor academic performance in the stage of basic education. They have not only lower abilities to understand, but also psychological feelings of fearing and boring of learning. There are also some students with bad behaviors. All of these make teachers’ teaching abilities even more important.

Although we can set up a lot of ideal goals and programs on the specialization for the teachers, it is impossible to require all teachers are at the same level because of their own personalities, capacities to development and their educational level. It is unrealistic, and it is also unnecessary. But the basic standards and requirements must be guaranteed. We should set the corresponding standards to ensure the teachers fit the position according to the vocational education training objectives and tasks. The standards are all teachers must meet, and also the embodiment of the teachers’ qualifications, which should be accessed mainly by pre-service training and the training targeted to in-service teachers who have not meet the standards. On this basis, we should set the corresponding standards of the
professional development for teachers according to the principal of better education, and hold various types of teacher trainings to help as many teachers as possible achieve professional development rapidly and effectively. This article only discusses basic standards and requirements.

**C. The First Standard of the Specialization for Secondary Vocational Teachers: Professional field**

The basic requirements for the secondary vocational teacher in the professional skills should be familiar with the professional subject matter content, and master the professional knowledge and operating skills directly related to the curriculum content, and also should be aware of the production situations of corresponding enterprises and professional tasks.

On the one hand, higher school graduates of relative professional majors generally have enough professional knowledge. But there is a wide gap between the operational skills and practice in different higher school graduates. As a result, setting up the professional standards for the teachers in secondary vocational schools and implementing the appropriate assessment can promote the improvement of teaching and enhancing the use of skills and practical work training.

On the other hand, the principles for teachers in the professional and technical requirements should be appropriate and sufficient. For example, training objectives for students are the intermediate technicians, so teachers do not necessarily need to meet senior skilled workers over the technical level. The duty of the teachers is to enable students to achieve the required level of skills. It is not surprising that the teacher’s skill level may be lower than some outstanding students, for example, the lower competitive level of a coach cannot prevent him from cultivating outstanding athletes. The key point lies in training methods. So do the teachers. Especially the purpose of professional training, including business practice, of in-service teachers, is to teach better, even the task of enhancing the teachers’ level of profession is also included.

**D. The Second Standard of the Specialization for Secondary Vocational Teachers: Teaching Field**

The training task for the secondary vocational school teachers in the professional field can be completed basically by the higher school education, but the teachers’ teaching skills must be obtained through special curriculums and organizations. The traditional curriculums in Normal school are usually made up of pedagogy, psychology, teaching methods for the given curriculums and educational practice. Recent years’ educational reforms attempt to break the previous disciplinary frames so that the curriculums can be developed from the angle of job analysis according to the practical needs of the teachers’ responsibilities, duties and teaching jobs. The educational administrative departments have been summarizing the teaching reform experiences from different regions and are drawing up the curriculum standards for the teachers in primary and secondary as well as kindergarten in order that the standards can be regarded as the basis of curriculum development and implementation for the national teacher education institutions. The curriculum standards don’t involve the
professional field of the discipline, but focus on the instructional and teaching skills, and set forth the concrete norm requirements.

We also set out to deliberate the training standard for the secondary teachers. Here I want to introduce the Sino-Australian cooperation research project “the competence standard for the secondary teachers”, which has been trying out in Chongqing, and the achievement is very prominent. The project involves primary, intermediate, high-level three ranks, in which competence requests progressively. Here I only introduce the primary, whose bare bone is constituted of 9 ability units:

1. **Professional Ethics and Conduct**
   1. Model professional and ethical behavior
   1.2 Teach professional ethics

2. **Industry Liaison**
   2.1 Conduct industry liaison
   2.2 Provide training services for industry

3. **Curriculum Design**
   3.1 Design and develop teaching and learning programs.
   3.2 Design and develop teaching / learning materials
   3.3 Review and evaluate teaching and learning programs

4. **Teaching and Learning organization and Conduct**
   4.1 Plan training sessions
   4.2 Organize and deliver teaching and learning activities
   4.3 Evaluate teaching effectiveness

5. **Assessment**
   5.1 Plan and organize assessment activities
   5.2 Develop assessment tools
   5.3 Conduct assessment

6. **Communications and Cooperation**
   6.1 Communicate effectively with students and peers
   6.2 Work effectively in a team

7. **Occupational Health and Safety**
   7.1 Ensure a safe teaching and learning environment
   7.2 Conduct Occupational Health and Safety Education

8. **Services to Students and Welfare Management**
   8.1 Manage students in the teaching and learning environment
   8.2 Provide vocational guidance service

9. **Professional Development**
   9.1 Improve professional knowledge and practice
   9.2 Research teaching practice

The teaching competence test standard for the secondary vocational teachers drawn up by the national teachers’ qualification authenticating and directing center is only a draft at present. Although it isn’t a training standard, it will be sure to become a fundamental basis for the teachers’ pre-service because it will be used for the teachers’ qualification authenticating. The draft lists the written examination and the interview standard separately. On the one hand, the written examination standard’s frame involves professional ethics
(including laws and regulations), educational ideas, the disciplinary specialized knowledge and skills, the practical knowledge of education, the modern overlapping technology and so on. On the other hand, the interview frame involves communication ability, practical operation ability, teaching design ability, teaching monitoring and reconsideration ability as well as body and mind, correct manners and so on,

The frames are different, but the basic contents tally roughly. I think there are two main flaws. First, the attention to the vocational education’s characteristic is not paid enough as its frame is designed according to the pedagogical model. Although teaching as a job has a number of common requests, the specialization of the vocational school teachers must show the vocational characteristic, such as the mastery of the principle of the vocational education, the teaching method of the given major, learning about the students’ characteristic in the vocational school. The students are generally weak in the literacy, reluctant to study, with all kinds of behavior problems so the teachers must be able to stimulate the students to study and to make them get enough confidence.

Next, it is much too idealized. Some standards stem from the comprehensive requests of the disciplinary education, for example, the thorough understanding the history of the educational development as well as the present situation can be used in teachers’ practical work, but must be mastered by no means. Some standards are impossible to achieve for all the teachers, especially for the green hands. For example, only with enough teaching experiences can the requests of curriculum development and self-assessment, the abilities to control the class and carry on the research and so on, be achieved.

E. Conclusion

The educational scale is very large in China. As for the secondary vocational education it is a field that develops vigorously and officially at present. The number of the students at school is over 20,000,000, approximately equal to the number of the students in high school. Meanwhile, the number of the teachers is nearly 1,000,000, so the training mission will be very heavy. China is such a large country that different places have different educational levels, for example, the teachers’ sources, the training levels and the implementing conditions are so different that it is very necessary for the national standard to regulate and direct them.

First, the national teacher training standard must guarantee its authority, if there is no comprehensive execution system, no law and regulation to safeguard, it will be meaningless to formulate the national standard

Next, the national standard must be able to put into practice. Given the fact that the regional developments are not balanced, the national standard cannot be formulated excessively high. If many places are not able to achieve the standard because of their present condition, the national standard may lose its significance. But we cannot make one concession after another, as for the teacher training, the standard is not only a power, but also a pressure. Formulating the national teacher-training standard is supposed to start with the teachers’ entrance, to link up with the teachers’ qualification. The standard is supposed to be able to guarantee that the teacher can get fundamental knowledge, skills and methods to undertake the vocational education and teaching job.
Last, test ways suitable to the national standard are supposed to find out to make sure that this standard has the testability and the test on teacher entrance standard is also the national teachers’ qualification test. In the meantime, attention is paid to establishing the teacher training institutions for the vocational education. For example, the colleges or the universities with favorable situations, especially those who have established the teacher-training bases, can develop the curriculums and carry out the training mission according to the national teacher training standard. The educational administrative department of the government is supposed to reauthenticate the teacher training institutions and establish the monitoring and assessing mechanism so as to guarantee the quality and the effect of the teacher and qualification training for the vocational education.

China is still a developing country at present and the vocational education develops gradually with the reform-open policy, so we not only need to profit from the systems and measures of the developed countries, but also need to learn from each other with all the developing countries. Here, I appeal to all of my friends, let us communicate and cooperate better, share the experiences, make our efforts to create the good environment of the teacher and qualification training for the vocational education.