

## **Student Teachers' Knowledge Structure and Their Professional Development---based on the study of EFL student teachers**

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### **Abstract:**

It is known that teacher's knowledge can influence students' understanding and learning. The knowledge structure of teachers should be perfect to help students to gain language skills and knowledge, affect, learning strategies and cultural awareness as the new curriculum required. Since qualifies teachers are grown up from student teachers, perfect knowledge structure should be the goal of education for student teachers of normal universities. This article discusses the significance of building student teacher's knowledge structure. It presents the concept of the EFL student teacher's knowledge, reveals the relationship between student teacher's knowledge structure and their professional development. It provides the results based on the research and gives some feasible advice on how to perfect and improve their structure knowledge to gain professional development.

**Key Words:** Student teacher, Knowledge structure, Professional development

## 1. SIGNIFICANCE OF THE STUDY ABOUT EFL STUDENT TEACHER'S KNOWLEDGE STRUCTURE

Nowadays, with the development of social economy, science and technology, people pay more and more attention to the quality of teachers, which is an essential component of an effective education system internationally. Teachers will be expected in the future to perform new roles to meet the challenging expectations of educational practice. The new curriculum reform of basic education in China has been expanded deeply and requires all teachers to construct new concepts of education and teaching, and to change their traditional roles, teachers' knowledge structure will face new problems and challenges. The expectation that initial teacher or student teacher education can impact on teacher quality has made it a focus of new curriculum reform. There is widespread consensus both internationally and in China on the need for teacher education, to demonstrate its contribution to teachers' professional development. Teachers' knowledge, ability and their preparation for the implementation of the new curriculum relate directly to the realization of the aims of the new curriculum reform. The modern society is a society with knowledge as its core. As a person who works mainly on knowledge, teachers should know clearly what kind of knowledge they should possess to face the challenges brought by the new curriculum reform. Since EFL teacher's knowledge structure should begin to be built during the learning process as a student teacher, a survey of the current situation of EFL student teachers' knowledge structure has practical significance for their professional development.

## 2. LITERATURE REVIEW OF STUDENT TEACHER'S KNOWLEDGE STRUCTURE

The quality of student teacher's education or rather higher normal education has aroused considerable interest internationally. In view of this increasing interest, it is important to think of what the student teacher means, to know what the student teacher's knowledge include, and to inquire into the nature and extent of student teacher's knowledge and the relationship between knowledge structure and professional development so as to find effective ways to better their knowledge structure and promote their professional development.

### 2.1 Review of key terms

#### 2.1.1 student teacher

Student teacher<sup>1</sup> or pre-service teacher are those who are college or graduate students studying the required coursework in pedagogy in normal universities, and have not formally entered the supervised teaching. They are usually with clear goals to be teachers after graduation and they usually go to teach under the supervision of a certified teacher during the process of learning in

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<sup>1</sup> [http://en.wikipedia.org/wiki/Student\\_teacher](http://en.wikipedia.org/wiki/Student_teacher) From Wikipedia, the free encyclopedia 2012,3,30

order to qualify for the teaching post. The number of such pre-service teachers is so large that it can not be neglected. Without bettering their knowledge structure, there will not be teachers' professional development to satisfy students' needs.

### **2.1.2 knowledge**

Knowledge is defined as "everything that is known; organized body of information" in *Oxford Advanced Learner's English-Chinese Dictionary*<sup>2</sup>. In *Longman Dictionary of Contemporary English* it is meant by "what people knows; the fact, information, skills, and understanding that one has gained, esp. through learning or experienced"<sup>3</sup> According to the above two definitions we can conclude that knowledge is a complex abstract concept.

### **2.1.3 teacher's knowledge**

Teacher's knowledge obviously refers to the knowledge owned by teacher or specifically by a certain subject teacher related to teaching. Teachers' knowledge must be the scientific and cultural knowledge and the degree they mastered. It includes the fundamental knowledge of science and culture, professional subject-matter knowledge, educational and psychological knowledge, etc. Besides, teachers get to build some effective classroom situational knowledge through their long time work experience. Therefore, teacher's knowledge is not just about teaching. It is the knowledge possessed by teacher to solve problems in specific teaching situations. It is field-specific and varies across subject, which is the prerequisite of teacher engaging in teaching.

### **2.1.4 teacher's professional development**

Teacher's professional development means here not only developing a college student to a teacher who regards teaching as a job, but also from a passive recipient of training to an active researcher or educator who regard teaching as a profession. If a student teacher wants to become a qualified professional teacher, then they must be willing to receive education and readily learn to develop a wide-ranging skills and build confidence and perfect knowledge structure and becomes strategic to find ways to do self-development.

## **2.2 Features of teacher's knowledge structure<sup>4</sup>**

According to Chen Wei (2006), teacher's knowledge structure has the following features.

### **2.2.1 being purposeful.**

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<sup>2</sup> *Oxford Advanced Learner's English-Chinese Dictionary* (1998)The Commercial Press (fourth edition)

<sup>3</sup> *Longman Dictionary of Contemporary English* (1993)Longman Group UK limited (new edition)

<sup>4</sup> Chen Wei( 2006): A Study of Teacher's Knowledge Structure from the Perspective of Teacher's Professional Development Thesis of master degree under the guidance of Xie Limin from Shanghai Normal University, p.10-12

As people's life is limited, it is unnecessary for teachers to obtain all kinds of knowledge. As long as they mastered the professional knowledge and meet the requirement of the teaching and education, they can be said to fulfill their tasks.

### **2.2.2 being creative**

People have different creative abilities because they are different in character and experience. Teachers must be flexible in class to meet the needs of students. They have to create something different actively to attract their students and develop students' creative ability, for students are usually willing to follow suit.

### **2.2.3 being comprehensive**

Teaching must be interdisciplinary. It is said that teaching is not only a profession but also an art since language teaching requires several theories to support and several influencing factors to be considered. In the process of teaching, several disciplines, such as linguistics, psycholinguistics, sociolinguistics, etc. are needed to help explain the roles of teachers and learners, the methods used by the teacher, harmonious context to be established, and so on.

### **2.2.4 being Open**

Traditionally, teachers usually follow the syllabuses and textbooks in teaching. Their knowledge is closed and not willing to receive new ideas. With the development of society, new ideas for education, coined vocabulary and even descriptive grammar appeared. Teachers must have a positive attitude to learn all these, otherwise they will be rejected by students.

### **2.2.5 being advanced**

Education must face the future. Teachers must not fall behind and have to grow up with their students. In the content of being taught, there should be something new and learnable. When planning lesson, teachers must adapt coursebooks by searching the internet to find more supplementary information. Introducing something new or breakthrough can make students more interested in the lesson and the teachers will be made more advanced in their thought and become more ambitious.

### **2.2.6 being diverse**

As persons' characters are different, teachers' knowledge is diverse. Some of the teachers are used to their old knowledge structure and not willing to receive new methods or content. With the development of science and culture they have to accumulate relevant scientific and cultural knowledge to take challenges.

### **2.2.7 being dynamic**

The increase of knowledge will result in new knowledge structure. Teachers have to reconstruct their old knowledge structure to build new structure. They have to grow with the times and

students. Whenever there is new knowledge, teachers have to know it and try to master it so that they can transform the knowledge to students more effectively.

## 2.3 Previous studies of teacher's knowledge structure

### 2.3.1 studies abroad

The expression of teacher's knowledge in teaching is related to the studies of skill, personal and practical teacher knowledge. The literature review begins as early as Elbaz's pioneering study. Elbaz<sup>5</sup> believes that a teacher possesses a broad range of knowledge, often tacit knowledge: knowledge of subject matter; of classroom organization and instructional techniques; of the structuring of learning experience and curriculum content; of students' needs, abilities, and interest; of the social framework of the school and its surrounding community; and of their own strengths and shortcomings as teachers. She states that teacher's knowledge is "dynamic" and "is held in active relation to practice and used to give shape to that practice". It is a fact that people understand and acquire knowledge through the recognizing and understanding of the knowledge structure they have. To explore its content and components, many researches have been done to know about the structure of teacher knowledge. The research findings about the content and components of teacher's knowledge structure is made by Shulman<sup>6</sup>. He describes seven elements: knowledge of subject matter; pedagogical content knowledge; knowledge of curriculum; general pedagogical knowledge; knowledge of learners and their characteristics; knowledge of educational contexts; knowledge of educational aims, purposes and values.

### 2.3.2 studies at home

Zhong Keding et al (1998) Xin Tao et al (1999)<sup>7</sup> provide the teacher knowledge structure as: subject-matter knowledge (teachers' discipline knowledge, which can be divided into instrumental knowledge, basic knowledge, and professional knowledge); practical knowledge (the accumulation of teachers' teaching practice); conditional knowledge (the knowledge of humanities and social science, and the knowledge of pedagogy and psychology) and cultural knowledge. Zhang Pinghai and Xiang Huiwen<sup>8</sup> published an article in 2003 entitled "Practical Knowledge: One Urgently Knowledge Model to Teacher's School Student", in which they pointed out that "Teacher's practical knowledge is an experienced knowledge or a case knowledge. Its formation and accumulation relate to the student's teaching situation and

<sup>5</sup> Elbaz, F. (1981). The teacher's "practical knowledge": Report of a case study. *Curriculum Inquiry*, 30, 3-7

<sup>6</sup> Shulman. (1987). Knowledge and teaching: Foundation of the new reform. *Harvard Educational Review*, 57(1),1-22

<sup>7</sup> Zhong Keding et al (1998) On the Knowledge Structure of Teachers and the Implication for Teacher Development, *Society of Education* 1998,03, p.55; Xin Tao, Shen Jiliang, Lin Chongde (1999): On the Reform of Normal Education from the perspective of Teacher's Knowledge Structure, *Higher Normal Education Research* 06, p.13

<sup>8</sup> Zhang Pinghai, Xiang Huiwen(2003): Practical Knowledge: One Urgently Knowledge Model to Teacher's School Student *Journal of Henan Normal University (Philosophy and social science edition)* 06 p.140

experience. Because our teacher's education has problem with curriculum system and curriculum setting up, the knowledge model of teacher's school student is the weakest model in their knowledge structure".

### 3. RESEARCH ON THE EFL STUDENT TEACHER'S KNOWLEDGE STRUCTURE

The present writer tries to match those researchers' findings with EFL student teachers and did a survey to find whether student teachers of English majors gained English language knowledge, including phonetics, vocabulary, grammar, function and topic; developing listening, speaking, reading and writing skills; getting to approach to the ways of presenting subject knowledge appropriately for learners; grasping the strategies to use materials and resources; obtaining broad understanding of management and organization; knowing about learners and their characteristics and about educational contexts ranging from groupings, classroom, school, education authorities, national policies to wider communities and cultures to ensure knowledge of educational aims, purposes and values.

#### **3.1 Survey for EFL student teacher's knowledge**

##### **3.1.1 questionnaire**

In order to obtain the present situations of student teacher's knowledge structure, we made a questionnaire based on the relevant literature review and the requirement of syllabus for English majors in higher education. 90 student teachers of English major who passed TEM band 4 acted as participants and 87 returned as valid. There are 30 items in all and for each one there are five items for participants to choose. Participants are asked to do multiple choice or add more information or opinions.

The present writer designed 30 questions about various types of knowledge, including their range of knowledge; oral communication ability; reading ability; writing and translation ability; pronunciation and intonation; how much passive and active vocabulary they have remembered; in what way they learn grammar; whether they can understand an article of 1,300 or so words correctly within 5 minutes; whether they like learning theories of English language, i.e. phonology, semantics, pragmatic, lexicology; of foreign language learning; of applied linguistics; whether they have knowledge about curriculum, testing, second language acquisition; what disciplines they have learned systematically, such as education, psychology, teaching techniques; whether they are satisfied with their awareness of students; how much they know about CAI; English teaching methodology; whether they often do self-reflection about their learning; whether they are initiative in their teaching practice, i.e. come across new ideas or new knowledge; whether they are satisfied with their classroom climate or management, with their strategy knowledge of teaching including the use of various teaching techniques, for example, singing, dancing, playing, using body language, etc.; whether they

understand and make good use of coursebooks and teaching materials; whether they are aware of and can use task-based teaching model; whether they can put subject-matter knowledge into understandable, acceptable and simple language for students to understand, and so on. Nearly all components concerning EFL teacher's knowledge structure are covered.

The result shows that 75% of participants are satisfied with their oral communicative ability, indicating that they can be able to communicate in English. 78% of teachers are satisfied with their reading ability showing that most of teachers lay stress on reading various English materials. 87% of student teachers are satisfied with their pronunciation. They still pay attention to practice their pronunciation. As for vocabulary, 75% expressed their mastering of 4000 or so vocabularies. Even, 30% chose the mastering of above 5000 vocabularies. None of them chose below 3000 vocabularies. It seems that vocabulary is valued by EFL student teachers and their basic subject-matter knowledge is sufficient for acting English language teaching. However, only 20% of the participants confessed that the vocabulary they mastered is active vocabulary instead of the passive. This is far from satisfactory because passive vocabulary is not as efficient as active vocabulary.

Besides vocabulary, 85% shows their deductive way of learning grammar instead of inductive way or through discovery approach both in senior high schools and in university. For reading speed, less than 30% expressed that they cannot understand correctly an article of 1,300 or so words within 5 minutes, which is the demand of the syllabus to the undergraduates in normal university. For the courses of language theories only 25% participants chose to the item "satisfied with the content of the courses as well as the methods of teaching", which indicates that they don't like learning the courses of language theories such as applied linguistics, sociolinguistics and psycholinguistics.

None of the participants are satisfied with the courses' content for conditional knowledge. 70% participants chose the item of "not satisfied with the content". 25% "not satisfied with the methods of teaching" 5% added their opinions. In their opinion, some courses like educational psychology, social psychology and other relevant unprofessional courses should not be their compulsory courses because they don't think they can become teachers. They think the courses are not learnable and they feel boring in classroom. They are often absent from those classes and try to find someone to deal with the roll-calls. 60% participants think it necessary to use multimedia computers in class when using flashes, pictures or movies to assist teaching, and to be offered more chance to use internet in class.

85% EFL student teachers expressed their opinions about gaining practical knowledge. As they lack of time and opportunity to practice due of the large number of students. To summarize their opinions, they need to develop all kinds of abilities including listening, reading, speaking and writing; effective ways to play with the students; properly using the body language in teaching. They want to be good cooperators with their future singing--fun students with the

help of provided opportunities to teach singing or enjoy music in classroom teaching practice. They claim that it maybe a good way to integrate the concept of educational theories they learned and the praxis of art education because participating in the arts - music, dance, drawing, and so on help students to love learning English. Therefore they need more teaching act to observe and more practicing chance.

For cultural knowledge, we inquired whether they know about the culture of English-speaking countries, i.e. history, geography, literature, custom, dressing, table manner, etc. Study shows that 65% of the participants are not satisfied with their cultural background knowledge, which means they are not very well aware of different cultures and lack of cross-cultural ability. They expressed their needs of inputting more about cultural knowledge in the present society.

### **3.1.2 interview**

We randomly chose 10 senior EFL student teachers to be interviewed when they were having methodology class. We designed five questions and all are open.

- 1) What kind of knowledge do you prefer to learn?
- 2) In what ways do you obtain English knowledge?
- 3) Do you have chance to teach a class? If yes, tell how you teach; if no, tell why.
- 4) Can you observe the teaching act? Try to tell what you observe.
- 5) How would you, an EFL student teacher, plan to perfect your knowledge structure?

The first question is to explore EFL student teacher's knowledge structure. Eight participants prefer subject-matter knowledge. What they are busy with learning every day is basic English knowledge, such as pronunciation, grammar, and vocabulary. They are pursuing to pass various tests including TEM Band 4 and TEM Band 8 to get certificate of the bachelor degree, and to pass TOEFL, IELTS, SAT, etc. to go abroad for further study. Therefore, they spend a large amount of time learning English, such as attending intensive and extensive English classes, memorizing words, reading English literature works, listening to English materials, doing writing and translating exercises, etc. They do not like learning linguistics, psychology, education, and philosophy, which they regard useless.

The second question is about ways to obtain knowledge and the answers are different. Several different ways are presented, such as through reading, attending lectures, surfing internet, talking with others, taking part in training, studying and reflecting.

The third question is to explore whether EFL student teachers are provided chance to practice teaching, whether teacher educators create "real" classroom setting for teaching. One subject said that she had taught English lesson once. She prepared a long time with the help of classmates and received comment from peers after teaching. She could not behave properly in the front of the class and could not express what she wanted. She often used big words to



organize class. For example: “Can you elaborate the sentence?” and waited for the answer. She meant to ask the student to explain the sentence. She found the puzzled faces but could not deal with it. She expressed the need of much teaching practice. Six subjects told the fact that they never had a chance to practice teaching in classroom.

Through the fourth question the writer wants to know whether student teachers need observe the other teachers’ classes. One student reported: “My training in observing has given me many different views of teaching. I used to look at only the content of a lesson. Now I know that it is necessary to lay stress on the methods the teachers used. I should try to know more about ‘how’ that lesson is taught, What the teacher and students are doing, and what teaching aids are used by the teacher.” This indicates the significance of observing a lot of teaching act to develop practical knowledge and teaching skills.

For the last question, the EFL student teachers expressed their different opinions. Two participants said that they do not know what knowledge structure means though they are already in their third years of college life. They do not select teaching-oriented courses to learn because they are not prepared for going to be teachers after graduation. The other eight participants mainly emphasized the importance of practical knowledge. They expressed different opinions, such as listening to more lectures about teaching; going to the middle schools to know more about authentic teaching there; inviting more experienced teachers to come to give lectures; organizing knowledge competitions about teaching among student teachers; providing more opportunities for student teachers to practice as tutors, and so on.

## **3.2 Discussions**

### **3.2.1 EFL student teacher’s subject-matter knowledge needs clarity.**

Compared with other knowledge, EFL student teachers are proficient in subject-matter knowledge. Subject-matter knowledge is regarded by the student teachers as the most fundamental knowledge. It is the emphasized knowledge in traditional education. It is widely considered in the world that in-depth understanding and mastering subject-matter knowledge is very important for effective teaching and it is surely the main part of teachers’ knowledge. It is found through the research, most EFL student teachers are not yet satisfied with their oral communicative competent and reading comprehension. Some still need spending more time practicing their pronunciation and intonation. Their amount of vocabulary and grammar knowledge are sufficient in a sense. But it is not sufficient enough for them to act in English language teaching and to meet the challenge of the present education.

Without doubt student teachers must have a large amount of subject-matter knowledge. They must learn to set good examples in language use for their future students and use target language to express their ideas rhetorically or poetically. However, from the research the writer finds that EFL student teachers are still not clear about some concepts. For example, they do not make sure whether they mastered a word, for mastering a word in a target language as well

as the native speaker knows it may mean the ability to recognize it in its spoken or written form; recall it at will; relate it to an appropriate object or concept; use it in the appropriate grammatical form. In speech, pronounce it in a recognizable way. In writing, spell it correctly; use it with the words it correctly goes with, i.e. in the correct collocation; use it at the appropriate level of formality; be aware of its connotations and associations. According to the syllabus for students of English majors in higher education, when they graduate from normal university, they must meet the goal of comprehending 10,000-12,000 words through various approaches and mastering 5,000-6,000 active words, which can be used frequently and efficiently. They must know clearly, those words more important to students and teacher educators usually spend more time in presenting, giving examples, asking questions and practicing them again and again, and students have been taught (and hopefully learned), and the words which they should be able to use are active vocabulary. On the contrary, those words which students should recognize (e.g. when reading) but probably not to produce and teacher educators usually present them quickly, give a simple example, leave students to guess from context understanding, rather than production as an active word are passive vocabulary.

For grammar learning, the traditional way of teaching grammar is through direct instruction, that is, the teacher tells the learners what the rules are, but student teachers have to become active-thinkers. They need to discover for themselves how the grammar of the language they are studying works. They must turn grammar into a “content” that the learners can communicate about. It is necessary for them to learn to develop the analytical skills they need to dissect language for themselves, and learn to help foster the curiosity needed to work on language autonomously. In this way, they can be successful language learners and more important set good examples for their future students.

### **3.2.2 EFL student teacher’s conditional knowledge needs learnability.**

Teaching English is not easy, just as <sup>9</sup>Shu Baimei (2006) points out in her book *Modern Foreign Language Teaching Methodology* “Teachers have to make their students understand the language, namely, the pronunciation, vocabulary, grammar, etc. they must also develop their communicative competence, so that they use the language they have learned correctly, appropriately and expressively in real situation”. It is true they must fulfill this complicated work to be successful teachers. They need not only to learn what they will teach, but also how to teach, more important, why to teach, i.e. to attend more courses concerning education, psychology, understand students’ cognitive development and motivation, to learn more about educational works to understand underlying theories and principles so that they can be fully confident in doing the teaching work.

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<sup>9</sup> Shu Baimei(2006): *Modern Foreign Language Teaching Methodology*, Shanghai Foreign language Education Press. p.1

Most college teachers complain that “student teachers don’t like learning education psychology, social psychology. They are often absent from such classes Besides, they usually find someone to deal with the roll-calls. They only value subject-matter knowledge as it is important for student teacher to join in various English examinations”. But it is a fact that because most of them are not good at the other knowledge they cannot get high scores in the examinations though they spend too much time in learning various English courses. They can’t have adequate command of the language he or she will be teaching as they are not equipped with language teaching and learning theories. Therefore teacher educators must reform their teaching, from adapting the content of coursebooks to the various teaching strategies to make the teaching as interesting and learnable as they can.

### **3.2.3 EFL student teacher’s practical knowledge needs flexibility.**

Study shows that most of the EFL student teachers lack of personal practical knowledge. They need initiative and new ideas in learning and teaching. they must be trained through many types of practice in class. They have to gain more flexible activities, for example, problem-solving activities in classroom teaching and learning must be often done by the student teachers. Study shows that in the present classroom teaching, most of the student teachers are not given more questions for them to ponder and more situations for them to deal with to help them to become all-round people and good resources for their future students.

Teacher educators must focus on student teachers’ insight and metacognition and ask student teachers to make choices on their own about classroom tasks or homework assignments, allow them to choose to work in pairs or alone, and encourage them to make posters, do a short play or do exploratory research about the topic on the internet or in the library, and so on.

Practical knowledge includes not only various teaching methods and approaches but also why and how to do lesson planning, classroom management, and how many ways to lead in a classroom teaching, etc. All these should be done by way of both classroom and practicum. But so far, student teachers even have no chance to be practitioners in the schools recently. While in the past student teachers could be able to go to middle schools for practice every year to build practical or strategic knowledge as their compulsory subject, but now they are encouraged to spend the time preparing for post graduate entrance examination.

### **3.2.4 EFL student teacher’s cultural knowledge needs variety.**

Language is a part of the culture and the carrier of culture. It is far from enough to learn language just by relying on language knowledge itself. Language is inseparable from culture. To understand the culture of English countries is good for the learners to understand and use English properly, deepen the understanding of their culture and build the consciousness of the whole world. In the present classroom teaching, as is found in the research that the teacher educators do not consciously enhance students’ cultural knowledge learning, compare different cultures’ differences in language learning, improve students’ cultural appreciation abilities and

promote students' cross-cultural communication through understanding and appreciating the different cultures. The study shows that student teachers' knowledge about English cultural background were not enough to teach and they know about the significance of inter-cultural knowledge, but the relevant courses are short of except the sketch of English-speaking countries and under such circumstance, they obtain little about western cultural knowledge in learning.

### **3.2.5 the requirement of English Curriculum Standards**

As the goal of the English curriculum, EFL students must be developed from five dimensions: language skills, language knowledge, affect, culture and learning strategies. Language skills are important components to use language, including listening, speaking, reading and writing skills and the comprehensive application ability of the four skills. As for language knowledge, the new curriculum standards for basic education proposes that senior high school students should learn and master English language including pronunciation, vocabulary, grammar, function and topics. Affect is an important factor to affect students' learning and development. One of basic concepts of the new curriculum standard is paying attention to the students' affect and improving humanities. If English course focuses on students' affect, then students in the process of English learning, can be able to enhance the ability of independent thinking and judgment, to develop the communicative competence and cooperation, to promote the ability of cross-cultural understanding and intercultural communication. As a result, they can set up the correct outlook and values on life and the world, enhance the social responsibility and promote the humanistic quality. So student teachers should not only possess the knowledge of student, pedagogical psychology, but also know how to apply them in teaching to promote students' learning interests.

## **4. WAYS TO PERFECT EFL STUDENT TEACHERS' KNOWLEDGE STRUCTURE**

Altering from a student to a teacher is definitely a challenge, while to be a successful student teacher whose knowledge structure is perfect is attributed to a professional teacher. So it is the duty for teacher educators of normal universities to help student teachers to perfect their knowledge structure, through gaining more knowledge, esp. conditional and practical knowledge so as to obtain professional development. Research shows that, to accomplish the goal of perfect knowledge structure, in classroom teaching the following measures should be taken.

### **4.1 Develop student teachers to be good at observing and thinking.**

Teacher educators should try to offer more opportunities for student teachers to act as real junior or senior school teachers and their peers to be the elementary or secondary students so that they can get familiar with the every aspect of the classroom teaching in the middle schools.

Divide the student teachers into groups and encourage them to design the teaching procedures and teach in the imitation classroom with the rest of their peers observing the teaching and acting as middle school students to cooperate with each other and to finish the tasks. Through doing this student teachers can learn to be good observers and thinkers so that they will be able to know what to do when they actually take real teaching as their occupation after graduation.

#### **4.2 Develop students to be artists and appreciators.**

When the students engage in the arts they are able to access and incorporate many different learning styles and intelligence factors that enhance not only their learning within the arts themselves but also generally to improve their verbal and written skills. Teacher educators should set good examples for the student teachers in this aspect. That is, they should be good at matching colors, dressing appropriately, etc. They should pay attention to how to move, how to pronounce well and sound sweet, what hair style is proper for students to look at, and so on. If college teachers can use appropriate body language, and give all the class eye contact often and show encouraging smile to all the class, move about the classroom instead of standing on the platform to show the authority then they can have very good direct influence on their student teachers. Student teachers, like all other students, love to read textbooks with lots of pictures, charts, or graphs and they like to do puzzles as well. Therefore, in classroom teaching college teachers must try to provide opportunities to train student teachers with colorful pictures and different styles of visual modes or symbols.

#### **4.3 Give more cases study**

Cases study should be major part of courses to be given to student teachers to accumulate conditional and practical knowledge because cases study can be a powerful strategy to use for helping student teachers to learn practical knowledge as well as conditional knowledge. Since cases study can not only provide an environment for active learning, but also encourage creation of the students. For example, in the process of studying cases, student teachers can learn more teaching strategies and techniques from the experienced teachers and develop observing ability and thinking power as well. After watching the cases, they must be given chance to discuss the advantages and disadvantages and learn some techniques to imitate and act out as a real teacher. Through discussion and debate student teachers can tap into their prior knowledge and make good use of them to solve problems in their own teaching practice. For those conditional knowledge such as education psychology and social psychology, cases study is also necessary to be interesting enough for students to learn. In this way, they are able to relate educational theories to various aspects of teaching and learning, which was necessary to improve themselves as professional teachers.

#### **4.4 Practice more in class**

Practice makes perfect. Only when student teachers have more opportunities to practice can they become more strategic in teaching. In class, whenever possible, student teacher should be given chance to do presentation, to teach as an instructor. At the same time their peers can cooperate with them and make comment on their behavior after that so as to grow up with their peers.

In the present situation, few schools are willing to accept student teachers to participate in their teaching activities because of the student teachers' lack of experiences and they are afraid of being interrupted to prepare for examinations or waste valuable time of their students. It is the duty of the government to propose some powerful policies to support the teaching practicum including giving more financial support to help strengthen student teacher's practical knowledge, meanwhile, classroom teaching should be valued and made good use of. Such activities as role play, mime etc. should be arranged in classroom teaching and learning to enhance practical knowledge of the student teachers. It is true that student teachers like to exercise new skills instead of reading about it and they love activities such as acting out dialogues, or experience any language learning process where they can move around the classroom instead of sitting there listening to the teacher passively. They need to understand their students and perceive their feelings, to communicate with their students, to work well with their students so as to be effective leaders and cooperators. Therefore, in classroom teaching, college teacher educators may emphasize the development of student teachers' social and interpersonal skills by asking them to work in pairs or groups and taking different roles and often giving them the chance to cooperate.

#### **4.5 Make good use of multimedia in the classroom.**

In multimedia project classrooms or micro-teaching classroom, teachers spend more time having students practice skills on their own with strategic assistance provided by teachers as needed, then having students watch or listen as teachers perform a task for them or explain a process to them. On the one hand, teachers in multimedia project classrooms are more likely to be engaged in helping students by moving about the classroom and responding to student questions, on the other hand, student teachers can be video-taped so that they can watch and listen to themselves and comment or judge by themselves and their peers. College teacher educators must try to use multimedia as effectively as possible and set good examples in this aspects.

#### **4.6 Give students alternative assessment.**

It is known that current models of assessment and testing are being changed because the past testing system, e.g. standardized testing, is overtly limited and emphasized only the value of memorization of knowledge and students' different intelligences are totally neglected. But students have different intelligences and potentials, therefore, assessment of learning should measure multiple forms of intelligence and try to promote reveal potentials. It is a new idea, or

rather, recommended that each student is allowed to learn and to be tested by the same material but in different ways. College teacher educators should not only do summative evaluation but also formative evaluation, for which different measures must be used, such as interview, oral test individually, classroom observations, student portfolios, etc. to achieve their greatest potentials and increase the quality and purpose of student learning. If the college teacher educators can have alternative assessment and pay attention to the involvement or process in learning then their student teachers can follow the examples and act the same way when they become real teachers. As a result their student teachers can be welcomed and loved by the middle school students. It is also beneficial for student teachers to gain nondiscouraging personalities.

## 5. SUMMARY

As a teacher, to give students a glass of water, he would have a bucket of water. In the process of imparting knowledge to students, teachers should constantly enrich their knowledge. The more input, the more output. Through participating the investigation of present situation of EFL student teachers' knowledge structure, the student teachers have gained an overall awareness and take a new look at their own knowledge structure. They are sure that they are indeed in need of improving themselves and becoming teachers of high quality who understand student psychology and are familiar with the adaptive features of teaching. In the context of small group teaching or some other forms, teachers can figure out students' differences in abilities by grasping the right entry point for individual students to build up their confidence in learning so as to achieve ideal results. They must strive to develop the potentials of student teachers to make them outstanding in the new era. To ensure high quality and effectiveness, the programs should be designed according to the new curriculum standard and take the most suitable teaching and learning methods to make the student teachers gaining integration of high standards, key competency and noble character.

All in all, the mission of higher education is for the development of every college student and for the elevation of the whole nation in the end. Student teachers should be developed to be professional educators, whose knowledge structure is a complicated network including many aspects. They should not only impart knowledge both in colleges and in middle schools but also have the ability to perfect their knowledge structure to fulfill their special responsibility. In the present information age, it is the college teacher educators' mission to cultivate a new generation of student teachers who enjoy learning, think wisely, dare to innovate and shoulder responsibilities. The new type of student teachers should have a balanced development in academic pursuit and character formation, and display perfect structure.