

Knowledge Construction as Socially Embedded Collective Learning

Bo Chang, University of Georgia, USA

Abstract: *This paper discusses how knowledge construction is a socially embedded collective learning through analyzing learning embodied in five specific patterns of knowledge construction. The analysis reveals that knowledge construction is socially imbedded in the empirical world and is generally a collective activity.*

The Shanghai Zhabei Learning Community is a pilot educational site which embedded learning in the local social context and situated learning activities in different social units beyond the classroom setting. The purpose of this study is to investigate this open-ended collective learning and to understand how knowledge is situated in the local context and how it is socially and collectively constructed in a local administrative community.

Theoretical Framework

Berger & Luckmann's (1967) social constructionism was employed as the theoretical framework to interpret how knowledge construction in this local community is a socially embedded collective learning. According to Berger and Luckmann (1967), society exists as both objective and subjective reality, which "is understood in terms of an ongoing dialectical process composed of the three moments of externalization, objectivation, and internalization" (p.129). Externalization means how a person "projects his own meanings into reality" (Berger & Luckmann, 1967, p. 104). In other words, how people with different perspectives interact with each other, access the knowledge stocks of others, share the common stocks of knowledge and make their subjective knowledge explicit. Objectivation means how subjective knowledge is generated into objective or institutionalized knowledge. Specifically, how people in interaction form the typifications for the activities in which they engage, how people habitualize these typifications into their institutionalized roles, and how people routinize these roles into institutional knowledge. Internalization means "the immediate apprehension or interpretation of an objective event as expressing meaning, that is, as a manifestation of another's subjective processes which thereby becomes subjectively meaningful to myself" (Berger & Luckmann, 1967, p.129). In other words, how people crystallize objective knowledge into an individual's consciousness and transform it into their subjective world. Knowledge construction is an ongoing collective learning process of creating and institutionalizing knowledge (pre-theoretical, or even theoretical knowledge) out of the subjective empirical world and transferring and internalizing the institutionalized knowledge into the subjective world.

Research Design

I used embedded case study to investigate learning in the Shanghai Zhabei Learning Community and its learning cells. Embedded case studies examine mini-cases such as subsections, occasions, dimensions and domains within a single case to get a comprehensive idea of a social phenomenon (Scholz & Tietje, 2002, Stake, 2005). 20 participants were selected from five groups of learners (elderly people, migrant workers, unemployed workers, white-collar

workers, and leaders) within nine selected learning cells (Ground Calligraphy Club, Bao Shan Photography Salon, West Zhijiang Chorus Program, Golden Dream Fashion Show Program, Sisters Club, the New Shanghainese Club, D.N. Community Affairs Center, Shanghai X.Y. Transportation Co., and Shanghai H.B. Power Co.). Data was collected from interviews, observations and documents and was analyzed with the constant comparison method.

Findings, Conclusions and Discussions

Generated from the data, five patterns of knowledge construction-- radiation, circulation, simulation, socialization, and contextualization, emphasize the different aspects of learning in the construction process of knowledge externalization, objectivation, and internalization (Berger and Luckmann, 1967). These different aspects of learning reveal that learning in the Shanghai Zhabei Learning Community is a collective effort that was socially embedded in community development, in the learners' practical works, and in the mundane living world. Learners were situated in the empirical social world to share their knowledge, to generate new knowledge, and to transfer their stocks of knowledge into the sub-social structures such as the local communities. Learning extended the traditional classroom learning territory. Strategically, learners were immersed in the activities of community management, community services, and the entertainment milieu, which brought the learners back to the mundane world where knowledge derives, and connected learners—the individual knowledge carriers—to a larger body of knowledge carriers.

Radiation is a social interaction process of how individuals' subjective knowledge transfers to the public, and how learning connects the relevant stocks of knowledge in multiple directions through hubs or nodes. Arts and popular culture play an important role in facilitating social interaction by way of serving as a common topic for conversation (Lizardo, 2006). In Zhabei, arts and media are social interaction tools that connect the individuals' knowledge to the public interest. Individual learning became a collective activity and influenced the other people in or outside of the local community. This radiation process bonded the individuals with the public together and created a communication platform for the learners and the public. For example, the members of the Baoshan Photograph Salon immersed their learning in the community services and created communication platforms with the local people. They took pictures for the local people, preserved the local community heritage, documented the local historical moments via photographs, and extended individual photography knowledge to the local community.

Through the nodes that tie the different stocks of knowledge, individual learners and the public are connected. Knowledge from individuals thus proliferates among the public. Popular culture has a positive impact on weak-tie networks (ties among strangers), while highbrow culture consumption has no significant effect on weak ties (Lizardo, 2006). In order to transfer the highbrow culture of calligraphy to the public, Lin and his calligraphy members from the Ground Calligraphy Salon moved calligraphy writing from the inside to the outside public spaces such as parks and squares, which connected more people's attention. They created new giant calligraphy writing brushes to replace the small professional brushes in order to encourage more nonprofessionals to join their learning activities. This open-ended learning created a communication platform for the professional calligraphers and the non-professional outsiders, broke the non-professional outsiders' fear of being unable to access the highbrow culture, and connected multiple knowledge carriers together.

Circulation reflects how people access sub-dimensions or subcategories of objective knowledge and internalize this knowledge into their consciousness. According to social constructionists, reality is divided by the social structures, or the institutions, Every social structure, or institution, has its own stock of knowledge, which is composed of the subcategories of that stock of knowledge. “Such knowledge constitutes the motivating dynamics of institutionalized conduct” (Berger & Luckmann, 1967, p.65). In order to know one type of institutional knowledge, learners access or circulate around the subcategories of that stock of knowledge and internalize them.

The migrant workers from the Sisters’ Club and the New Shanghainese Club knew the macro-Shanghai society by circulating among its subunits. Shanghai has its particular culture, history, custom, and politics, each of which is embodied in the empirical subunits of Shanghai such as the Bund Sightseeing Tunnel and the Shanghai Urban Planning Exhibition Hall. To support the migrants to adapt to Shanghai well, the Sisters’ Club organized the one-day-trip to Shanghai for the migrants to experience the historical and modern aspects of Shanghai. The detailed interpretation of the sights by the tour guide displayed to the migrant workers the knowledge of Shanghai embodied in these subunits. The New Shanghainese Club used similar strategies to support migrant workers in getting to know Shanghai society better. Using the Dragon Dance performance as an interaction tool, the migrant workers from the New Shanghainese Club traveled around to the sightseeing attractions of Shanghai, entered the higher level social life of Shanghai through attending some social activities such as the big companies’ opening ceremonies, and got to know the custom and the lifestyle of Shanghai. By socially interacting with each dimension in its practical entity, learners gradually make sense of this body of knowledge.

Simulation is one type of internalization in construction process. Learners apprehend or interpret others’ knowledge that has a similar or relevant structure with their own. “An important element of my knowledge of everyday life is the knowledge of relevance structures of others” (Berger & Luckmann, p.45). In everyday life, people learn some social stock of knowledge that has relevance to theirs. Simulation is about how people gain knowledge that has similar or relevant connections to theirs through a process of observation, imitation and adaptation, which is similar to Bandura’s socio-cultural learning theory (Bandura, 1977). Interview data show that some participants simulated knowledge that had relevant structures with theirs from daily life and from people around them. Interview data from Qiong in the Fashion Show program and Chau from H. B. Power Co. indicate that simulation is a process of observing the significant features of the modeled behavior, refining and improving the observed behavior, and adjusting the learned behavior based on their own situations. For example, Qiong observed the catwalk of other catwalk groups and got to know the whole picture of the key structure of the catwalk and understood which parts in this picture were missing. Qiong also described how he adapted observed daily-life walks into his catwalk: “They (daily life-walk and catwalk) are both very similar. The catwalk is more exaggerated. The real catwalk is simulated from life, and is refined and improved.” Chau, as an administrative official, trained his sense of human relations by observing the significant features relevant to human relations, such as languages people used, their body languages, and their different reactions to the same issues. Then he connected his work with what he observed, imitated the strategies used, and adapted these strategies in his work.

The simulation pattern is especially useful for gaining analogous knowledge, knowledge that has similar or relevant structures between the observers and the observed. Learners can

simulate the analogous knowledge from people, from their everyday life experience, from the media, from nature, from other animals, or from their cultural and historical heritage. Three factors are identified from data that are important in simulation process: the similar knowledge structure of the observed and the observers, learners' ability to access to knowledge carriers, and the knowledge carriers' willingness to share the knowledge safely (Cross, Parker, Prusak and Borgatti, 2001).

Socialization is one aspect of learning, internalization, in the process of knowledge construction. Socialization in this study refers to adults' resocialization. "In re-socialization the past is reinterpreted to conform to the present reality" (Berger & Luckmann, 1976, p.163). That is, the individuals transform themselves to a new social context and reinterpret their past based on the new social structure. It is a process of how people involve in a new reality, learn its relevant norms, rules, culture, social roles and skills and knowledge and adapt to that reality in social interactions.

Successful socialization means "the establishment of a high degree of symmetry between objective and subjective reality (as well as identity, of course)" (Berger & Luckmann, 1976, p. 163). The discrepant versions of the objective realities provided to the learners may cause their unsuccessful socialization. Sun, a migrant, was not very successful in his resocialization process due to the discrepant versions of the objective realities provided to him. Shen participated in the learning activities provided by the New Shanghainese Club to adapt to Shanghai society. Being involved in the mundane world, participating in activities such as community volunteer work and visiting many places in Shanghai revealed to him a positive aspect of Shanghai society. However, later, the leaders and the administrators of the club changed. They organized the club in a bureaucratic way and did not provide the learning activities to the migrant workers unless the leaders from the top came to visit the club, which ruined Shen's trust in the leaders and the club. Finally, he refused to go to the club since he doubted that the programs provided by the club could continuously support him in adapting to Shanghai society. His socialization process backfired due to the discrepant versions of the new objective realities exposed to him.

In the resocialization process, significant others play an important role in guiding the individuals the objective reality and its relevant roles and behaviors, guiding them to the structure of the new reality, and mediating them to adapt to the new reality. These significant others "represent the plausibility structure in the roles they play vis-à-vis the individual..., and they mediate the new world to the individual" (Berger & Luckmann, 1976, p.157). The experience from Sun, once a laid-off worker, indicates that in the complicated situation when the social structure changed dramatically, professional agencies are needed to support individuals' adjustment to the new reality. Economic reform in China since 1980 dramatically changed the original social structure where Sun lived. The changed structure correspondingly required a series of changes not only in the employment market, but also in values, beliefs and individuals' knowledge structures. Without getting support from significant others or particular agencies, Sun got lost in his resocialization process. He had no idea where to go, from whom he could acquire information, or what kind of knowledge and skills he needed to obtain. His subjective reality still remained at the state of the original social structure and he could not find his new position in the new social context.

Contextualization is also a socially embedded collective process. It is based on the rational of how knowledge is objectivated from the empirical reality to the pre-theoretical or theoretical level in the knowledge construction process. Knowledge objectivation shows how the subjective reality is reified, or dehumanized into an objective reality. Reification "can be

described as an extreme step in the process of objectivization, whereby the objectivated world loses its comprehensibility as a human enterprise and becomes fixated as a non-human, non-humanizable, inert facticity” (Berger & Luckmann, 1976, p.89). The more complex the theories are, the more detached they are from their original subjective context. “Especially on the theoretical level, it is quite possible for knowledge to attain a great deal of detachment from the biographical and social interests of the knower”(Berger & Luckmann, 1976, p.86). Contextualization traces back to where knowledge comes from and situates knowledge in the local authentic context and obtain or create new knowledge.

Contextualization could be generating the tacit knowledge collectively from the practical work and objectivating the tacit knowledge into the explicit knowledge. Data from Hao, a white-collar worker from the Shanghai H. B. Power Co., show that her professional group’s various perspectives on the best technical solutions and methods drawn from their practical work were pooled together, were negotiated, and were finally published in the online QC (Quality Control) system and became explicit knowledge shared with the public. In this process, the subjective individuals’ particular stocks of tacit knowledge drawn from the empirical practice were objectivated into the explicit knowledge. Contextualization could be learning the explicit knowledge by situating this knowledge in the practical work. For example, instead of internalizing the institutionalized welfare policies by reciting them, Wan and her colleagues learned the welfare policies by participating in role-play games, which were created based on the actual practical cases occurring in their work. These role-play games about the welfare policies were embedded in daily life and practical work and are attached to the learners’ subjective world, which makes it easier for the learners to internalize the knowledge of welfare policy. Literally, contextualization means situating something in the local context. The reason for doing so is because we try to close the gap between the subjective reality and the objective reality, a reality that is abstracted from the empirical subjective reality and is detached from the individuals’ subjective world. All of these efforts of contextualization attach to the social and empirical world where knowledge originates, and involve social interactions.

Each of the five patterns of knowledge construction generated from data emphasizes one particular aspect of knowledge construction. However, they all have the elements of interaction and adaptation and indicate knowledge construction is socially imbedded in the empirical world and is generally a collective activity. These patterns favor consensus in collective learning, which is congruent with Berger and Luckmann’s (1967) theory of social constructionism and most of the scholars’ views on social constructionism (Heylighen, 1993; Prawat & Floden, 1994). They also value collaboration in collective learning, which is highly stressed by the scholars on social constructionism and the learning community (for example, Ernest, 1995; Kilpatrick, Barrett, & Jones, 2003; Lawrence, 1997; Marsick, Bitterman & van der Veen, 2000). The Zhabei Learning Community attempted to promote collaboration among the institutions and organizations, and encouraged collaborative among learners, which promotes collective learning across the different social units and a variety of knowledge carriers.

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