A COMPARATIVE STUDY OF TEACHER COMPETENCE ACCORDING TO THEIR DEMOGRAPHICS IN HANZHONG HIGH SCHOOL OF SHAANXI PROVINCE, CHINA

Xu Yuan

A Thesis Submitted in Partial Fulfillment of the
Requirements for the Degree of
MASTER OF EDUCATION
in Educational Administration
Graduate School of Human Sciences
ASSUMPTION UNIVERSITY OF THAILAND
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I.D. No. 6019513

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Thesis Title: A COMPARATIVE STUDY OF TEACHER COMPETENCE ACCORDING TO THEIR DEMOGRAPHICS IN HANZHONG HIGH SCHOOL OF SHAANXI PROVINCE, CHINA

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ABSTRACT

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Key Words: Teacher competence, Teacher demographics, Hanzhong high school

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Thesis Title: A COMPARATIVE STUDY OF TEACHER COMPETENCE ACCORDING TO THEIR DEMOGRAPHICS IN HANZHONG HIGH SCHOOL OF SHAANXI PROVINCE, CHINA

Thesis Advisor: Asst. Prof. Dr. Yan Ye

This study mainly aimed to compare teacher competence according to teachers' age, gender, education background in Hanzhong High School of Shaanxi Province in the academic year of 2018. The researcher surveyed one hundred sixty-eight (168) full-time teachers at Hanzhong High School of Shaanxi Province in this study. The questionnaire was adopted based on previous studies. Frequency, Mean & Standard Deviation, Independent samples t-Test and One way-ANOVA were used for data analysis. The findings showed there were significant differences of teacher competence according to age and education background in Hanzhong High School of Shaanxi Province. But no significant difference about teacher competence according to teachers' gender was found in this study. Most of teachers were in age group 30 and 45 years old and got the highest mean score about teacher competence. Moreover, the teachers with master degrees or higher had more competence compared with those with the Bachelor degrees.

All the five components of teacher competence including pre-instruction, presentation, student learning, learning environment and professionalism were regarded as high, but the mean of teacher presentation was lowest, which indicated teachers' presentation was relative weak in this school. The study recommended that administrators should create more opportunities to encourage teachers to develop various teaching styles through teamwork, group project, so that teachers could perform different teaching style and apply different teaching methods in different situations.

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CHAPTER I

INTRODUCTION

This chapter presents the background of the study and the statement of this problem, the objectives and hypothesis of this research, theoretical framework, conceptual framework, scope and limitation of this study, definition of terms and significance of the study.

Background of the Study

A rounded educational system with quality teacher team is essential to stimulate economy robust growth for a nation, which caused all the schools to realize the significance of teachers' competence as a long-term focus (Peng, 2014). OECD (2011) proposed that teachers played an important role to motivate students to be innovative and curious about the pursuit of knowledge. Moreover, Lee (1997) found that a great quantity of teachers was not good at information communication and technology skills; and in this digital era teachers should be able to master ICT and put into the school curriculum practice, which contributed to improve teaching quality. Whitty (1996) claimed that professional competence included subject knowledge, curriculum, student learning and understanding, assessment, education system and teachers' role. And professional competence is also needed skills such as classroom methodology, subject application, classroom management, assessment, evaluation and undertaking a

wider role and recording under the teaching background.

Commission Report (2006) proposed that this situation also happened in China. Nowadays, Chinese government implements new education policies and reform continually in order to focus on and improve the teachers' competence through different means. China's Ministry of Education has encouraged schools to reform and improve education quality since 40 years ago. In the 13th session of National Congress of the Communist Party of China, Premier Deng Xiaoping (1987) announced education is the basis of a One-Hundred Year Strategy of a Nation. With the practice of exercising leadership in China's reform and opening up and socialist modernized construction, Premier Deng Xiaoping (1983) put forward his systemic educational reforming strategy, which was reflected by the policy of "Three Orientations" that concerned with the unbalanced development between China's education development and modernization construction. "Three Orientations" represented that education should be geared to the needs of modernization, of the world and of the future. Under new situation and mission of educational business, "Three Orientations" policy demonstrated substantive characteristics of modern educational development and reform (Shi, 2013). Until the 17th Communist Party of China National Congress (2007), China implements National Plan for Medium and Long-term Education Reform and Development (2010–2020), which has critical influence on a national bright future in terms of science technology and economy. Developing educational business is an imperative way to bring about Chinese Dream of the great rejuvenation of Chinese nation (Tong, 1999).

However, teachers were still confronting many problems and hardships in different schools of different provinces, so it was the school's duty to improve and develop their teacher team's competence so as to cope with crisis and improve the school effectiveness (Sudirman, 2017). For this problem, Yu (2010) appealed that Chinese teachers needed to give up traditional teaching methods and improve professional competence in order to advance their teaching level step by step. In fact, Cheng (2002) also pointed out that teacher effectiveness framework including the aspect of behavior and cognitive, both needed to be focused and improved as the major concerns in school developmental plan.

Teachers in different age group have different competence. In the context of demographics change, such as age or gender, teachers are different in professionalism. For example, the male teachers are less proficient than female teachers. The older teachers are more proficient than younger teachers (Jessica, 2016).

High level of teacher competence will contribute to the improvement in teaching quality, which is every school seeking (Kunter, 2013). Though the related studies on teachers' competence are very limited in China, this researcher felt it was necessary to study the Chinese teachers' competence in the big well-known public school firstly, to better understand Chinese public school teachers' competence as well as their problems.

Statement of the Problem

Hanzhong High School of Shaanxi Province is the biggest public high school

that has the highest enrollment rate of college entrance examination in Hanzhong city, Shaanxi province.

This researcher did some interview with some teachers from this school as the starting point of this study. According to the researchers' interview with the teachers, the school did a lot of teachers' professional development work, but there was no previous study or report about teacher competence based on their self-assessment in this school. From the interview with the leaders, the researcher heard that the school conducted many professional development activities always, such as encouraging teachers to transform traditional teaching method to new concepts through professional training; inspiring teachers to adapt to new technology and ICT tools to understand new information and improve innovation competence in the classroom; and pushing teachers to publish more research in China National Knowledge Internet, and so on. In fact, the school did evaluate the teachers' performance through the observation of leaders, peers, and questionnaires from students, but no previous study from teachers' perspectives to reveal their competence directly, therefore, the school leadership team encouraged this study to take place in this school.

Meanwhile, since this school is the biggest and well-known school in Shaanxi Province, this researcher believed to this teachers' competence study might provide some implacable information for the principal and leaders in this school and other big public schools to better understand the teachers' perceptions and their competences.

Research Questions

The research focused on the following questions:

1. What were the teachers' demographics factors including age, gender and education background at Hanzhong High School of Shaanxi Province?
2. What was the level of teacher competence at Hanzhong High School of Shaanxi Province?
3. Were there any differences of teacher competence according age, gender and education background at Hanzhong High School of Shaanxi Province?

Research Objectives

The research objectives were accordingly as follows:

1. To identify the teachers' demographics factors including age, gender and education background at Hanzhong High School of Shaanxi Province.
2. To identify the level of teacher competence at Hanzhong High School of Shaanxi Province.
3. To compare the teacher competence according to age, gender and education background at Hanzhong High School of Shaanxi Province.

Research Hypothesis

There are significant differences of teachers' competence according to their age, gender, education background in Hanzhong High School of Shaanxi Province.

Theoretical Framework

This study was mainly developed on the basis of Medley's theory (1977),

which focused on five components of teachers' competence, namely, pre-instruction, presentation, student learning, learning environment and professionalism.

Medley's Theory (1977) of teachers' competence

One of the five components of teachers' competence was ***pre-instruction***, which meant teaching plan and pre-service ahead of schedule. Good preparation was the basis of good presentation for teachers. After this, when the teachers were teaching, another important competence was ***presentation***, which presented teachers' teaching ability about teaching ways in academic day and management for class organization. Teacher presentation was a long-term process to transferring academic knowledge from teacher to students, which had critical effect on student growth.

Beside these, there were two components of teachers' competence to emphasize, which were ***learning environment*** and ***student learning***. At first, teachers must ensure a safe classroom, and create a safe and warm environment to promote student to learn confidently and hopefully in the teaching process. Good learning environment was essential to student study. Teachers developed supportive environment to motivate students to increase learning interests and thirsty of knowledge. Student learning was a progressive process. Teachers could interact with students in some activities and take assessments and instructions into practice. High level of teacher competence had good influence on student learning in the aspect of critical thinking, learning habits and benefit for the entire life.

Scope of the Study

The study was conducted in the first semester in 2018 at Hanzhong High School of Shaanxi Province, in Hanzhong city, Shaanxi Province, China.

The researcher selected to conduct in this middle school due to the reasons that Hanzhong High School of Shaanxi Province is the biggest public high school in Hanzhong city, Shaanxi Province, China. The school had the highest enrolment rate in college entrance examination and also is admitted to be the key middle school by Ministry of Education in Shaanxi Province. Also, the researcher herself had graduated from this school and was going to work in this school after completing the master degree.

This study evaluated teachers' perception of their competence in public high school in Hanzhong city, Shaanxi province, China. The questionnaire was based on five important components of teachers' competence. The teachers' demographic factors were age, gender, education background. A total of (168) full-time teachers who were teaching in this school were used in this study.

Definitions of Terms

The following terms were defined and applied in this study:

Demographics Factors referred to age, gender and education background of full-time teachers at Hanzhong High School of Shaanxi Province in Hanzhong city, Shaanxi Province, China.

- **Gender** in this study referred to male and female full-time teachers who

worked at Hanzhong High School of Shaanxi Province in Hanzhong city, Shaanxi Province, China.

- **Age** referred to full-time teachers who worked at Hanzhong High School of Shaanxi Province in Hanzhong city, Shaanxi Province, China
- **Education background** in this study referred to full-time teaching staffs' academic diplomas at Hanzhong High School of Shaanxi Province in Hanzhong city, Shaanxi Province, China.

Teacher in this study referred to a person who was a full –time teaching stuff at Hanzhong High School of Shaanxi Province in Hanzhong city, Shaanxi Province, China.

Competence in this study referred to teachers' professional knowledge, teaching skills, teaching experience and teaching ability which was necessary to carry out a defined function effectively.

Teachers' Competence in this study referred to teachers' knowledge, skills and ability of teachers, which promoted teachers to teach and instruct students to get more knowledge in a healthy way. Five components of teachers' competence were investigated in this research. As follows:

- **Pre-Instruction** in this study referred to one of teachers' competence, which meant teaching plan and direct students to get instruction and expectation. Question 1-6 of the questionnaire measured this component.

- **Presentation** in this study referred to teaching ways and passing knowledge process of teachers for students. Question 7-16 of questionnaire measured this component.
- **Learning-Environment** in this study referred to teachers' ability to create a safe and supportive environment to motivate students to increase learning interests and thirsty of knowledge. Question 17-29 of questionnaire measured this component.
- **Professionalism** in this study referred to teachers' professional knowledge and professional teaching methods. Question 32-38 of questionnaire measured this component.
- **Student Learning** in this study referred to teachers' competence about accelerating learning process and getting more knowledge successfully. Question 30-31 of questionnaire measured this component.

Significance of the Study

Since there was no previous research about teachers' competence from teachers' perspectives in this school, this researcher believed that doing this study could assist better understanding of the teachers' competence and provide valuable feedbacks for the students, teachers and administrations at Hanzhong High School of Shaanxi Province.

For students, this study would help the students to understand more detailed knowledge of teachers' competence. This may have good influence on students'

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growing, learning and life.

For teachers, this study will promote them to study and understand more about their own competence. Since the study will also compare the teachers' competence according to their age, gender and education background, and evaluating the aspects of pre-instruction, presentation, learning environment, student learning and professionalism based on their perception; it could help teachers to understand more about themselves and improve their competence and teaching ability in different circumstances.

For administrators, this research would provide information as well as some ideas for the administrators to strength teachers' competence and teaching passion after the result accepted by the principal. High level teachers' competence means high teaching quality, which attracted more students and kept competitive in management.

For future researchers, this study would be also beneficial to future researchers who also focus on teachers' competence in China; it would provide them with background knowledge and information to conduct future research. High level of teachers' competence was valuable to future education and school construction.

CHAPTER II

Review of Related Literature

This study mainly focused on teachers' competence in detail. This chapter presents a review of the research literature, which serves as the theoretical foundation of the study, and have a detailed description of the concepts engaged in this study as follows:

- Role of Teachers in Education
- Teachers' Competence
- Previous Studies about Five Components of Teachers' Competence
- Previous Study on Teachers' Competence
- Introduction of Chinese High School Education System
- A Brief Introduction to Teacher Competence at This School
- Summary of the Reviewed Literature

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Role of Teachers in Education

The teachers took responsibility for designing, evaluating and managing the educational program for that student to meet the special and different needs of students (Irene, 2009). And teachers should shoulder many responsibilities, as follows: firstly, teachers should provide adequate resources to maintain a safe and great environment. Secondly, teachers should have an appropriate workplace accommodate the learning activities and meet special needs of students (Gunduz, 2016). Thirdly,

teachers could have access to important students' information to take a series of respective responsibilities linked with students' programs. Fourthly, teachers could provide some in-service on behavioral and practical techniques and approaches. Finally, teachers could have spare time to support learning and take part in as required in the long process of improving, developing, practicing, and implementing (Jennifer, 2005).

There are some different roles and responsibilities of teachers in different ages (Auhadeeva, Yarmakeev & Aukhadeev, 2015). Teachers should design projects and plans and organize teaching and learning experience for students with special needs. Teachers also should implement projects for meeting the special needs of students: providing for service. Additionally, Teachers also need assess, evaluate, report and record student progress. And teachers should develop supportive, safe and appropriate environments for teachers and learners, their parents and school climate and districts (Katharine, 2011).

Echevarria (2004) assumed that teachers should be learning facilitator. Although teachers shared instructional professional resources and materials such as articles, journals, books and others. But also at the same time teachers should learn with others and from others to improve student learning according to teachers' classroom work and filling gaps in students learning. Teachers were not only role models, but also were importantly learners. Learners should keep continual improving themselves, helping their students according to using what teacher learn from students achievement and staying hungry to keep life-long learning.

Teachers helped their peers by many ways through sharing their experience and instructional resources. These might include articles, websites, journals, materials, or other resources to be used on students. Teachers might also share some professional resources as theses, books, or unit plans, and evaluation ways (Liu, 2018). And then according to these ways just mentioned, teachers helped peers and colleagues to practice and observe effective teaching experience and put some strategies into practice. Basis on these, teachers would share their practice and give instructions or planning lessons to colleagues, and find some instructional methods of teaching were appropriate and beneficial for the school; and develop their professional abilities together (Allwright, 1977).

Similarity, Curriculum was also an important part of teaching process. Teachers should choose appropriate curriculum in the aspect of instruction and evaluation to carefully implement consistent curriculum, and follow standard curriculum to develop shared assessments. And then teachers could be able to deal with a great deal of data, they could analyze data and use this information and results to strengthen instruction, and on the basis of their findings to develop and implement a professional development plan (Cohen, 1996).

Additionally, the various roles help teachers to find own ways in order to develop interests and improve capacity. Regardless of the roles, teachers cultivate the culture of their schools for achieving schools' goals, which are beneficial for student learning and improvement of teaching quality (Nespor, 2006).

Teachers' Competence

Medley (1977) claimed teachers' competence including knowledge, skills, attitudes and experience, which was a process of skillful experiences and educational performance. The initial and in service training in the aspect of knowledge and skills, whatever changes and variation about students and environment. Teachers' competence could be able for self-development, variable and flexibility.

According to Medley (1977), there were five components of teachers' competence including pre-instruction, presentation, learning environment, student learning and professionalism. Pre-instruction means some teaching plans and enough preparation before teaching schedule. Presentation is an important element that teachers could put scientific and technical disciplines into practice in this educational process in order to finish teaching vision. Learning environment means the teachers to create a safe and friendly atmosphere to inspire students. Student learning means teachers should implement efficient methods of communication and exchange with students in order to improve teaching quality. The last component, professionalism, which means professional competence in teaching and managing. The high level of professionalism promoted students to get deep knowledge and keep life-long learning.

Similarity, Olga (2012) came up with 21st century teaching competence including teachers' class leadership, making a safe and warm environment to meet the needs of different students, imparting academic knowledge, encouraging to learn for their students and putting into their practice. Teachers should have these competences,

such as class management, teaching practices, and assessment and teaching skills. High level teacher competence had critical importance for this current situation. Schools and government set high standard and put forward new polices to improve teaching and learning with the development of economy and science. In Europe also set educational foundations to support educational business. According to increasing investment, teachers got more training and initiative to achieve the goals of education (Robert, 2010).

There were different standards and polices to guarantee teaching quality in different countries. According to in European Commission (2013), Finland had traditional culture in terms of trust and autonomy in educational providers and teachers' professionals, and might not show urgent need for teacher competence frameworks or standards related to educational accountability. But teacher competence was a long-standing tradition, which would create common directions and a shared discourse among education stakeholders, linking initial and in-service training. Blerim (2014) examined that Germany, Sweden or some other European countries had been developing some comprehensive policies to improve the development of teacher education –named Educational Monitoring Strategy of Germany, and Sweden's policy paid more attention to teacher competences which aim at teachers' quality as linked to student learning and professional improvement.

In Asia, UNESCO (2016) pointed out that transversal competencies were increasingly considered as countries in Asia as being a necessary element of the education system, promoting communication, cooperation, creativity, respect, help

and good relationship among teachers. There was essential need to provide more support and useful resources for the improvement and integration of transversal competencies in schools, in the process of professional teachers' training and learning (Goe, 2007).

Additionally, Maastricht (2004) purposed that the examination of the specific learning needs and challenges of vocational teachers of possibilities would make their professional skills better and more diverse, such as improving their professional skills continuously. Teachers should improve their professional competence and learn more skills in their vocation. Under this current situation, teachers also confronted many teaching challenges from school or parents. Teachers must keep competitive and make progress to improve professional competence continually.

However, China is the largest population in the world, which was considered that improvement of a high level teacher workforce was an imperial element to the further prosperity and development of Chinese people. China must ensure quantity and quality of teachers as an important feedback in raising the quality and quantity in the nine years of compulsory education provision (Peng, 2014). In the process of teaching teachers could need to actively communicate and interact with students, meet the demands of them, guide students to find ways to answer and solve these problems, and support teacher work through ICT. This changeable appliance was very imperative for teaching diversity just like constructivist models in the process of teaching and learning, relating to students learning in the real life rather than more common and traditional methods to teach, learn and the diffusing of knowledge

(Markus, 2017).

As Yu (2010) pointed, there was a tendency on teachers to improve their professional capacity increasingly and to continuously increase their teaching outputs in China. And the current National Plan in the year of 2010-2020 refers to many strategies in the development of high quality teachers.

Nowadays, UNESCO set the education goals in 2030, and the entire world pays more attention to educational business to achieve this goal. Ministry of Education (2016) in China also conformed to the historical trend of the time and takes educational responsibility to implement many policies in order to improve teaching quality according to teachers' improvement (Shatska, 2014).

Previous Studies about Five Components of Teachers' Competence

Theory of Medley (1977) was developed based on the concepts of five components of teacher competence, which included pre-instruction, presentation, learning environment, student learning and professionalism.

1. Pre-instruction

Pre-instruction meant teachers should make a teaching plan before class, how to welcome students to learn according to engaging some activities (Jan, 2013). There were many ways to design teaching plan in different situations. Don (2006) proved basic initial formula would consist of the five following parts:

Teachers should give students an overview of class, which was a definite purpose and plan ahead of activities. And then teachers always started class from an interesting

activity or topic to attract students to pay more attention to this class, which created a safe and relaxing atmosphere. Generating warm environment reinforced the importance of genuine communication right from the beginning of the class period. Moreover, there were main activities to take in this class and some relative games at the same time. If class time allowed teachers to take more optional activities, teachers would prepare more interesting optional activities to strength students' understanding. At last, there were reserve activities to prepare for teachers in case leaving some time at the end of the class time.

There were other notes on pre-instruction as Don (2006) assumed, which meant some cautions in teaching plan. Firstly, teachers should estimate activity time and write it down in their teaching plan. Teachers should control activity time to match up with class time as a professional teacher. Secondly, teachers' evaluation and suggestion should also provide perfect closure. Students would feel better if teachers end an activity by wrapped up and concluded, rather than simply stopped. So closure was an important part of the plan. Thirdly, teachers should pay more attention to activities' variety. During a class period, you should motivate students to stay more alert according to different activities.

Nevzat (2009) commented that a good preparation would be beneficial to promote and motivate students to the class content and related to reviewing the previous knowledge for some special students, by inspiring students' curiosity and making an appeal according to their senses. This method helped the child to receive more new knowledge. Teachers' preparation habits also had an influence on students.

Scheerens (2007) added that every teaching objective could start from a verb, which described to be taken an action in order to show achievement and accomplishment. Verbs usually described how to behave if accomplishment had taken place or not. The objective supported the whole lesson, which was why the lesson exists for a long time. Teachers always set a special goal to achieve.

Plan was also very beneficial to students and teachers as Don (2006) mentioned. For teachers, a good plan would help you construct more confidence considerately. And teachers would get through a lesson with professional knowledge. But strategic plan was a good impetus to improve teaching quality. For students, a warm and friendly atmosphere would establish rapport with each other, which expressed emotions and interest in them. Some various activities would encourage students' involvement in class. Students and teachers should collaborate with each other in order to achieve teaching vision.

2. Presentation

Presentation was a process that teachers show their knowledge, skills and comprehensive of information according to telling stories, interaction and communication. Under the current situation of the world reform of teachers' competence, teachers must improve professional competence and academic ability constantly. Good plans and professional knowledge were the basis for teachers, which supported teachers to teach effectively and professionally (Puschel, 2017).

Effective teachers needed some methods to educate as Nevzat (2009) proposed.

Micro-teaching method was used in pre-service teacher education programs for many years to develop the knowledge, habits and attitudes for effective teaching in classrooms. This method provided a basis for self-reflection and professional growth. A teacher should improve and develop unique teaching skills and practice giving and receiving constructive or helpful criticism. According to micro-teaching, teachers would have opportunity to review fundamental knowledge about teaching, check some basic practices and then teachers would learn and get more new ideas from peers, carry out new strategies, get diverse feedback with peers in helpful and warm atmosphere. Teachers should transform theoretical knowledge into practice.

Alison (2017) also suggested that teachers should have many skills and beliefs. Communication was the first competence skill, including writing and reading in the aspect of communication, professional gesture or body language, and professional listening ability to understand. Teachers also must be able to adjust communication style to meet the needs of different students. Teachers should solve problems among students, lesson content, and deal with issues with colleagues. And teachers should have critical thinking to solve problems quickly and effectively. There were some important abilities to enhance for teachers, such as, organization management, the personality of willingness to surmount obstacles, willingness to grow and take more experience and keep patient and tolerant. However, as Scheerens (2007) pointed that effective teaching will involve in many teaching aspects, such as lesson content, classroom time management, teaching plans and management, discipline and evaluation. Quality teaching required adaptive and diverse skills and a systematic

evaluation in the aspect of professional knowledge and put them into practice for teaching and learning.

Researchers like Gonzalez & Wagenaar (2005) believed that teachers' competence was dynamic combinations of cognitive and meta-cognitive skills including learning tough, know, feel, and think as teachers. Learning to act as teachers indicated a critical examination of teachers' beliefs and development of teaching or cognition. To know meant knowledge required as teachers by teacher own experience, teachers must master some necessary professional knowledge and pedagogical teaching, but more importantly, they also must understand the knowledge of technology and subject area in the aspects of historical, cultural and structural features, related to others through the curriculum.

Moreover, Hagger & McIntrye (2006) had commented on this competence, which should include intellectual and emotional aspects and was divided into attitudes just like achievement, confidence, fulfillment, respect, and expectations such as, initiative, passion and encouragement for improvement, information seeking, and leadership style for flexibility, open-minded or critical thinking for learning. To act as teachers indicated integrating professional knowledge, skills and thoughts into practice.

World Summit on Teaching (2011) discussed on teacher's competence as an important theme, researchers concluded that teachers should lead students to search not only the easiest skills "to teach and to test" but also more importantly, ways of thinking, such as creative thinking way, critical thinking, problem-solving thinking,

decision-making of learning; ways of working including communication with students and collaboration with peers; tools for working new technological information and communicated tools; and skills around citizenship, and career and taking personal and social responsibility effectively and successfully in ordinary life and modern democracies. Teachers should have great competences to work hard and adjust all the time, positive attitudes between inside and outside classroom to adapt into their practice, when teacher could response to outcome of students. Moreover, teachers needed to teach in increasing technological and multicultural classrooms, taught students to meet some special needs in the aspect of using ICT for effective teaching, or engaging in evaluation activities and complex accountability processes, and invited parents to take participate in their schools together.

European commission (2009) also confirmed that teacher should have not only elementary knowledge, skills and obligations, but also more importantly, specialist competences including teaching to diverse classes, making good use of ICT and making good progress with pupils together. According to ICT report from Education Accountability Depart of Education and Training Western Australia (2009), it was important for teachers' attitudes and motivation to improve teachers' ICT competence in order to understand how to apply to teaching. There were many benefits to learn ICT well for teachers. And teachers liked the technology and new software and its possibilities, which helped teachers to inquiry based learning, provide teachers valuable resources and tools to support efficient presentation and communication tools. ICT tools also attracted students to pay attention to study because of diversity

and interestingness.

3. Learning environment

Learning environment was a place where there are many buildings, such as, teaching buildings, laboratory, and classrooms and so on. But in 21st century, learning environment was not only a place easily, but also a virtual system where students could get knowledge from Internet, robots or high technology (Kristen Kereluik, Punya Mishra, Chirs Fahnoe & Laura Terry, 2014).

Williams (2002) proposed that school class buildings or laboratory buildings design features had good effects on learning and performance of students. Influential features and components had negative or positive influence on students' achievement. A school building had influence on students maybe good or bad, depending on the features or components of the building. For example, overcrowded school buildings and classroom had negative influence on students, especially poor and hard students according to some correlative studies. And poor school facilities had negative influence on teacher effectiveness and performance the same as students. But a safe and positive building environment would have good influence on student performance and various factors.

The National School Climate Council (2007) claimed that school climate had influence on people social, emotional and physical feeling according to norms, values, and expectations. This organization also identified five components of school climate: including (1) safety, such as social security, norms, (2) teaching and learning, such as

supports to teach, study motivation or inspiration, (3) interpersonal relationship, such as, observation from peers, communication with parents, and interaction with students, (4) institutional atmosphere, such as administration control, management, (5) staff relationship, such as leadership, professional relationship. School climate was an organization of the interpersonal diverse relationships among students, parents, teachers, principals and administrators.

Sugai& Horner (2006) believed positive behavioral interventions and supporting approach was a prevention strategy that focuses on students' problem, promoting a safe and positive environment, reducing need for counseling and special education services to enhance school climate.

Nowadays, many discipline problems still arouse in unsafe school climate, including bullying, aggressive behaviors and suspensions, which were solved by support of schools and government together. It was essential to provide good climate for schools and students. Good school climate indicated multi-dimensional school culture, which had multi-tiered framework, and provided a continuum of programs and wonderful services to solve specific problems (Lide, 2014).

Greenberg (2003) suggested that if school community took part in developing the program, including staffs, teachers, students and teachers, program would be more effective. When school administrators could take part in some activities, more communication would get more energy and development. Staff, teacher and students have different views, but more importantly, which was helpful for understanding each other. Thirdly, Cindy (2007) stated that a teacher was a resource provider. Teachers'

responsibility was sharing professional resource from website, books and instructional materials to colleagues and students. But at first teachers must adapt to new mission to create safe and healthy classroom environment, which kept a positive relationship between teachers and students. Then teachers could collaborate with students to implement teaching plans easily; help students get new knowledge successfully, explore new knowledge initially; give some orientations in future study gradually under the good environment. And then teachers should be facilitators, providing more professional developing opportunities like impetus for students.

Killion (2001) mentioned that school promoted the school's professional development committee and developed to cultivate the committee's language arts representative; and made teachers' plan the year's professional development program at the same time. Teachers were learners and continual improvement as a role model for students, which had good influence on student learning and development.

Mudasiru (2011) stated that ICT was the tools of technology in order to search or get information and teaching conveniently with the development of globalization and technological change, ICT was the tools of technology in order to search or get information and teaching more conveniently. In the teaching process of teachers, ICT had improved teacher effectiveness which in turn would help students to improve student learning results and enhance educational performance for long years. And teachers could improve themselves by using ICT according to observation from famous excellent peers, making teaching plan, do some activities. Nowadays, ICT had gradually become an imperial part of daily life for teachers even for education

business. ICT had also changed student learning environment for students at the same time. More resources meant more chances, including Internet, software, journals, and books and so on. If teachers could use technology appropriately, which would help to improve the education quality for teachers or students and raise the educational level by developing the relative infrastructure of education. Learning in dairy life and distance learning of Internet were all kinds of types of learning that arouse from the ICT. Students could observe scientists teaching and watch videos from other lectures. It would construct teaching environment from teacher-centered to student-centered, which promoted students to perform and practice and cultivated them to learn by themselves (John, 2011).

Through relationship-based whole-school practices, classroom practices, clearly communicated behavioral expectations, students would be developed and supported for positive people. The high level of classroom infrastructure or classroom seating arrangements had good influence on student behavior, Such as inconsistent routines, inadequate materials or obliviousness to cultural differences (Lide, 1994).

According to the Department of Education and Training in Western Australia (2009), creating an atmosphere in the school would motivate students to engage in the curriculum with full heart, inspire teachers to know themselves and persist on when the teachers suffered some hardship, giving the school staff a sense of belonging to the school. In short, if students were in a respected and capable environment, students would be more likely to achieve it well. This organization took every opportunity to promote student behavior more responsible between school and home. School and

teachers could act to good school behavior in safe and warm environment. Parents also had a significant influence on their children's behavior. If teachers and parents cooperate well, students would make a great success.

4. Student Learning

Student learning meant that students get learning experiences and new approaches to improve their ability of problem solving, insight and practices according to guidance by teachers (Herbert, 1979).

Calhoun (2008) explained that a school cultivated students in many aspects; the first was complex cognitive skills, including critical skills or reflective skills. The second was an ability to put knowledge into practice to solve many problems of learning and life. The third was an understanding and appreciation of human differences. The fourth was practical competence skills, such as ways of solving problems, decision making. The fifth was a coherent integrated sense of identity, integrity, self-esteem and confidence. Learning professional knowledge was an important part of student learning, and there were also many things about intellectual competence to learn.

Experience was also an important part of learning. Both experiences in various in-class and out-of-class settings, both on and off the campus, had great influence on self-development in learning and life. And in some cases, environment was beneficial for students' learning, including internal environment staffs, faculty and peers, extra environment physical spaces, cultural milieus and classroom settings. For example,

classrooms and some technological equipment contributed students to get more information and develop practical competencies intentionally while they were having class or taking part in campus residence (Gallagher, 2004).

At the same time, when teachers used effective technology appliances and arranged classroom space to promote interaction and collaboration, students learn more. And students pursued knowledge through many resources, libraries, student organizations, laboratories and studios. This journal also emphasized on critical thinking in learning tasks to improve institutional productivity through engaging some activities, which would raise students' aspirations and contribute to develop skills and competencies to live productive and satisfied lives (Calhoun, 2008).

According to Olga (2012), it was essential to evaluate students' grades of the lessons. Assessment was an important instruction to reflect that the goals of education are met or not. Nowadays students were not only learning basic and professional knowledge, but also facing a continually changing world. After that, students would get new goals and change the relationship between evaluation and instruction, meanwhile, teachers should improve competence and keep life-long learning as a good model.

5. Professionalism

Professionalism meant teachers' competence and professional skills, reflecting many aspects, such as, updating teaching content, communicating with students and self-developing by many ways to contributing schools (Kim, 2015).

Hargreaves (2000) had once argued that teacher professionalism was different from other occupations, because of different demands in different time periods. There were four ages of teacher professionalism, accordingly, the first was the age of pre-professionalism proved that teachers lecture their professional knowledge for students; the second was the age of autonomous professional, because after teachers accepted a long time and judge and choose the best thing for them; the third was the age of collegial professional; teachers should collaborate and consult programs in the process of teaching in the same organization; and the fourth was the age of post-professional; teachers should communicate with external force, especially parents.

Similarly, Webb (2004) defined teachers' professionalism as teachers' responsibilities to control and develop teachers own knowledge and actions for the benefit of the clients. Normally, community and organization would promote teachers to make progress in the aspect of professional development and taking part in academic exchange with the development of economy and technology. In order to face this complex and innovative world, educational systems had great influence on changing teachers' role and expectations inevitably.

Teacher's professionalism as Baggini (2005) claimed that was defined as teachers' outcome in the terms of difficulties and in some extent teachers had capacity to use their professional skills and personal experiences. Phelps (2006) supplemented that professionalism was measured by the best and the highest standards, which meant professionalism was enhanced when teachers thought good work results as an

important standard for measuring teacher working results and following actions. Teacher's professionalism was relative to changing context in the aspect of history, politics and society. Various meanings had changed and inspired the ideal interests of an occupational group over time. So it was somewhat difficult to define in many complex circumstances, usually which paid more attention to teachers' professional qualifications, for example, shouldering the highest standards, achieving the overall goals (Hilferty, 2008).

Teachers played a vital and indispensable role to accelerate learning process and improve learning results, and especially at the time when educational business faced so many challenges and conflicting pressures. So teachers should motivate students to learn in a changeable society according to development driven by a professionalism based on effective and deep self-reflection professional thoughts and played the role well. For this regard, Irene (2009) had commented if teachers had fun and were interested to work daily, who were careful for helping children and supporting for teaching at school- which meant professionalism for teachers.

Association of Teachers and Lecturers in UK (2012) mentioned that teacher professionalism was based on many norms and principles. As follows: firstly, the teaching professionalism was continually developing professional knowledge in the aspect of learning, thinking ways, dealing with relationship among peers, students and parents. And teachers should learn diverse knowledge of history, technology, culture, and so many aspects. Secondly, the teacher professionalism focused on understanding and knowledge in theory in order to put teaching methods into practice, which needed

teachers to exercise judgments on management, pedagogy and evaluation. Thirdly, teachers knew how to cultivate their professional capacity or values and take their responsibilities in teacher own organizations. Further, teacher also should know a balance between teacher autonomy and appropriate accountability measures prescribed by government.

Blerim (2013) pointed out that under the special social and historical context a country also leaded to change educational environment and improve educational quality, which was not only from teacher professionalism but also focusing on the reasons of existing professionalism. Teachers' professionalism was helpful for contextual framework where teachers work environment was embedded.

Basis on this, Ozga (1995) also purposed that professionalism evaluation located in particular social and historical context, which was interpreted as a strategy to inspire and represent particular interests. And professionalism was an ideological weapon to control teachers and help teachers to self-defense in struggle against dilution at the same time. At the different background of society and history, the definition of professionalism was interpreted differently.

Hargreaves (2000) analyzed that teachers' professionalism had been improved and developed in many countries. An exciting board social movement advanced teachers' professionalism by learning to work in organizations and institutions effectively beyond school.

Sachs (2003) remarked that teachers' professionalism provided professional knowledge and environment to take responsibility for the teachers in teacher teaching

practices, which could be defined as a process to renovate teaching concept and conditions in a changeable work environment rapidly. And Sachs claimed that teachers' professionalism level was a special strategy to develop and promote teaching profession under social and political environment.

Neimi (2006) observed that teachers' competence and professionalism proved skills and readiness to face many different circumstances. Meanwhile, Brehm (2006) claimed that professionalism had three categories: professional parameters, professional behaviors and professional responsibilities. Professional parameters paid more attention to laws of city and federal confronting to educational and instructional issues of the legal and ethical. Professional behaviors were actions to adjust the individual's optimum and appropriate behaviors such as: making warm and harmony relationships with peers, parents, students and colleagues; role models of the students in the aspect of professional appearance and attitude. Professional responsibilities would demonstrate to take responsibility to the professionalism for a teacher, students, school climate and do benefits for the community. This dynamism resulted in the transferring status and implication of the teaching profession in historical, political and social background. Different approaches of teachers' professionalism also had different standards and linked with many things. However, the status and implication of teachers' professionalism were different meaning in diverse fields.

For the same point, Whitty (2000) claimed that it was the best to think the different meant and status of teacher professionalism as competing versions of teacher professionalism rather than seeing any one as fitting an essentialist definition of

professionalism in the twenty-first century. Haworth (2008) supported this pointed that teachers' professionalism was not only considered in an individual point of thinking ways and self-reflection, but it was rather considered as core thoughts and beliefs that had been related to teachers' role traditionally and normally.

Previous Studies on Teachers' Competence

A few previous studies in ASEAN has been conducted to focus on the school teachers' competence in different countries. Among those studies, Naree (2009) investigated teachers' competence of teachers at schools in the three southern provinces of Thailand, which aimed to find the relationship between teacher qualification, teaching experience, and school size and teacher competence. Based on this design, Naree (2009)identified the level of teacher competence of teachers in the three southern provinces of Thailand was quite low, and she suggested the Thai school administrators to emphasize on the importance of professional curriculum for teachers to learn from knowledge and experience in the aspect of nine competence; language and technology, curriculum development, learning management, Psychology for teachers, educational measurement and evaluation, classroom management, educational research, educational innovation and information technology, and teacher ship.

In Western Myanmar, another researcher Kavinda (2014) also conducted a study on the teachers' competence of two high schools in Northern Rakhine state, which compared teachers' competence in two high schools. Based on his results, the

teachers' competence in these two schools were needed to be improved still, as Myanmar is a developing country, with insufficient resources and lack of professional training, teachers in Myanmar were still using traditional teaching ways in their instruction, which was a big challenge for the schools in Northern Rakhine state and Myanmar also. As a result, Kavinda's (2014) study identified that there were significant differences of teacher competence according to teacher demographics, like gender, however, no different differences about teacher competence according to age and education background were identified by his study.

In China, Zhou (1994) has studied and stated that teacher competence had different levels according to teacher education background or teaching style. Schools should motivate teachers to improve teaching quality and professionalism through training plans and evaluation. Schools also could change teaching environment and relevant conditions to inspire teaching. High level of teacher competence was an imperative component for teaching competence, which included cognitive thinking, knowledge, psychological quality and physical condition. With robust growth of economy in China, education business also followed this step to improve teaching quality.

Background of Chinese High School Education System

According to Education in China from OECD (2016), China has the largest education system in the world. Chinese high education originated from Han dynasty, and developed quickly after the founded of the new China in 1949.

Chinese government has implemented many policies to prompted more students enter higher education institution, as well as to ensure the quality high education in recently years. These implementation relied on the national five-year-plan and divided into few stages. Firstly, China set up strict national standards for institutions of higher learning, majors and disciplines; and strengthened the degree awarding system and empowerment standard. Secondly, China carried out the undergraduate teaching project. In 2007, "undergraduate teaching quality and teaching reform project" was started. Then, after this in 2011, In order to carry out the spirit of National Education Guidelines, China should further deepen undergraduate education and teaching reform and improve the quality of undergraduate education. The Ministry of education decided to continue the implementation of the project during the 12th Five-Year Plan (2011-2015) and it was abbreviated as "undergraduate teaching project". The primary coverage included quality standard construction, professional comprehensive reform, national excellent open course construction and sharing, practice innovation ability training and teacher teaching ability promotion (Shatska, 2014).

Thirdly, according to Yan (2015), China emphasized on the supervision of quality of Chinese-foreign cooperatively-run schools. By the end of 2011, China has signed bilateral recognition agreements in degrees, academic qualifications and diplomas with more than 40 countries and regions. Meanwhile, Yan (2015) also argued that Chinese parents would like to send children to learn in foreign countries since the practice of opening up policy. So Chinese government cooperated with many countries to run school, which was convenient for bilateral students.

As OECD (2016) recorded, all the Chinese students attend school for at least nine years, which was named as the nine-year compulsory education according to government funds. Nine-year compulsory education includes primary school for six years, three years of middle school. After junior middle school, students could choose to a three-year senior middle school continuing to academic high schools, which help students to enter into university. Or students might choose a vocational course in vocational high schools. China put many educational policies of primary or secondary school about these years to ensure students to join in school. In order to get a certification of graduation for students, students were required to pass graduation examinations and meet education standards of physical. The graduation examinations were designed and administered by individual schools according to guidelines set by the city educational government or by state educational community. Students were typically examined in the following subjects for graduation to pass many subjects, Such as, Chinese, Mathematics, Chemistry, Physics, Foreign Language, and Politics.

Foreign researcher like Kinglun (2007) also acknowledged that China had been developing and improving in many aspects since reform and opening up in 1978. As for educational industry, China invested so much money and paid more attention to raise educational quality and promote the development of education business. Chinese government adapted to modern time and put educational policies into practice. Under the country's special social and economic background, at the same time, the education system met the new education needs and trends. So in the past two decades, China undertook massive reforms in the education system in China. But with the rapidly

development of economy and technology, China had finished comprehensive social transformation. Education business was an imperial part of the Five-Year Guideline. China paid more attention to education development, which always included implementing basic practices for children development. The Chinese government emphasized on both scale expansion and quality improvement according to some important strategies in the process of educational reform and development. Making plans always emphasized on expanding to developing plans as well as working plans for the higher level of quality (OECD, 2016).

Wang (2014) noted in the 18th CPC National Congress put forward to build well-off society in an all-around way. According to Wang (2014), the Chinese government is trying to solve an important educational problem, to adjust the educational resources with regional development imbalance. Located in Shaanxi Province, Hanzhong city is short of natural conditions, and fall behind in terms of economy compared with other cities in Shaanxi province. There was a gap about regional disparity among cities in Shaanxi Province. As observed, there was no previous studies about teachers' self-assessed perception on their competence of Hanzhong High School of Shaanxi Province, though the school also followed current educational policies with the guidance of local government.

A Brief Introduction to Teachers' Competence at the School

Hanzhong High School of Shaanxi Province is located in Hanzhong city, Shaanxi Province, China, which was built in 1739. Hanzhong High School of Shaanxi

Province was named as model middle school of Shaanxi Province by Shaanxi Education Department in 2013.

According to the interview with some teachers from this school, currently the school has 168 teachers, quite many of their teachers were graduated from many famous universities and the qualification of teachers were always the focus of school management work. Ninety-four percent students entered in many famous universities after graduation in this high school, which also explained why Hanzhong High School of Shaanxi Province was rewarded as advanced educational school of Shaanxi Province, nationwide harmonious school by Shaanxi Education Department in 2014.

The motto of Hanzhong High School of Shaanxi Province is pursuit of truth, do good turns, uphold goodness and be tactful, which encourages students to pursue the objective law of the development of things, to be a kind person to uphold goodness that is beneficial for others and society.

According to the interview with several teachers by this researcher, every classroom had equipped with multimedia into the teaching, such as computer, projector and electronic blackboard were used quite often. Hanzhong High School of Shaanxi Province improved teaching environment continually in recent years. Moreover, teachers in Hanzhong High School of Shaanxi Province were encouraged to transform their teaching concept and expanded their capacity to understand new information and improve innovation competence. Additionally, teachers were also encouraged to apply the new teaching methods to inspire students' curiosity and promote students' growth.

As few teachers also mentioned to the researcher in the interview, Hanzhong High School of Shaanxi Province had established clear teachers' recruiting standards. Firstly, the school required the applicant must get a master degree. Secondly, teachers must have teacher certification for teaching the secondary school in China. Thirdly, teachers must have good capacity of cooperation and innovation. And the school conducted the teachers' evaluation in every semester according to teaching hour, teaching plan, management, motivation and so on. The school will organize professional members, as well as uses of questionnaire from students, observation and test achievement to evaluate every teacher. These three ways combined to ensure the learning output and teaching quality. The school also encourages teachers to publish classroom research in China National Knowledge Internet or data-base. Every teacher is required to write at least an academic paper in six years. As a conclusion of the interview, this researcher believes Hanzhong High School of Shaanxi Province pays attention to the teacher competence and teaching quality, though no previous studies has been reported or conducted on the teachers' competence level.

Summary of Reviewed Literature

Teacher competence played an important role in teaching quality. High level teacher competence of teachers had excellent professionalism about academic knowledge. Previous studies about five components proved more responsibilities of teachers. Teachers should prepare well before class, making plans and holding interesting activities. Teachers' presentation was well-organized, following the content

step by step; combining some activities and interactions with students to promote student learning, which leaded to student creative thinking, problem-solving, insight and so on. Student learning was a long process under the guide of teachers in positive learning environment. Learning environment included school climate and classroom atmosphere. Teachers and administrators collaborated together to create good environment for school vision at Hanzhong High School of Shaanxi Province.

Chinese high school education system was still developing. Under the development of educational business in China gradually, Hanzhong High School of Shaanxi Province also would support the governments' policies and pay more attention to improve teacher competence for achieving school's vision.

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CHAPTER III

Research Methodology

This chapter discusses about the research methodology. Thus, this chapter includes research design, population selected by the study, research instrument. The researcher will explain the process of collecting data and analyzing data, as well as the summary of research process.

Research Design

This research aimed to compare teachers' self-assessed competence according to teachers' age, gender, education background at Hanzhong High School of Shaanxi Province.

This research was designed as a comparative study, by using a questionnaire that contained two parts. In the first part, the researcher identified the teachers' demographic data including age, gender, and education background; and the second part was designed to determine levels of teacher competence through five components, including pre-instruction, presentation, learning environment, student learning and professionalism.

Population

According to Department of Personnel in Hanzhong High school of Shaanxi Province, there were total of 168 full-time teachers currently teaching in Hanzhong

High School of Shaanxi Province. So the researcher would distribute the questionnaire to every teacher in order to identify teachers' competence level in Hanzhong High School of Shaanxi Province accordingly.

Research Instrument

The researcher used the original questionnaire of Huyen (2003) study, which was adopted it from Medley (1977) originally. This questionnaire was divided into two parts. In the first part of this questionnaire, the object was about teachers' competence according to teachers' age, gender, education background at Hanzhong High School of Shaanxi Province. In the second part of this questionnaire, the object was about the level of teacher competence through components pre-instruction, presentation, learning environment, student learning and professionalism.

There were totally 38 questions in this questionnaire. Question 1-6 was used to measure teachers' competence towards pre-instruction. Question 7-16 was used to measure teachers' competence towards presentation. Question 17-29 was used to measure teachers' competence towards learning-environment. Question 30-31was used to measure teachers' competence towards student learning. Question 32-38 was used to measure teachers' competence towards professionalism.

Table 1:

Breakdown of Survey Question

No	Components of Teacher Competence	Survey Question
1	Pre-instruction	1,2,3,4,5,6
2	Presentation	7,8,9,10,11,12,13,14,15 and 16
3	Learning Environment	17,18,19,20,21,22,23,24,25,26,27,28,and 29
4	Student Learning	30 and 31
5	Professionalism	32,33,34,35,36,37 and 38

There were 36 questions in this questionnaire. If the score was 5 or the range was in 4.51-5.00, teachers were very positive for teacher competence. And if the score was 1 or the range was in 1.00-1.50, teachers were very negative for teacher competence. The detail was table below as follow.

Table 2:

Interpretation and Range

Teachers' perception	Scores	Range	Interpretation
Strongly Agree	5	4.51-5.00	Very High
Agree	4	3.51-4.50	High
Neutral	3	2.51-3.50	Neutral
Disagree	2	1.51-2.50	Low
Strongly Disagree	1	1.00-1.50	Very Low

Validity and Reliability

As this study adopted the questionnaire from Huyen (2003) study and Medley

(1977) study. The validity of the questionnaire was confirmed by Huyen (2003) and Medley (1977).

According to Huyen (2003), the reliability of this questionnaire was analyzed by means of Cronbach's alpha to .81, which was regarded as reliable greatly of teacher competence. Another researcher Kavinda (2014) also used the same questionnaire, the Cronbach's alpha of his study reached to .73, which was regarded as high reliability. The detailed reliabilities report from the previous studies is shown in the following Table 3. The researcher also has reported the reliability of this questionnaire based on this study's data analysis as Table 3 shown.

Table 3:

Cronbach's Alpha Report from Different Studies

Previous Studies	**Cronbach's alpha**
Huyen (2003)	.81
Kavinada (2014)	.73
Current Study	.75

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Translation of the Instrument

Since the study was conducted in China, the researcher used the Chinese version for the teachers in Hanzhong High School of Shaanxi Province. In order to have a quality translation, the researcher sought the translation service of a legal institution, which is called *Real Learning Language and Translation Institution.*

The translation institution provided this piece of translation service for many

years, with high level of accuracy and accredited as reliable including the government and court uses for the entire society. The details of questionnaire evidence from this institution later would be shown in the Appendix C.

Collection of Data

This study mainly focused on the teacher competence under five components and its comparison according to teachers' demographics. As the personnel registration office recorded, there were 168 full-time currently working in the Hanzhong High School of Shaanxi Province, the researcher distributed 168 questionnaires to all the full-time teachers.

Before the distribution of the questionnaires, the researcher had already gotten the permission from the principal from Hanzhong High School of Shaanxi Province. Since the school principal also would like to know the teacher competence compared with their age, gender, education background, as well as the level of teacher competence based on their self-assessment, this study got a lot of support from the school management team, especially in the interview and data collection processes. The research was conducted systematically following a proposed design with a specific schedule.

Table 4 below shows the schedule and action plans for conducting this study in last few months. Finally, among 168 questionnaires, 150 are returned and valid, which reached 89% for valid rate.

Table 4:

Timeline for This Study

Time duration	**Actions**
May 2018	Got the permission from the target school
September 2018	Write the proposal
October 2018	Thesis proposal examination
November 2018	Translate and distribute the questionnaires
December 2018	Collect and analyze the data
January 2019	Complete the five chapters, prepare for final defense

Data Analysis

The collection of data were computed based on each objective; the following statistical methods were utilized in this process:

For research objective 1: Frequency, Percentage were used to identify the Teachers' demographics factors including age, gender and education background at Hanzhong High School of Shaanxi Province.

For research objective 2: Mean and Standard Deviation were used to identify the levels of teachers' competence at Hanzhong High School of Shaanxi Province.

For research objective 3: Independent samples t-test were used to compare the teachers' competence according to their gender; One way ANOVA were used to compare the teachers' competence according to teachers age, gender and education background at Hanzhong High School of Shaanxi Province.

Summary of the Research Process

Research objective	**Source of Data or Sample**	**Data Collection Method or Research Instrument**	**Method of Data Analysis**
1. To identify the Teachers' Demographics Factors including Age, Gender and Education Background at. Hanzhong High School of Shaanxi Province.	168 teachers, who teaching in Hanzhong High School of Shaanxi Province	Questionnaire Part I and II	Frequency Percentage
2. To identify the Levels of Teachers' Competence at Hanzhong High School of Shaanxi Province.			Mean Standard Deviation
3. To compare the Teachers' Competence according to Age, Gender and Education Background at Hanzhong High School of Shaanxi Province.			Independent samples t-Test and One way-ANOVA

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CHAPTER IV

Research Findings

This chapter presents the results of valid questionnaires from teachers teaching at the Hanzhong High School of Shaanxi Province, in Hanzhong city, Shaanxi province, China. The researcher got back 150 questionnaires of distributing 168 questionnaires.

From three research objectives, data analysis and these findings of this study were described as follows:

1. To identify the teachers' demographics factors including age, gender and education background at Hanzhong High School of Shaanxi Province.
2. To identify the level of teachers' competence at Hanzhong High School of Shaanxi Province.
3. To compare the teachers' competence according to age, gender and education background at Hanzhong High School of Shaanxi Province.

Research Objective One

The objective one was to identify the teachers' demographics factors including age, gender and education background at Hanzhong High School of Shaanxi Province. The researcher used part one of questionnaire to identify teachers' demographics which included age, gender, education background. There were total 150 full-time teachers to take part in this research, including 68 male teachers, and 82

female teachers. And the following Table 5-7 below presented the demographics.

(1) **Age**

There were three age groups in this questionnaire, including 39.3 percent teachers under thirty years old, 44.7 percent teachers between 30 and 45 years old and 16 percent teachers between 45 and 60 years old.

Table 5:

Teachers' Age Group

Age	Number	Percentage
Under 30	59	39.3
30-45	67	44.7
45-60	24	16
Total	150	100

（2）Gender

In Hanzhong High School of Shaanxi Province, there were 54.7% female teachers, which was more than 45.3% male teachers.

Table 6:

Teachers' Gender

Gender	Number	Percentage
Male	68	45.3
Female	82	54.7
Total	150	100

（3）Education Background

There were 105 teachers who had Bachelor degrees, occupying 70% of human resources. And the rest 30% of them obtained over Bachelor degrees in Hanzhong High School of Shaanxi Province.

Table 7:

Education Background of Teachers

Education Background	Number	Percentage
Bachelor	105	70
Over bachelor	45	30
Total	150	100

Research Objective Two

This objective was to identify the level of Teachers' Competence at Hanzhong High School of Shaanxi Province. There were 38 items in this questionnaire, including pre-instruction, presentation, learn environment, student learning and professionalism. Pre-instruction was from items 1 to 6, and the mean score was 4.11. Presentation was from items 7 to 16, and the mean score was 4.03. Learn environment was from items 17 to 29, and the mean score was 4.13. Student learning was from items 30 to 31, and the mean score was 4.18. Professionalism was from items 32 to 38, and the mean score was 4.24. Table 8 below shows the teacher competence of pre-instruction in detail.

Table 8:

Teacher Competence in Pre-instruction

Items	Mean	S.D.	Interpretation
I expected continuous academic, social, emotional and physical improvement.	4.36	0.64	High
I collect data to identify students' skills level to determine students' learning needs.	4.10	0.80	High
I established approximately challenging expectations for students.	4.08	0.78	High
I demonstrate adequate knowledge in the subject matter.	4.06	0.83	High
I set high standards for my role as a teacher.	4.05	0.84	High
I demonstrate the ability to specify or select appreciate learner objectives for the lesson.	4.02	0.81	High
Total	4.11	0.36	High

Table 8 indicated that teachers expected continuous academic, social, emotional and physical improvement in the process of pre-instruction. The highest score (4.36) means from item of "I expected continuous academic, social, emotional and physical improvement", which implied that teachers kept doing the research and stayed curious about the knowledge in the aspect of work or life. The lowest (4.02) meant from item of "I demonstrate the ability to specify or select appreciate learner objectives for the lesson", meant that some teachers didn't demonstrate the ability to specify or select

appreciate learner objectives for the lesson. Some teachers could be confused to set suitable teaching objective when teachers faced different level of students under the different and complex situations.

Table 9:

Teacher Competence in Presentation

Items	Mean	S.D.	Interpretation
I allocate instructional time consistent with learning objectives.	4.19	0.80	High
I use instructional time effectively and efficiently.	4.18	0.76	High
I provide feedback to learners throughout the lesson.	4.06	0.78	High
I use appropriate verbal and non-verbal expression.	4.05	0.77	High
I provide clear written or verbal information to student.	4.03	0.72	High
I work effectively with individual, small groups and larger groups.	4.01	0.81	High
I effectively implement a variety of methods suitable to the objectives, learners and the environment.	3.99	0.71	High
I use available technological tools to enhance teaching method.	3.95	0.79	High
I instinct students to use available technology to enhance their learning.	3.94	0.82	High
I use available technological tools to enhance student learning method.	3.90	0.84	High
Total	4.03	0.28	High

The highest score (4.19) meant from the first row in the item of "I allocate instructional time consistent with learning objectives" in Table 9 showed that teachers allocated instructional time consistent with learning objectives. However, the lowest

(3.90) meant scores in the item of "I use available technological tools to enhance student learning method" showed teachers didn't always use technological tools to enhance teaching method.

Table 10:

Teacher Competence in Learning Environment

Items	Mean	S.D.	Interpretation
I provide an environment that is conductive to learning.	4.27	0.76	High
I establish clear behavioral expectations which are evidenced in the classroom.	4.26	0.73	High
I establish a climate which encourages student thinking.	4.25	0.75	High
I help learners develop and maintain positive self-esteem.	4.14	0.76	High
I plan instruction at varying and appreciate level of thinking.	4.14	0.76	High
I model a positive attitude toward learning.	4.13	0.69	High
I use discussing and questioning strategies to stimulate student thinking.	4.11	0.80	High
I provide a safe environment for students.	4.11	0.74	High
I structure the learning environment to encourage students to become self-motivated.	4.10	0.77	High
I use strategies which develop intrinsic motivation.	4.08	0.79	High
I maintained acceptable classroom behavior.	4.08	0.80	High
I promote friendly interpersonal relationships.	4.04	0.74	High
I deal fairly with learners.	3.96	0.78	High
Total	4.18	0.57	High

The highest mean (4.27) scores from the first row in the item of "I provide an environment that is conductive to learning" in Table 10 showed teachers could

provide positive environment that was helpful to learning. The lowest mean (3.96) scores in the item of "I deal fairly with learners" implied some teachers couldn't deal with learners fairly under the different situations.

Table 11:

Teacher Competence in Student Learning

Items	Mean	S.D.	Interpretation
I adjust methods and resources as a result of analyzing assessment data.	4.21	0.75	High
I use a variety of assessment to monitor student learning.	4.15	0.77	High
Total	4.13	0.27	High

The highest mean (4.21) scores in the item of "I adjust methods and resources as a result of analyzing assessment data" in Table 11 showed that teacher competence was good in student learning. Meanwhile, the item of "I use a variety of assessment to monitor student learning" got the lowest means scores (4.15), which indicated that teachers could use a variety of assessment to monitor student learning and adjust method as a result of analyzing assessment data.

Table 12:

Teacher Competence in Professionalism

Items	Mean	S.D.	Interpretation
I demonstrate professional growth.	4.47	0.71	High
I serve as a positive educational role.	4.36	0.75	High
I make effective use of time.	4.26	0.69	High
I exhibit cooperative behavior in working within the school community.	4.22	0.74	High
I execute responsibilities in a professional timely manner.	4.21	0.72	High
I assume a pro-active role in communication of the school's strategic plan.	4.16	0.78	High
I treat all people with respect and dignity.	4.03	0.77	High
Total	4.24	0.42	High

The highest mean scores (4.47) in the item of "I demonstrate professional growth" in Table 12 showed that teachers could pay attention to professional development and expect professional growth. But the lowest means scores (4.03) in the item of "I treat all people with respect and dignity" showed that teachers sometimes couldn't treat all students with respect and dignity.

Table 13:

Teacher Competence with Five Components

Teacher competence	Mean	S.D.	Interpretation
Professionalism	4.24	0.42	High
Learning environment	4.18	0.57	High
Student learning	4.13	0.27	High
Pre-instruction	4.11	0.36	High
Presentation	4.03	0.28	High
Overall	4.13	0.38	High

Table 13 above showed the overall of teachers' competence based on the five component was high, while teacher presentation got the lowest mean scores, which reflected that teacher competence of presentation needs more improvement. The teacher competence of professionalism was relatively high, which to some degree indicated the school had professional teachers.

Research Objective Three

The last research objective was to compare the teachers' competence according to their age, gender, education background in Hanzhong High School of Shaanxi Province.

(1) Compare to their age

The researcher firstly compared teachers' competence according to their age. Since there were three age groups in the first part of the questionnaire, under 30 years old, 30-45 years old and 45-60 years old, one way ANOVA was used to determine the

differences among different age groups. Table 14 below presented that there were significant differences of teacher competence according to age in Hanzhong High School of Shaanxi Province, as the p value of significance was .000, which indicated the F test was significant, and there were significant differences for at least one pair of groups.

Table 14:

Comparison of the Teachers' Competence according to Their Age

Source of Variance	Sum of Squares	df	Mean Square	F	Sig
Between Groups	1.20	2	.60	15.20	.000*
Within Groups	5.80	147	.04		
Total	7.01	149			

In order to determine the significant differences in different pairs, Post Hoc multiple comparison of scheff's test on the teachers' competences according to their age group was further conducted. The multiple comparison result of this test was shown in Table 15 below. From Table 15, it could be concluded that the teachers in age group 30-45 years old had the highest competence; then followed the teachers under 30 years old. Teachers between 45-60 years old had the relative lowest level of competence.

Table 15:

Multiple Comparison of the Teachers' Competence according to Their Age

Age (I)	Age (J)	Mean Difference	Sig.
Under 30 years	30-45 years	-.12	.004*
	45-60 years	.12	.029*
30-45 years	Under 30 years	-.12	.004*
	45-60 years	-.24	.000*
45-60 years	Under 30 years	-.12	.029*
	30-45 years	-.24	.000*

(2) Compare to their gender

The researcher compared teachers' competence according to their gender. Since there were females and males for the teachers 'gender, the independent samples t-test was used for this test. Table 16 below showed that the p value significance was.63, which is more than .05 and there were no significant differences of Teachers' Competence according to gender at Hanzhong High School of Shaanxi Province.

Table 16:

Comparing the Teachers' Competence according to Their Gender

Gender	Mean	S.D.	t-Test for quality of means		
Male	4.13	.21	t	df	Sig(2-tailed)
Female	4.14	.22	-.48	148	.63

(3) Compare to their educational background

The researcher lastly compared teachers' competence according to their educational background. Since there were only two groups for the teachers' educational background, the independent samples t-test was used for this test. Table 17 below showed that the p value significance was.00, which is less than .05 and there were significant differences of Teachers' Competence according to Education Background at Hanzhong High School of Shaanxi Province. As observed, the teachers with Master degree and over showed higher competences than the ones with Bachelor degrees only.

Table 17:

Comparing the Teachers' Competence according to Their Education Background

Education background	Mean	S.D.	t-Test for quality of means		
Bachelor degree	4.09	.19	t	df	Sig(2-tailed)
Master degree	4.24	.23	4.03	148	.000*

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CHAPTER V

Conclusion, Discussion and Recommendations

This chapter presented about the findings of this study, conclusion of the results, and recommendations for this selected school and relative topic for further research.

Initially, the study identified to teachers' demographics according to age, gender and education background. And then the objective was to identify the level of Teachers' Competence according to pre-instruction, presentation, learning environment, student learning and professionalism. Finally, the researcher was to compare teachers' competence according to teacher competence at Hanzhong High School of Shaanxi Province. The researchers distributed questionnaires to 168 full-time teachers, which are returned 150 questionnaires. There were three objectives in this study.

1. To identify the Teachers' Demographics Factors including Age, Gender and Education Background at Hanzhong High School of Shaanxi Province.
2. To identify the level of Teachers' Competence at Hanzhong High School of Shaanxi Province.
3. To compare the Teachers' Competence according to Age, Gender and Education Background at Hanzhong High School of Shaanxi Province.

Based on these findings and responses, the researcher found out the significant findings just as follow.

Findings

There were 68 males and 82 females in Hanzhong High School of Shaanxi Province. Males were about 45.3%, which were less than 54.7% females.

There were three age groups in this study, 59 teachers under 30 years old taking 39.3%, 67 teachers between 30 and 45 years old taking 44.7%, 24 teachers between 45 and 60 years old taking 16% in Hanzhong High School of Shaanxi Province. The second group 67 teachers got the highest mean score about teacher competence; the teachers got the second highest mean score under 30 years old; the last one was teachers between 45 and 60 years old. And according to One-way ANOVA data analysis, sig. was smaller than .05, so there were significant differences of teacher competence according to age in Hanzhong High School of Shaanxi Province. And every part of teacher competence was high mean score. The mean of pre-instruction was 4.11; the mean of presentation was 4.03; the mean of learning environment was 4.13; the mean of study learning was 4.18 and the mean of professionalism was 4.24.

There were no significant differences of Teachers' Competence according to gender at Hanzhong High School of Shaanxi Province.

There were 105 teachers who had bachelor degree, taking 70% main resources. And the rest 30% was Master degree in Hanzhong High School of Shaanxi Province. And t-test for equality of means presents sig. was .000, which was less than .05. So there were significant differences of teacher competence according to education background in Hanzhong High School of Shaanxi Province.

Conclusion

Based on findings derived from data analysis, the researcher made some conclusions as follows:

There were 160 teachers, including 68 males and 82 females, 105 teachers who had bachelor degree, taking 70% main resources. And the rest 30% was Master degree in Hanzhong High School of Shaanxi Province. Teachers' competence including its five components were all high， the rank from the high to low, were professionalism, student learning, pre-instruction, learning environment, and presentation.

No significant differences of Teachers' Competence according to gender at Hanzhong High School of Shaanxi Province was found in this study. However, there were significant differences of teacher competence according to age in Hanzhong High School of Shaanxi Province. Teachers between 30 and 45 years old were the most and got the highest mean score about teacher competence. Teachers under 30 years old got the second highest mean score about teacher competence Teachers between 45 and 60 years old were the least and got the lowest mean score about teacher competence. Moreover, significant differences of teacher competence according to education background in Hanzhong High School of Shaanxi Province was also founded in this study, the teachers with master degrees or up had more competence compared with those with the Bachelor degrees.

Discussion

This study found there were significant differences of teacher competence according to education background in Hanzhong High School of Shaanxi Province, which is opposite to the study of Kavinda (2014) because of different environment between Myanmar and China. Nevzat (2009) pointed out that high level of teacher competence meant high teaching quality. High education background meant excellent ability to create positive student learning environment in pre-instruction and teaching process, and high professionalism in academic aspect.

There were significant differences of teacher competence according to age in this study, which is opposite to the study of Kavinda (2014). The level of teachers under 30 years old and over 30 years old about teacher competence are almost equal in Myanmar. However, there are different levels of teacher competence in Hanzhong High School of Shaanxi Province. Gunduz (2016) pointed out that teachers' responsibility should teach classes; make positive growth environment and keep good relationship with students. According to the interview, teachers over 30 years old could have good relationship with students and enjoyed teaching time in Hanzhong High School of Shaanxi Province. On the contrary, teachers between 45-60 years old had more experience; teachers couldn't catch up innovation to adjust themselves. Teachers should learn more new ICT knowledge according to the findings of teachers' presentation skill in ICT. Therefore, OECD (2009) described that teachers should teach in using technological appliance for effective teaching.

Five components of teacher competence are pre-instruction, presentation, student

learning, learning environment and professionalism. Teachers who worked in Hanzhong High School of Shaanxi Province got the highest score in professionalism. Robert (2010) claimed that some new teachers working an organization should been trained usually about teaching professionalism. Nowadays, a series of strict standard had been set when Hanzhong High School of Shaanxi Province enrolled new teachers according to the interview with teachers. And there are some advices as follow; Yu (2010) proposed that school should organize many activities to cultivate previous teachers, such as, inviting famous professionals to make a course of lectures; giving teachers some accounts in order to improve teaching according to internet; and sending teachers to observe teaching of other schools. Because of these diverse opportunities and chances from schools, teachers kept enthusiastic and passionate in learning fresh teaching style so that teachers make progress constantly.

And teachers keep good relationship with students in Hanzhong High School of Shaanxi Province according to the interview. Alison (2017) claimed that teachers were good communicators between students and school; cooperated with students to finish teaching mission, took relative responsibility to treat students equally and enthusiastically.

However, the study found the mean score of presentation about teacher competence was the lowest, which suggested the school administrators should try to improve more of the teachers' presentation in their future work. So school administrators could organize more improvement training, peer interacting and invite famous educators to train teachers. Teachers should focus on the class assessment of

writing and reading comprehension a lot, this may influence the way of teacher presentation in the classroom, which was also mentioned by some teachers in the interview process. Nowadays China's education system pays a lot more into the written examinations especially.

Recommendations

Based on the findings and conclusions of this study, the researcher had the following recommendations for different group of people, as follows:

Recommendations for teachers in Hanzhong High School of Shaanxi Province.

Firstly, even though teachers have high score about professionalism, teachers also should read articles and dissertations to constantly improve own professional knowledge and skills to adapt to challengeable world. Teachers could also observe famous teachers' teaching and learn diverse teaching methods from internet. Teachers could adjust teaching style and change teaching method in different situations. And some teachers should use high technology to enhance their teaching and motivate students to use available technology, especially some old teachers.

Secondly, teachers are communicators between students and school (John, 2011). So teachers should communicate with students well from students' feedback. Teachers should give more spaces to students and respect students in daily life, which promote students to give real feedback. Teachers could adjust themselves to give suitable teaching style in this cooperation relationship. It is important for students to provide a

warm and positive environment, which ensure students to get full dignity and respect. Teachers should give equal rights and views to every student, even though some students are not positive.

Thirdly, as good communicators, teachers should take school's plan into practice. Some teachers don't care school's policies and coordinate development plan positively. School always follows government policies to adjust teaching objective, and encourages teachers to finish new plans successfully under the cooperation between each other. Sometimes teachers also need to communicate with parents to finish plans together. Teachers should listen to school and take development plans into practice.

Recommendations for administrators in Hanzhong High School of Shaanxi Province.

Administrators should take some activities to improve teacher competence, especially some old teachers. High technology is a good appliance to improve teaching quality. School could invite old teachers to learn how to use ICT and new teaching style into practice. Old teachers also could observe skillful teachers teaching and summarize suitable methods to improve own competence under this progressive background. Administrators could help these teachers combine previous experience with new technology in order to follow time steps.

Administrators should create more chance to encourage teachers to communicate teaching style according to teamwork, group project (Don, 2006). Teachers inspire

students to focus on own study. Teachers could solve problems together and adopt suitable methods to deal with issues under the same situation, which also is a good process to understand administrators' actions and policies. Teachers would allocate instructional time effectively and implement a variety of suitable methods for individual, small groups and larger groups conveniently. And it is efficient for teachers to get feedback and use teaching appropriate method. If teachers and administrators collaborate with each other, teachers can achieve schools' vision successfully.

Recommendations for future researchers in Hanzhong High School of Shaanxi Province.

Teacher competence is an essential part to improve teaching quality. Every school should pay more attention to teacher competence under pre-instruction, presentation, learning-environment, student learning and professionalism, which is appropriate for every school. For future researchers, whatever schools will be conducted, such as middle schools, high schools or private schools, public schools or international schools. According to these five components, the future researchers could know teachers' level of their competence and give some pieces of advice to improve teaching quality. Especially, nowadays Chinese government pays more attention to education business, so teacher competence is a hot topic. This study provides some information to future researchers.

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APPENDIES

Appendix A

Part I: Personal Information

Directions: please read each question and answer " √ " in the following box carefully.

1: Please specify your gender

☐ Male

☐ Female

2: Age group

☐ Under 30

☐ 30 -45

☐ 45 -60

3: Education background

☐ Diploma

☐ College BA

☐ Master and over

Part 2: teachers' competence questionnaire in the HANZHONG HIGH SCHOOL OF SHAANXI PROVINCE in Shaanxi province, China.

Heading	NO	Statement	SD	D	N	A	SA
pre-instruction	1	I expected continuous academic, social, emotional and physical improvement					
	2	I established approximately challenging expectations for students.					

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Heading	NO	Statement	SD	D	N	A	SA
	3	I set high standards for his/her role as a teacher.					
	4	I collect data to identify students' skills level to determine students' learning needs.					
	5	I demonstrate adequate knowledge in the subject matter.					
	6	I demonstrate the ability to specify or select appreciate learner objectives for the lesson.					
presentation	7	I effectively implement a variety of methods suitable to the objectives, learners and the environment.					
	8	I work effectively with individual, small groups and larger groups.					
	9	I use technological tools available to enhance teaching method.					
	10	I use available technological tools to enhance teaching method.					
	11	I instinct students to use available technology to enhance their learning.					
	12	I provide clear written or verbal					

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		information to student.					
	13	I provide feedback to learners throughout the lesson.					
	14	I use appropriate verbal and non-verbal expression.					
	15	I allocate instructional time consistent with learning objectives.					
	16	I use instructional time effectively and efficiently.					
Learning environment	17	I provide a safe environment for students.					
	18	I provide an environment that is conductive to learning.					
	19	I help learners develop and maintain positive self-esteem.					
	20	I promote friendly interpersonal relationships.					
	21	I plan instruction at varying and appreciate level of thinking.					
	22	I establish a climate which encourages student thinking.					
	23	I use discussing and questioning strategies to stimulate student thinking.					

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Heading	NO	Statement	SD	D	N	A	SA
	24	I establish clear behavioral expectations which are evidenced in the classroom.					
	25	I maintained acceptable classroom behavior.					
	26	I deal fairly with learners.					
	27	I model a positive attitude toward learning.					
	28	I structure the learning environment to encourage students to become self-motivated.					
	29	I use strategies which develop intrinsic motivation.					
Student learning	30	I use a variety of assessment to monitor student learning.					
	31	I adjust methods and resources as a result of analyzing assessment data.					
professionalism	32	I assume a pro-active role in communication of the school's strategic plan.					
	33	I exhibit cooperative behavior in working within the school community.					
	34	I treat all people with respect and dignity.					

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	NO	Statement	SD	D	N	A	SA
	35	I serve as a positive educational role.					
	36	I make effective use of time.					
	37	I execute responsibilities in a professional timely manner.					
	38	I demonstrate professional growth					

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附录 1

关于教师工作能力的问卷调查

第一部分：基本信息

说明：请仔细阅读以下每一项并在符合您的情况的答案后画“√”。

1：性别

□男

□女

2:年龄

□ 30 岁以下

□ 30-45 岁

□ 45-60 岁

3:教育背景

□ 专科

□ 本科及本科以上

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第二部分：关于中国陕西省汉中高级中学教师工作能力的问卷调查

说明:请仔细阅读以下表格中的每一项表述，并根据您在教学和工作中的实

际情况，从 1-5 分的格子里选择代表您的认识，画“√”。

请注意 1-5 分别代表您对此项表述的认同程度，其中:

1=完全不同意
2=不同意
3=中立(既不同意也不反对)
4=同意
5=完全同意

标题	项	问题表述	1 完全不同意	2 不同意	3 中立	4 同意	5 完全同意
教学前	1	我期望在学术、社交、情感和身体素质等方面有着持续的提高。					
	2	我为我的学生设立了一些有挑战性的期望目标。					
	3	作为教师，我对这个角色设定了较高的行为准则。					
	4	为了通过用学生的技能水平来确定其学习的需求，我会收集相应的数据。					
	5	我对授课的内容有着充分的了解。					
	6	我有足够的能力来为课程指定或选择合适的学习目标。					
	7	我会有选择地使用各种方法来适应不同的学习目标、学生以及周边环境。					
	8	我会有选择性地与个人、小组或大团队合作。					
	9	我会使用合适的技术工具来提高教学方法。					
教学中	10	我会使用合适的技术工具来提高学生学习					
	11	我支持学生使用合适的科技来提高学习成绩。					
	12	我会给学生提供清晰的书面或口头信息。					
	13	在整个课程中，我会给学生以反馈。					
	14	我可以使用适当的语言或非语言表述。					
	15	我可以根据教学目标而分配教学时间。					
	16	我对教学时间的使用是有效并合理的。					

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标题	项	问题表述	1 完全不同意	2 不同意	3 中立	4 同意	5 完全同意
	17	我为学生提供了安全的学习环境。					
	18	我提供的环境是有助于学习的。					
	19	我帮助学生建立并保持了积极的自尊。					
	20	我提倡友好的人际关系。					
学习环境	21	我建立的教学计划是基于不同的思考理解水平上的。					
	22	我建立了一个鼓励学生思考的氛围。					
	23	我使用探讨及提问策略来激励学习思考。					
	24	在课堂上，我使用明确并已被证明有效的行为预期。					
	25	我一直使用可接受的课堂行为。					
	26	我公平地对待每个学生。					
	27	我树立了积极的学习态度。					
	28	我建立了鼓励学生自我激励的学习环境。					
	29	我使用方法以建立积极的内因。					
学生学习	30	我使用各种评估方法来监管学生的学习。					
	31	我会根据评估数据的分析后的结果来调整教学方法和资源。					
职业精神	32	我会积极地参与制定学校发展计划。					
	33	我会配合学校的各种活动。					
	34	我对所有人都给予尊重并保护他们的尊严。					
	35	我会扮演一个积极的教育者的角色。					
	36	我会合理分配时间。					
	37	我以专业并适时的方式承担职责。					
	38	我会展示出本人职业成长的成果。					

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Letter of Certification

This is to certify that Miss Yuan Xu's Questionnaire for her Master's thesis in Assumption University of Thailand were translated and edited into standardized Chinese simplified version by our professional translator from *RealLearning Center & Translation Institute*. The translated version was exactly developed based on the original English one, and a *back-translation* procedure was used for checking the translation validity. Thus, the quality of the translated Chinese version was confirmed herein this letter.

RealLearning Center &
Translation Institute
Bangkok, Thailand

.....

Mr. RuiMing Zhong
(The Translator)
October 18, 2011

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