On the Context Vein of “Competence” and Its Generating Mechanism-based on the Perspective of Situational Learning Theory

Jianjun Zhang*
Qingdao University, Qingdao, Shandong, 266071, China

1. Introduction

Nowadays, there are different views on competence research. Different countries have their own key competence framework, and different scholars have different understandings of competence. Based on this situation, exploring the origin and essence of competence is of great value to educational theory and practice. Only by clarifying the essence of competence, can we grasp the direction in the formation of competence, so that competence can be realized in the participation of situational practice.

2. What is Competence

2.1 The Connotation and Development of Foreign “Competence”

Now the research on competence rises in foreign countries, using the word “competence” to express “literacy”. Competence wasn’t a unique concept in the field of education at first. It’s a daily term like other words. Basil Bernstein believes that analyzing the social logic of competence helps to explore its origin. He divides the
and the quality of comparative education seems to be a crucial issue. Countries attached importance to the quality of education, and the competence really popular. In the late 1980s, more and more countries attached importance to the quality of freedom/progress is the earliest one he thinks, which focuses on the inherent potential of individuals and opposes the forms of oppressive authority in families, schools and industries. In the 1960s and the early 1970s, “competence” was valued by the supporters of free progress thought, and appeared in different forms in different disciplines, such as Chomsky’s language ability, Piaget’s cognitive ability, Levi-Strauss’s cultural ability and Garfinkie’s cultural ability, but they did not pay attention to education, but competence as a medium of ideological collision. Basil Bernstein believes that the concepts of competence in these different disciplines have converged, and they can become the core role of educational theory and practice because the social logic of competence occupies a dominant position in the re-context field of education and the official re-context field of education. In the late 1960s, with the change of the organizational structure of secondary education to weak classification and the general weakening of differences between primary and secondary schools, competence resonates with this ideology of liberating pursuit, as well as the proposal of “Ploden Report”, which are proof of the dominant position of social logic of competence. In the 1970s, as progressive education was questioned and the state strengthened its intervention in education, the “return to basics” education movement in the United States emphasized that every student must pass the “minimum competence testing”. At this time, competence emphasized the basic skills of reading, writing and counting. Competence prevailed in the field of vocational education and human resources in the 1990s, indicating that individuals need to be competent for a certain job. Generalism proposed by Basil Bernstein is also life-work oriented and has the characteristics of “competence”. Then the terms “key and core skills”, “thinking ability” and “problem solving” appeared in the field of generalizationism, meaning that cross-domain competence is increasingly becoming a social demand.

OECD research on competence makes the term competence really popular. In the late 1980s, more and more countries attached importance to the quality of education, and the quality of comparative education seems to be a form of comparative international competitiveness. Based on this situation, countries continue to explore the evaluation system of education quality, and how to evaluate the quality of education and its role in social and economic development has become a problem. In order to meet the evaluation needs of countries on the quality of education output, OECD launched the Indicators of National Education Systems (INES) project in 1987. In order to better define and evaluate the quality of educational output results. OECD has carried out a number of research projects, including the Cross-Curricular Competencies Project (CCC), the International Adult Literacy Survey (ILS), the Human Capital Indicators Project (HCI), the International Life Skills Survey (ILSS) and the Program for International Student Assessment (PISA). Even after so many project studies, there is no uniform definition of competence as a result of educational output. To compensate for the lack of research, the OECD launched the Definition and Selection of Competencies: Theoretical and Conceptual Foundations (DeSeCo) in 1997. The OECD aims at a successful individual life and a sound society, analyzes social visions and individual life needs, combs previous research results, interviews and symposiums with representatives of different professional fields such as sociologists, evaluation experts, philosophers, anthropologists, psychologists, economists, historians, statisticians, educators, policymakers, policy analysts, trade unions, employers, domestic and international institutions, and ultimately forms a key competence framework, namely, interactive use of tools, autonomous action and action in socially heterogeneous groups. From the nature of OECD itself, as an economic organization, its purpose is to promote the economic and social development of member countries and promote world economic growth; helping member governments formulate and coordinate relevant policies to improve the living standards of member countries and maintain financial stability; encourage and coordinate the efforts of member countries to assist developing countries, help developing countries to improve economic conditions and promote economic development of non-member countries. Education is in their eyes the tool of economic development, they are concerned about the contribution of education to the economy. Recently, the key figure of DeSeCo project, has directly said that education and capacity development are “critical investment” for individuals and society. The focus of DeSeCo project on “key competence” is to promote economic growth through human resources. From the perspective of its research process on key competence, OECD combines the opinions of representatives of different professional fields and disciplines to formulate the framework, and does not start from the field of education alone, which determines that competence is a cross-do-
main concept.

OECD defines competence as the ability to meet complex needs by using and mobilizing psychosocial resources (including skills and attitudes) in specific situations [5]. This is mainly defined from the functional point of view, with the purpose of individual successful life and good social operation. With the development of knowledge economy, globalization and information technology, we are living in a complex and changeable world. The competence of OECD is defined in the background. Basil Bernstein defines the changing attributes of this era as “short-termism”, which refers to a process of continuous development, disappearance and substitution of skills, work and scope of work. Life experience does not depend on the expectation of future stability and the positioning of the future. Based on this situation, people need to develop the new ability of “trainability”. Basil Bernstein believes that trainability means that individuals need “certain competences”, which are very important for the survival of individuals themselves, economy and society. At the same time, it is also “empty”. Individuals need to rely on material consumption, that is, market products to establish temporary stability, direction and evaluation. This outward projection is consistent with functional attributes.

In this way, it seems that the change and development of the times and society require people to need competence, which is an external given standard. But this competency does not represent a passive adaptation, but also an active force for change. Society is human society, and people are people in society. The complex and changeable situation of the present era and society is created by human beings, and people have found the role of competent people in this era and social development, that is, to improve international competitiveness, economic, political and social problems. Competent people become competing resources for comparison among countries and promote people to define and choose competence. When we find out what is competence, as long as everyone can have competence, then the development effect on the whole society and the world can be imagined. Only in this way can we be in truly complex and changeable, and we also adapt to this complex and changeable. While adapting to the development of society and times, we are also creating and changing the world. Competence is not only the requirement of the times and social development, but also a tool for people to actively change the world.

2.2 The Evolution of Competence in China

Cai Qingtian and others believe that national key competence refers to the “knowledge”, “ability” and “attitude” that individuals must learn through education in order to develop into a sound individual, which cannot be lacking in response to the needs of complex social life situations. Especially, it refers to the comprehensive state of “quality education” that individuals learn through school education curriculum design, which is referred to as “competence” [6]. At the same time, when selecting and defining competence, they put forward the following reasons: international competitiveness, local care, education in a broad sense (including character and moral education), basic ability and functionality to be a person, and teachable and learnable [7]. They translate competence into literacy, which may focus on “basic ability as a person” and “teachable and learnable”, corresponding to “prime” and “raise” respectively. In terms of whether competence can be taught, DeSeCo project believes that competence is continuously adjusted with the process of human social civilization, and competence is gradually acquired and improved from the day after tomorrow, rather than innate. Cai Qingtian et al. regarded competence as acquired from school education, and believed that key competence can contribute to the continuous inertia and integration of the development of subject courses in various learning fields, and can achieve the cultivation of competence through different fields/scientific learning in various educational stages, and take key competence as the main axis of Taiwan’s 12-year national basic education curriculum reform. Through the comparison between the two, it can be found that the formation of competence in DeSeCo project emphasizes the improvement in the whole acquired environment, rather than confined to school education. Taiwan regards competence as the result of school education, highlights the teachability of competence and misinterprets the formation of competence.

The word competence is originally associated with morality and values in Chinese. When choosing and defining competence, Cai Qingtian and others integrate character and moral education factors into it, which makes up for the defect of “competence” from a functional perspective and abandons morality and values [8]. OECD believes that personal quality and value are not competence, but the conditions for the development of human ability. That is to say, although such competence does not include personal quality and value, it has preset personal quality and value before a person has competence. So far, the word competence contains the connotation of quality and value, which makes many countries also regard moral quality as the component of competence. For example, the Singapore government puts forward four ideal educational achievements, namely: cultivating self-confident people, active learners, active contributors and enthusiastic nationals, and takes the core values of respect, integrity, love, resil-
ience, harmony and responsibility as the decisive factors of the competence framework. The “Curriculum Architecture” in “Learning to Learn-Curriculum Development Direction” in Hong Kong, China is composed of three interrelated parts: learning field, common ability, attitude and values [9].

In the framework study of Chinese students’ development of key competence, we also learn from the research experience of OECD and adopt a combination of theoretical and empirical research to analyze the value orientation, national policies, traditional culture and curriculum standards of key competence in various countries. At the same time, experts and representatives in different fields are interviewed and seminars are held. In 2014, China promulgated the “opinions on deepening curriculum reform to implement the fundamental task of moral education”, putting “key competence” in deepening curriculum reform to implement the education goal of moral education [10]. In China, the cultivation of moral quality plays an important role both in traditional culture and in public awareness, which leads to the primacy of moral quality in policy analysis, traditional culture analysis and interviews. In China, key competence is defined as the necessary character and key ability that students should have to adapt to the needs of lifelong development and social development, including cultural foundation, independent development and social participation [11]. Here we can still see the shadow of competency, pointing to and adapting to the complex and changeable society. But at the second level, that is, humanistic heritage, scientific spirit, learning to learn, healthy life, responsibility, practice and innovation of these six aspects, the moral quality revealed is very strong, the functional attributes of competence are missing. The quality education concept of cultivating people with all-round development of morality, intelligence, physique and aesthetics has been deeply rooted in the hearts of the people. If we change another set of standards and treat competence from a functional perspective, it may be a huge impact on current education. Under the influence of political, cultural awareness and educational traditions, China’s quality has still been put into the melting pot of quality education and committed to cultivating people with all-round development, which has become a way to implement quality education.

From the perspective of competence development mentioned above, “literacy” and “competence” are still different. If we break away from the characteristics of “competence”, there will be some misconceptions about competence only from the Chinese meaning of literacy. Liu Xilang regards quality as the “alloy” of innate endowment and acquired education. Competence is the lower concept of quality, which belongs to the part of acquired education, in order to highlight its teachable, learnable and measurable characteristics [12]. This is exactly different from the fact that the quality emphasized by the DeSeCo project is gradually improved, which indicates the process of human growth and is from the perspective of human self-development. The acquired cultivation means the shaping effect of external environment on human beings, and then the competence will become the result of external indoctrination. He regards quality as an “alloy” of innate endowment and acquired education, which may be more in line with the original meaning of competence. People can use imagination and creativity to construct a world, can let more people gather together through language harmonious survival, can consciously division of labor and cooperation. This is the uniqueness of human beings and the essence of human beings. Whether it is the OECD’s interactive use of tools, autonomous action and in social heterogeneous groups are emphasized in this human nature. Society is created by people. If society becomes a “occupation or position” and needs people to be competent, then only by grasping the essence of people, no matter how the society and the world change, we have mastered the fundamental force and can naturally adapt to this complex and changeable society. It is the use of these competence that promotes social changes, and they are also necessary to be competent for social changes. This does not mean that people have acquired competence from birth, at birth, people have the potential to become people or have the potential to become people with competence. People are people in society. They must gradually grow into a person and improve their competence in the interaction of social situations and the participation of social practice. How to become a person with competence in situational interaction and social practice participation, which may require a revolutionary way of learning, situational learning theory can give us some inspiration.

3. How Competence Forms

Jean Lave and Etienne Wenger pointed out that learning is an integral part of social practice, and “legitimate marginal participation” is the descriptor of individual involvement in social practice, which also becomes the descriptor of learning [13]. Legal marginal participation means that individuals invest more or less in and exist in the field of participation until they reach full participation and become one of the diverse and unique members of the community. The process of individual’s legitimate marginal participation is learning, and participation in practice is the interaction in various situations of practice. In this case, competence is also generated. In other words, com-
petence is generated in a wide range of daily activities and practice.

3.1 Participation in Situational Activities

The generation of competence or the growth of people is inseparable from the situation, the situation is not only refers to the specific circumstances of a person in a certain time and space. Jean Lave and Etienne Wenger believe that the situational activities related to knowledge and learning characteristics; negotiation characteristics of meaning; the nature of learning activities to engage in learner relevance (attraction, dilemma-driven). The world is constituted in a social way, and people’s participation in practical activities is also bound to be carried out in a social way. The objective form and system are linked with subjective understanding by means of interaction. In this process, the meaning of the world to people, the relationship between people and the world, and the relationship between people in the world are generated, and the changes of people and history are realized. This historical and human change is consistent with the concept of competence we believe. That is, the formation of competence is realized in this context of meaningful negotiation. As Basil Bernstein said, competence refers to the process of participating in and building the world, which is formed imperceptibly in informal interaction. When we get the mother tongue, it is not deliberately taught, but formed in the mother tongue environment. Even when children cannot speak, they can respond to what we say, which means that children can understand what we say. Dewey mentioned in the book “Democracy and Education”: “If the pronunciation of the hat is not connected with the action of many people, it will be as meaningless as the snoring that is not clear. When her mother took the baby out, she put something on her head and said “hat”... Through the combination of other tasks in the event, the hat’s voice quickly gets the same meaning for children as for mothers; the sound of “hat” becomes a symbol of their activities. Language is composed of sounds that can be understood each other. This fact alone is sufficient to show the connection between the meaning of language and common experience.” 

Chomsky believes that performance is the external language expression of children, and competence is the language rule system and production mechanism behind these language expressions. Children get the meaning of language in situational activities and organize it in the brain with the participation of activities to understand the meaning of others’ statements and make corresponding feedback. When children acquire language meaning and organize it, they acquire the rule system and production mechanism of language, and language competence is gradually improving. When we can speak, language competence is manifested in the form of behavior. When teachers teach students grammar rules in schools, namely, what are subjects, predicates, objects, and how they are organized, students have already obtained such rules and are always reflected in daily expressions, but they have not systematically combed their external systems.

When we study English, we always focus on recite the meaning of words and grammar rules for mechanical learning, from situational activities. This kind of learning without situational activities is difficult to obtain language meaning and rule system. If we construct an English learning environment like learning mother tongue and participate in situational activities, language competence will play a role and gradually improve. We can build a virtual environment by watching videos, but this environment must be long-term and continuous. The most real English learning environment is to live directly in English-speaking countries. In this environment, we actively and continuously participate in English communication practice to maintain our work and life. Through continuous interaction in activities, the growth experience of English communication is constantly enriched, and the internal rules and significance of English are gradually obtained. Gradually, we become a “English speaker”. It is a process from legal marginal participation to full participation when the unskilled use of English to the skilled use of English communication grows into an “English speaker”. In this process, our language rules system is further expanded, language competence is further improved, so that we are competent for more activities. At the same time, our communication and collaboration competence is also generated in situational activities, which shows that a specific practice often leads to the formation of diverse competence. The occurrence of competence is integrated into the process of legal marginalization and full participation. It is the product of interaction in situational activities, which means that human change is holistic and cannot be carried out in isolation.

3.2 Developing Learning Courses

In situational activities, individuals have a holistic understanding and understanding of practical activities through legitimate marginal participation, and know what practical activities are and what to learn. In this case, a “learning curriculum” is developed in situational activities. Learning curriculum is composed of situational opportunities. That is, learning opportunities are more given by practical activities. This cannot be understood as the participation of practical activities is task-driven, but situ-
tional activities allow participants to build a learning relationship with other members of the community of practice, and truly participate in practical activities through interaction with other members of the community to promote human growth and the occurrence of competence. Those direct guidance-based teaching, adopting external requirements and regulations, has become the goal of participating in practice to achieve these requirements and regulations, which forms a kind of restricted participation, and cannot allow individuals to truly participate in practical activities, nor can they achieve the formation of competence. Using some fixed tasks and activities to train students, so as to achieve some requirements and standards, hoping to cultivate students “creativity, critical thinking, focus and other qualities”, just form a limited participation. Bruner once said: “It’s extremely difficult to deduce directly from performance, even if not impossible.”[16] To achieve accomplishment through training is similar to the proposition of functional theory. Different functions of the human body are trained through specific activities to achieve certain standards, hoping to cope with various environments and solve different problems. But this kind of mechanical rigid training, just solidified the relationship between certain functions and specific activities, but lost the ability to migrate. Therefore, taking competence as the teaching goal, it is impossible to achieve the occurrence of competence by clarifying the characteristics and evaluation criteria of competence and developing a set of general teaching models for competence training. Basil Bernstein believes that the time, space and discourse under the competence model cannot produce a clear structure and classification, and they cannot establish order and transfer order. The nature of control in the learning process will become a personalized form. It emphasizes learner-centered, and mainly evaluates the teaching discourse with implicit and fuzzy evaluation criteria, because the output under the competence model is difficult to evaluate objectively.

As Dewey said, “purpose as a foreseeable ending, activities have a direction. This prediction has three functions. First, it includes careful observation of specific situations, attention to what is the means to reach the end point, and finding obstacles to the road. Second, he proposed the appropriate sequence of means to facilitate economic choices and arrangements. Third, we can choose the way to choose.” Therefore, purpose is not a conventional and rigid requirement, and it often has a flexible guiding role in the process of achieving purpose. Accomplishment is generated in the process of real participation in practical activities. For the purpose of accomplishment realization and the guidance of purpose, it is necessary to think about how to let learners participate in real practical activities. Legal marginal participation is a means for learners to truly participate in practice. Before learning the core aspects of practice, learners should learn marginal, less intensive, less complex and less important tasks. As far as possible to let learners get rid of the central authority and the provisions of the individual restrictions, so that learning courses in practice, so that individuals can more interact with other members of the community of practice and meaning negotiation. Through this process, learners can truly participate in practical activities, and gradually become a member of the community of practice to achieve competence. Basil Bernstein argues that the teaching resources required by the competency model cannot be predefined textbooks and teaching procedures, but require autonomous construction. In the process of legitimate marginal participation and the development of learning courses can provide learners with a variety of structural resources and play an independent role in the construction of teaching resources. To help learners to provide a real practice situation, so that learners can continue to participate in the process of competence is what we need to pay attention to.

3.3 Identity Negotiation

“Activities, tasks, functions and understanding cannot exist in isolation; they are part of a broader relationship system, and they have their own significance in these relationships.” This means that each activity in social practice is related to a certain social relationship, which is more clearly related to identity. In the process from the legitimate marginal participation of activities to full participation, learners grow into a complete individual in the community of practice, accepted by other members and become one of them. In this process, learners spend more time and effort, take more responsibility, encounter more difficulties and adventure tasks, not only to obtain more knowledge and skills, but also means the dynamic change of identity. Identity represents a label and membership of the community of practice. We can give this identity meaning by doing what we need to do. That is, participating in practice.Identity is a display of experience and competence[17], competency here may point to a community of practice, rather than a profession and position, because it is not only knowledge and skills but also represents the ability of learners to interact specifically with members of the community of practice, to view the world in a specific way through the impact of identity, and to explain and use the history of practice. Identity is always negotiated in practice and represents a change in competence. There is no doubt that we exist in different communities of practice, and become a joint of multiple identities. We need
to reconcile the competence of different identities, which indicates the growth of a person and the improvement of quality. When we become full members of the community of practice, we experience competence and are recognized to be competent, and even with the transformation of the community of practice, our identity and competence will continue to negotiate my improvement. The practice community does not mean that it is a closed circle. Different practice communities have connections in practice, so as to promote the practice. Practice itself is also the practice of connection, and the practice of participation in connection can also promote the improvement of competence. The reconciliation of different identities, the practice of participation connection and the degree of participation represent the negotiation changes of identity and competence. In the negotiation of identity, we can define who we are, rather than rely on others’ discourse and self-imagina-

tion. This definition means that people grow into people, is the gradual improvement of competence. With identity negotiation, competency is not limited to a community of practice, but to different communities of practice, practice and the world. Participatory practice can not only construct identity, but also promote participation. Being a member of the community of practice is often more attractive than some external rewards and knowledge and skills, which we usually think of as “internal rewards”. In the formation of competence, we should focus on learners’ practical participation, guide the change of identity, pay attention to the significance and role of identity in the formation of competence, and provide learners with the support of identity negotiation. Meeting with different people in life is our normal life. This non-participation state can sometimes promote participation, and contribute to enhancing learners’ experience and promoting identity change. This provides some enlightenment for us to help learners to participate in practice. Let learners interact with different things and people as much as possible.

4. Conclusions

Competence has different definitions in different disciplines. We do not expect to give a unified definition of quality, but hope to grasp the connotation of quality competence and the essence of being human, and realize the occurrence of quality through legal marginal participation in situational activities. Although the formation of this competence is not so specific and clear, so that competence does not appear to take detailed plans and standards for training, but more emphasis on the nature of competence, fit the perfect characteristics of competence, provide inspiration for the formation of competence. When learners continue to develop into members of the community of practice in participating in practice, they have made contributions to the production and reproduction of the community of practice, maintaining the continuity and replacement of the community of practice, and at the same time, it also means that the production and reproduction of competence, and the power of the society to adapt and change can also exist forever.

References


