

2018, Volume 5, e4397 ISSN Online: 2333-9721 ISSN Print: 2333-9705

On the Construction of Teacher Knowledge from the Perspective of Sociology of Knowledge: Exemplified with Teachers of Open University of China

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How to cite this paper: Chen, J.X. (2018) On the Construction of Teacher Knowledge from the Perspective of Sociology of Knowledge: Exemplified with Teachers of Open University of China. *Open Access Library Journal*, **5**: e4397.

https://doi.org/10.4236/oalib.1104397

Received: February 2, 2018 Accepted: April 26, 2018 Published: April 29, 2018

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Abstract

The construction of one's knowledge and ideas is subject to social structure and culture. According to the analysis of principles of sociology of knowledge, the mission of Open University of China is building a knowledge system. In light of the path to acquiring objective realism and subject constructionism, teacher knowledge covers practical knowledge and theoretical knowledge. Based on the analysis of sociology of knowledge, the teachers of Open University of China should be equipped with modern educational technology knowledge, subject knowledge, adult education knowledge, TPACK (Technological Pedagogical Content Knowledge), project management knowledge and so on.

Subject Areas

Education

Keywords

Teachers of Open University of China, Knowledge, Teacher Knowledge, Sociology of Knowledge

1. Introduction

The Open University of China, a new-typed college, will make an important reform in its function, teaching model and development mechanism [1]. With the foundation of The Open University of China, the author, a professional teacher of Open Universities, has been pondering a question, "How do the teachers of Open University of China conduct teaching? Besides, in order to

teach effectively, what kind of teach knowledge should the teachers acquire?"

The sociology of knowledge holds that "Man's social being determines his consciousness, and the formation of all the knowledge and ideas is subject to social structure and culture [2]. The Open University of China was founded in order to meet the challenges of current era, so our national strategies in politics, economics and education will make an effect on the construction of its teachers' knowledge. Therefore, this project will provide enlightenment on the professional development of the teachers of Open University of China.

2. Approach Analysis of the Project

As to the classification of teacher knowledge, there are many ways, ranging from two types to seven types [3]. After a literature review of teacher knowledge, some types of teacher knowledge are indisputable, such as subject knowledge, pedagogical knowledge, and so on. However, as to whether practical knowledge should be included into teacher knowledge, opinions vary. Therefore, if we want to discuss what knowledge the teachers of The Open University of China should be equipped with, we should give priority to solving the problem that whether practical knowledge should be included into teacher knowledge. In this project, firstly, we discuss the essence of knowledge, which is the origin of teacher knowledge, and then analyze whether practical knowledge is included into teacher knowledge. Secondly, the principles of sociology of knowledge and their influence on teacher knowledge are required to analyze. Lastly, with the principles of sociology of knowledge and teacher knowledge, we can know what types of teacher knowledge the teachers of Open University of China need acquire after analyzing the factors which will influence teacher knowledge. Therefore, the project covers five parts: 1) approach analysis of the project; 2) the interpretation of knowledge and teacher knowledge; 3) analysis of the principles of sociology of knowledge; 4) what teacher knowledge the teachers of Open University of China need to acquire based on sociology of knowledge; 5) Conclusion.

3. The Interpretation of Knowledge and Teacher Knowledge 3.1. What Is Knowledge?

Opinions vary as to the definition of knowledge. The project discusses the essence of knowledge based on epistemology. As to what is knowledge, objective realism holds that "knowledge is justified true belief (Plato)" [4]. Plato thinks knowledge is true belief based on argument. A statement must meet three criteria in order to be considered knowledge: it must be justified, true and believed. In a word, knowledge is justified true belief. Knowledge is a set of principles independent of human being's experience, the established procedure and unimpeached truth, which is a precise statement of objective world [5]. The explanation of knowledge in Cihai is a theory of objective realism. Knowledge is the understanding of human achievement and related to academic culture. In this theory, knowledge has the characteristics of objectivism, universalism, and value

neutrality. The theory of subject constructivism holds that knowledge is acquired through the construction of subject. Dewey believed that knowledge is the result of changing from a problematic context to the other problematic context [6]. The generation and acquisition of knowledge is not the established reflection of objective world, but the interreaction of subject and object. The individual chooses the reality world, modifies the reality world and endows the reality world with the unique meaning in the process of cognition of the world [7]. Based on this theory, knowledge has the characteristics of context, and people cannot give up their own proposition, ideas, feelings and prejudice in the process of the acquisition of knowledge.

3.2. What Is Teacher Knowledge?

Teacher knowledge means teachers, in order to teach effectively, possess a series of understanding, knowledge and skills [7], which is a part of knowledge.

Based on the theory of objective realism, teacher knowledge has been widely justified and accepted. With literature review of teacher knowledge, the classification of teacher knowledge put forward by Shulman is the final authority. Shulman classified teacher knowledge into content knowledge, general pedagogical knowledge, curriculum knowledge, pedagogical content knowledge, knowledge of learners and their characteristics, knowledge of educational context and knowledge of educational ends, purposes and values [8]. However, Professor Chen Xiangming of Peking University defined the knowledge mentioned above as teachers' theoretical knowledge, which is appropriate in the author's opinion. In this paper, the author adopts Professor Chen's classification of teacher knowledge. In reality, because of different types of teachers, different teaching methods and different educational objects, the teachers need different teacher knowledge. For instance, in contrast to the primary and secondary school teachers, the teachers of Radio & TV Universities need the different teacher knowledge. The educational objects of Radio & TV Universities are adults, therefore, the teachers need to know adults' learning characteristics, while the primary and secondary school teachers need to understand primary and secondary students' characteristics, all of which belong to knowledge of learners and their characteristics. Besides, the teaching method adopted by teachers of Radio & TV Universities is web-based distance education, therefore, modern educational technology knowledge (pedagogical content knowledge) is needed. In a word, discussing teacher knowledge should take the specific educational objects into account. The paper, based on Shulman's classification of teacher knowledge, modifies the classification of teacher knowledge after analyzing the mission of Open University of China and the characteristics of its teachers.

According to theory of subject constructivism, in the process of constructing knowledge, teachers are not "silent objects", and they emphasize the subjectivity and reflection in the construction of knowledge. The *Research on Teachers' Practical Knowledge* project members from Peking University believe that

teachers can understand teaching more clearly after reflecting on their own teaching. Teachers firstly acquire the experience, secondly reflect on their own teaching, and lastly form the value to guide their teaching, which is teachers' practical knowledge [9]. However, many scholars in China believe that experts produce knowledge, instead of teachers. In an assembly line of producing and consuming knowledge, teachers are at the terminal. But the *Research on Teachers' Practical Knowledge* project members from Peking University hold that cognition is an action of changing the prior, and its value is the result of changing the prior [9]. Therefore, action precedes cognition [10]. Teachers' practical knowledge is a kind of teaching behavior, which can surely get better results in teaching. It conforms to the definition of knowledge put forward by Dewey and the classification of ability-based knowledge. Therefore, the author also believes that teachers' practical knowledge belong to teacher knowledge.

4. Analysis of the Principle of Sociology of Knowledge

The sociology of knowledge is the study of the relationship between human thought and the social context within which it arises, and of the effects prevailing ideas have on societies. It is not a specialized area of sociology but instead deals with broad fundamental questions about the extent and limits of social influences on individuals' lives and the social-cultural basics of our knowledge about the world [2]. According to the sociology of knowledge, when you deal with the principle of knowledge, you should firstly understand its concept. When human being's heart is developed into the process of concept, it can be transformed into knowledge. The formation of concept lies in two sides: the basic model of perception and symbolism of expression. After the symbolism of expression, parole is developed. Parole is the words that people use to communicate. Therefore, society is built based on parole, which is the principle of the relationship between society and knowledge [2]. The symbolism of expression emphasizes the characteristics of knowledge-context. In other words, knowledge is related to time, space, theoretical paradigm, value system and language sign [7].

According to sociology of knowledge, knowledge lies in some context, and without this context, knowledge is meaningless, let alone cognizer and cognitive behavior [7]. There are two ways that knowledge connect with social life. Firstly, people's participation in some social system and people's behavior in social system depend on their participation in some social system. An expert in sociology of knowledge in Poland—Florian Znanieckiholds that there are four interactive elements that influence people's participation in social system: 1) social circle (forming a common value community and controlled by it); 2) actor's self (if you want to be a person his social circle wants him to be, you must be equipped with some qualities in physical strength and intelligence conforming to his social circle.); 3) actor's social status (if you are equipped with some qualities required by your social circle, your social circle will grant you some authority.); 4) actor's

social function (after gaining the authority and status, you must carry out social function and volunteer to finish some task, so as to meet the requirements of your circle members.) [10].

The author believes that the way you analyze "actor's self" put forward by Florian Znaniecki is conforming to that you deal with the issue "what kind of teacher knowledge should the teachers of Open University of China acquire?" In other words, in order to meet the requirements of "some social circle", what kind of knowledge should you acquire?

5. The Construction of Teacher Knowledge from the Perspective of Sociology of Knowledge: Exemplified with Teachers of Open University of China

5.1. Definition of Teacher Knowledge System (Social Circle)

As mentioned above, from the perspective of sociology of knowledge, when analyzing the issue "what kind of teacher knowledge should Open Universities teachers acquire?" we must firstly consider the knowledge system this knowledge belongs to. How can we define the knowledge system Open University teacher knowledge belongs to? What is system? It means a regularly interacting or interdependent group of items forming a unified whole (Wikipedia). Then what items are related to Open University teacher knowledge? The author analyzes it from the perspective of sociology, especially from the aspects of politics, economics, and education.

Secondly, what is the relationship among these items? The author holds that the development of politics and economics needs education, therefore, the Party Central Committee and the State Council, taking China's conditions into consideration, promulgates *An Outline of National Medium-and-Long-Term Program for Education Reform and Development* and puts forward three educational strategic objectives. In order to finish these strategic objectives, Open University of China is founded and its mission is decided. Based on the mission of Open University of China, core beliefs of Open University of China are formed. Therefore, these related items are the mission of Open University of China as knowledge system in which teacher knowledge lies, namely social circle.

5.2. Actors' Self of Open University Teachers

Open University teachers, the members of social circle, must be actors' self in their social circle in order to carry out actors' function. In other words, according to the requirements of social circle, Open University teachers must acquire or build teacher knowledge in order to finish social function granted by their social circle.

The mission of Open University of China is founding a distance Open University without walls, open to all members of society. It uses modern information technology to support a school network covering all urban and rural areas

in China. In order to finish this mission, Open University of China puts forward four tasks in its construction project: 1) rapidly developing non-degree education; 2) steadily developing degree education; 3) pushing to integrate modern technology with education; 4) building an "overpass" for lifelong learning. The author analyzes the construction of teacher knowledge of Open University teachers based on the four tasks of Open University of China.

The construction project of The Open University of China holds that public service platform (including online training) and online open course resources supermarket are two ways to develop non-degree continuing education in Open University of China. Besides, degree continuing education is being upgraded from the former Radio & TV University. At present, the teachers of Radio & TV Universities conduct degree continuing education in the aspects of curriculum management based on online learning platform, online teaching materials construction, teaching support service, face-to-face tutorial, teaching evaluation and educational practice organization and execution. In fact, degree education of Open & Radio University is a kind of educational form which gives priority to students' autonomous learning and teachers' learning support as a supplement. The students spend more time on online teaching materials. The main way of conducting non-degree education and training based on public service platform is developing amounts of high-quality open teaching materials, so as to satisfy the needs of various levels of non-degree education and training. Full-time ordinary institutions of higher learning focus on class teaching quality, while Open University of China pays attention to teachers' ability to develop curriculum and construct online open resources. The teachers, the major designers and participants of curriculum and online open resources construction, take on the job of designing instruction, providing affluent teaching materials and implementing teaching. It is well known that teachers must acquire some knowledge including subject knowledge and course knowledge. The former can ensure students to learn accurate subject contents so as to reach the goal of training, and the latter includes the formation of curriculum objectives, development and design of curriculum, teaching, curriculum organization and curriculum evaluation, which are useful for students' learning. Therefore, curriculum knowledge covers instructional design knowledge. In a word, teachers should collect, list all the materials of this course and present them in a way the students easily accept based on the students' learning style. Besides, building "overpass" for lifelong learning requires subject knowledge and curriculum knowledge. According to the experience in the accumulation and transformation of credits in Europe, America and North America, teachers are in charge of curriculum accreditation. For instance, in North America, the teachers are in charge of designing the course syllabus which is used for curriculum accreditation or evaluating other schools' application for curriculum accreditation [11]. An evaluator must acquire good subject knowledge and course knowledge, so as to become a qualified evaluator. Thirdly, adult education knowledge is of great importance. In Open University of China, the objects of degree education and non-degree education are adults. Therefore, the teachers of Open University of China must know the characteristics of adults' learning and their psychology, master teaching methods of adult education and provide the appropriate ways of learning support for the adult students, such as pedagogy knowledge, knowledge about learners and their learning characteristics mentioned by Shulman. Degree education focuses on distance education, while non-degree education includes community education, vocational education training and lifelong learning and training. In reality, andragogy in China covers distance education, community education, lifelong learning, adult teaching methods and adult psychology. Therefore, the author refers to them as andragogy instead of subdividing them into smaller sections. Fourthly, it is modern educational technology knowledge and integration knowledge of information technology, subject knowledge and pedagogical content knowledge. Degree education and non-degree education in Open University of China are conducted by means of public service platform. With information technology, public service platform should be designed according to our requirement, integrate resources, and form a system that provides education and service based on market requirement and is separated into provider groups and customer groups [12]. Therefore, acquiring modern educational technology knowledge is of great importance. However, if Open University of China wants to be a guider in educational informationzation, and modernization of education, Open University of China must adapt to the development of information technology and internet technology, build an internet platform and digital learning repository, help to create a digital learning environment and encourage social members to share high-quality educational resources. The teachers must be equipped with information technology and integrated knowledge of subject knowledge and pedagogical content knowledge, so as to build a network platform combined with teaching, research, management and service. Sixthly, that is project management knowledge. "Strengthening the cooperation with related section, industry", "striving to carry out various kinds of vocational education, skill training activities", "integrating various high-quality educational resources", "credit bank" construction, "online public curriculum resources supermarket" are mentioned in the construction project of Open University of China. In reality, all of them are projects. Therefore, the teachers of Open University of China have become the members or leaders of projects, cooperate with the related technicians, experts and administrators and finish various projects instead of working alone. In a conclusion, the teachers of Open University of China should be equipped with project management knowledge, including cooperation knowledge, communication knowledge and management knowledge.

To sum up, the author charted construction of teachers' knowledge of The Open University of China from the perspective of sociology of knowledge. **Chart** 1 is as follows:

Chart 1. Construction of teacher knowledge from the perspective of sociology of knowledge: exemplified with the Open University of China.

| Mission of OUC | Striving to develop nonformal continuing education | Developing formal continuing education steadily | Promoting the deep integration of modern technology and education | Building the "overpass" for the whole people's lifelong learning |
|---------------------------------------|---|---|---|---|
| Teachers' theoretical knowledge | Subject knowledge; Curriculum knowledge (including formulation of objectives, curriculum development and design, curriculum teaching, teaching design, curriculum organization, curriculum evaluation); Adult education knowledge (adult teaching methods, adult psychology, community education, vocational education, distance education, lifelong education); Modern educational technology knowledge and TPACK (Technological Pedagogical Content Knowledge); Project management knowledge (cooperation, interpersonal communication, management) | | | |

6. Conclusion

Knowledge system can be to a large extent explained from the perspective of sociology, which is the focus of sociology of knowledge [10]. Sociology of knowledge can explain the influential elements which create knowledge from the external factors. The paper, based on the development of state politics and economics, analyzes the issue on the construction of teacher knowledge, combined with the mission of Open University of China. Besides, the issue can also be discussed from the internal factors. For example, it can be analyzed according to the change of adult learners' learning style or the change of approaches to construction of teacher knowledge on the basis of information technology. Besides, in teaching staff construction, Open University of China adheres to the principle of combing full-time teachers with part-time teachers, giving priority to part-time teachers, presenting open and dynamic characteristics. In other words, part-time teachers will be the main force of Open University of China in the future. In this paper, the author discussed the knowledge of all the teachers, including full-time teachers and part-time teachers. In reality, there is no difference between the duty of full-time teachers and that of part-time teachers. For example, full-time teachers are in charge of project management and training part-time teachers. With an intensive study of teaching in The Open University of China, we can further study the composing elements and influential elements of teachers' practical knowledge of The Open University of China, which will be well studied in the late research.

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