

AN ONLINE PEER ASSISTED LEARNING COMMUNITY MODEL AND ITS APPLICATION IN ZJNU

Ruan Gaofeng¹, Lin Yeyu²

¹College of Education, Zhejiang Normal University, ²MingJiang University
rgf@zjnu.cn

BACKGROUND

Peer coaching and peer assisted learning

Peer coaching, or peer assisting, was established in 1970s by Joyce and Showers. Initially used in teachers professional development, it refers to a process that two or more teacher peers evaluate current practice mutually; expand skills, extract and build new skills; share ideas, and review & solve problems of classroom teaching in a way of cooperative learning (Slater C.L& Simmons, D.L,2001). Peer coaching is increasingly widely applied to school-based teacher development.

Meanwhile, peer coaching as a learning model of mutual growth has also been applied in other fields with theoretical research and practice deep going. The concept of peer has been popularized to social groups with equal or similar identifications and grades, which come from the same or similar backgrounds and pursue the same or similar objectives.

In learning field, peer coaching is significant for it generated peer assisted learning. Peer assisted learning refers to acquiring knowledge and skills via peers' assistance and support, including peer tutoring, peer modeling, peer education, peer counseling, peer monitoring and peer assessment(Topping, K & Ehly,1998). It is acceptable to believe that peer assisted learning reflects peer coaching. While in this article, learning models, in which knowledge construction is supported by peers and knowledge innovation of individuals and organizations is promoted, are generally called peer assisted learning model.

In recent years, due to the rapid development of Information and Communication Technology (ICT), peer assisted learning integrated with the advantages of fast information transmission in network, namely web-based peer assisted learning or online peer assisted learning, has been applied to classroom teaching in primary and secondary schools of China and other countries.

Application of peer assisted learning

At present, peer assisted learning is applied mainly in the following areas.

(1) School-based teachers' professional development

This kind of peer assisted learning model is the original meaning of "Peer Coaching". It bridges teaching cooperation and promotion of teachers' in-depth communications, and stresses the shift from teachers' independent research to partnership. Thus teachers can grow together through teaching observation and feedback in cooperative-learning way with teacher peers' professional specialty and experience used. And it has been proved as a highly effective way of teachers professional development in UK, US and many other countries since 1980s. Such research and practice were also started early in China since the Ministry of Education promulgated Code of Teaching Research Group in Secondary Schools (draft) in 1957, but it has never really developed fast until recent years. In theoretical research, peer assisted learning model promotes teachers'

education from training forward to learning communities, and it enables teachers as researchers in a group atmosphere to trust and advance mutually.(NI-Qiongfeng,2005;LI-Jiahou,2005). In practice fields, projects have been carried out to attempt action research on the process and features of peer assisted learning in ICT-based teachers' professional development, and university-supporting teachers' peer coaching model (ZHANG-Jingmei,YANG-Guofeng,2005;WANG-Lu,2005).

(2) Peer assisted learning introduced to classrooms of primary and secondary schools

In a background of social constructivism recovering in the instructional design, the idea of peer assisted learning coincides with the situated learning concept that stresses social contexts, interaction and collaboration. It not only meets students' need to seek assistance and reduce their learning gaps, but also develops their ability of problem solving, collaboration and interaction. Thus, peer assisted learning is also introduced in primary and secondary classrooms. For students who play the role as tutor and tutee, peer assisted learning is not only an effective learning way, but also encourages them to reduce dependence on teachers. Although the tutor's quality of assistance and support may not be as good as teachers, but they are comparatively immediate and rich, and often easily accepted. Therefore, teachers may focus on observing students' learning conditions and evaluating their learning process.

(3) Web-based or online peer assisted learning

Compared with traditional teaching, peer assisted learning considers not only interaction between teachers and students, but also support and assistance among members of the students groups. Especially in recent years during which e-learning has emerged, peer assisted learning becomes more advantageous and gradually used due to the features of fast and distributed information communication on the web.

For example of instructional assessment, peer assessment has emerged and widely used in instructional design, and a shift from teacher controlled assessment to combination of teacher assessment and students peer assessment has been seen.

Online peer assessment system based on the idea of peer assisted learning has become an important support for the framework of online instructional design. In such model, students submit their assignments (works) onto the web for peer assessment and feedback, according to which they revise their works. This process will be repeated several times and the teacher assess a particular work according to all peer assessment. Online peer assessment helps to facilitate students' critical thinking and self-reflection and it is a teaching trend of diversity, adaptation, individual and informationization (Yu-Shengquan, Mao-fang,2005).

Peer assisted learning community based on campus network and its application model

Inspiration of peer assisted learning model to build online peer assisted learning community

Essentially speaking, the emergence of peer assisted learning transforms the view of learning, that is, a belief that knowledge flows from teachers to students transforms to a learning environment closer to authentic social context., that is, students acquire knowledge not only from teachers and self-reflection, but also from social network – virtual or real. In fact, this view of learning coincides with informal learning.

As a concept compared to regular school education or continuing education, informal learning is the learning way of receiving knowledge from informal learning circumstances, such as work, daily life and social contact, and it mainly refers to learn in doing, playing and et al. Informal learning stresses positive significance of interpersonal interaction in knowledge construction. It used to be ignored by traditional views of learning, but with the development of theory and practice of social constructivism and ICT's support for

interpersonal interaction, informal learning is receiving increasing attention. Under the trend of the integration of collaboration technology, peer-to-peer technology and online learning community, peer assisted learning provides an important reference for the build of online peer assisted learning community.

First, different from traditional learning models are oriented to assess students and boost competition, peer assisted learning

encourages mutual help, supervision and communication among group members, corrects learning attitude and motivation. To some extent, it stimulates learning interests and consciousness.

Secondly, peer assisted learning in online learning contributes to develop consciousness and ability to inquiry and improve collaboration ability, understanding and command of knowledge. When learners join to interact in a particular online learning community, they provide their experience, or assimilate peers' attitude and behavior into their own cognitive structures incidentally. Group learning in online community is the most prominent reflection of implicit and explicit communications. In the group's interaction, learners exchange information and texts that they search for, as well as others' implicit knowledge, or create new collective knowledge through collaboration. Meanwhile, learners themselves explore and deepen knowledge. Online peer assisted learning also helps to form spontaneous groups based on common interests and learning objectives. And online learning community will have a healthy and positive advance by guidance and management to spontaneous groups, all of which, however, cannot be easily achieved by traditional teaching.

Model construction of online peer assisted learning community

2.2.1 Organization model of online peer assisted learning community

(1) Online peer assisted learning community model

Construction of online peer assisted learning community regards peer assisted learning, blended learning and knowledge management as its theoretical base. Blended learning integrates the advantages of both traditional learning and e-learning. It emphasizes teachers' leading role in guiding, inspiring and monitoring teaching process, and also embodies initiative, activeness and creativity of students as the main part of learning process. The learning essence lies in knowledge creation and spread. Today, ICT is getting a wider use in education, and theory & technology of knowledge management is being advocated in learning organizations.

Based on the above two points, the author proposes organization model of online peer assisted learning community (figure 1). In this model, online peer assisted learning community constitutes of the teacher, students and the mentor. The mentor's academic ability is between the teacher's and students', and his age is similar or identical with students. He may be a student of higher grades or a peer student. The mentor often plays a better role of guidance than the teacher as he has more time and better understands students' difficulties and ideas. The broken line in this figure shows that the mentor is a virtual role, that is, he may be full-time, long-term (full-time teaching assistant), or part-time, temporary (other students providing assistance). The teacher, students and the mentor, as well as the communicative and collaborative functions on the online learning platform represented by the triangle, form a system of peer learning, peer assistance and peer assessment. The arrows indicate typical actions and flows in the system. Circular shapes in the figure represent personal knowledge management (PKM) of the roles themselves, so that they can access, organize, use and store knowledge, as well as create new knowledge.

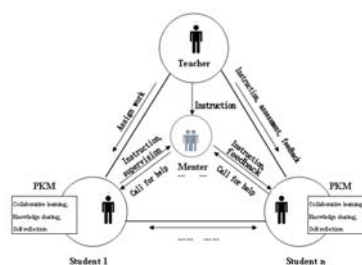


Figure 1: Online peer assisted learning community

And, online peer assisted learning community is constructed in an online learning community which support sharing resources, setting up learning atmosphere, avoiding misleading and providing context to support blended learning. Besides, and online learning community also support interpersonal interactions with its online communication tools such as web

interaction applications (BBS,Blog,etc.), real-time or non-real time communication tools(web messaging, E-mail, etc).

Procedures of online peer assisted learning community

Online peer assisted learning includes steps as following:

- (1) When a learner encounters a problem as fulfilling a task assigned by the teacher, he/she seeks help via real or virtual social network.
- (2) The mentor (full-time or part-time) analyzes topic layer and concept network of the subject, provides suggestions after communicating with the learner, and selects various transmission ways to provide proper learning resources and strategies according to property of the problems, the learner and the mentor's preference;
- (3) The learner solves learning problems according to the suggestions. He/she improves one's learning and examines oneself. During the process, the mentor supervises and evaluates, commenting on the progress.
- (4) As a supervisor and prompter, the teacher provides directions when the mentor is incapable of helping learns out, and assessment at the fulfillment of the task. In the whole process, the teacher supervises progress and climate, and guides the learning community by management.

In this model, learners play different roles, sometimes as the instructor and assistant, other times as the student needing help. Interactions in the community improve learners' ability to communicate, express and demonstrate, help to share personal experience and works, and ease anxiety.

Construction practice of online peer assisted learning community: the example of ZJNU course Distance Education

Using SimChoice Distributed Learning System (SimChoice DLS) developed by the author as the supporting platform, the author carried out an experiment of blended learning with Distance Education Zhejiang Normal University (ZJNU).

SimChoice DLS provides services including PKM, collaborative learning, community knowledge resources management, collaborative application, etc. This experiment applied blended learning, as well as activity course and task-driven learning, transforming the traditional classroom into a setting where the teacher gives directions & comments, and learning groups demonstrate their practice achievement. As for contents of the course, autonomous learners cover them in laboratory courses and spare time. As shown in figure 2, the experiment includes 3 stages: classroom instruction, online collaborative learning, demonstration and assessment of learning achievements.

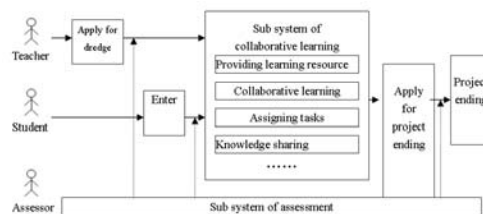


Figure 2, Process Design of SimChoice Distributed Learning System

The experiment divides contents of the course into several topics, and students volunteer to build interest-based assisted learning communities to work collaboratively. Students construct knowledge by using system resources, sharing resources in the community and interactions with members of the community.

To prove positive effect of online peer assisted learning community to study, the author used ways including assigning tasks, stimulating and adjusting atmosphere. After a semester of practice, emerged did online peer assisted learning communities based on actual social contacts and two-way Web communication, such as “alliance of postgraduate entrance exam”, “alliance of educational software development”, etc. This is beneficial for the students to construct their knowledge and maintain or strengthen social relations. Meanwhile, due to the guidance of teachers and administrators, an active and harmonious online learning climate was maintained and students were advancing in terms of acquisition of knowledge and skills, Internet ethics, information literacy, etc. Although quantity analysis has not been done, it has been proved that online

peer assisted learning community is effective in promoting interpersonal interactions and informal learning.

DISCUSSION

As argued above, peer assisted learning is a new model of online learning and it is worth research and practice. But some points need to be paid attention to.

First, shift of teachers' roles.No longer just an instructor, a teacher in the Web-based context ought to be a partner, cooperater and guider of students in autonomous learning, and is capable of directing peer assisted learning.In an online peer assisted learning community, students are the core and the teacher works according to students' need. Meanwhile, students are more independent for having complete control over time and place of learning without any restriction. For this sake, guidance and management turn out to be even more important, and the teacher should guide and manage the learning community by learning assistance, personal contact, learning climate adjustment, etc.

Second, Informal leaning in online peer assisted learning community .Informal learning exists in any minute. Even in online chat, if one is sensitive enough, one may regard it as an opportunity of informal learning. Informal learning that is often neglected in the community plays a role in realizing the spirit of the community. Thus, the lubrication role of informal learning should be recognized and informal learning be used.

Third, Stimulation mechanism in online peer assisted learning community. Stimulation in teaching is student-oriented, humanity-concerned, and it has students motivated. The use of stimulation mechanisms helps arouse learners' enthusiasm, so as to improve learning performance. In online peer assisted learning community, proper use of stimulation mechanisms promotes mutual supervision and progress among peers.

Peer coaching is not only an ideal model of teacher professional development, but also of great educational significance in build of online peer assisted learning community. This article aims to discuss peer assisted learning and construction of peer assisted learning community, has peer coaching integrated with Web-based learning setting to enhance online learning.

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