

## Chapter 6

# Community of Inquiry as Teacher Professional Development in China: New Literacies, New Complexities

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### **ABSTRACT**

*Over the past decades, improving teacher instructional quality has been a top priority in the Chinese government's K-12 educational reform agenda. Within this reform context, the purposes of this chapter are to share: (a) a community of inquiry model of professional development on new literacies that is being used with teachers in China; and (b) qualitative data from three teachers' perceptions of the professional development, their classroom practices, and challenges they are confronting as they implement changes in their educational system. Emerging themes indicated that teachers embraced pedagogical change along a continuum, from resistant to completely open, within the context of their school culture. Challenges to pedagogical change included teacher cultural identity and lack of time and commitment needed for implementation. Future research will include more in-depth analysis of the change process that Chinese teachers embrace as they conceptualize and apply new literacies and innovative pedagogies in their classrooms.*

## INTRODUCTION

Since technological advances are driving much of the change seen in information and communication, researchers and educators are attempting to answer the important question: *How do we design instruction that enables educators to cultivate digital literacies for themselves as well as their students?* Evolving pedagogical models for new literacies and emerging technologies (Leu et al., 2009) not only in the U.S., but also in China, hold “explosive possibilities” (phrase borrowed from Barab & Kirshner, 2001) for educators. Specifically, a “community of inquiry” (Garrison, 2013; Kennedy & Kennedy, 2013) perspective was applied to a professional development program with a group of Chinese middle and high school teachers, with a focus of engaging with them in new literacies pedagogical practices.

The value of learning, teaching, and schooling has been deeply embedded in Chinese culture over the past 2000 years. Additionally, teachers are highly respected within Chinese society, representing an important cultural symbol. In view of the importance of teacher quality in improving school effectiveness and student academic achievements, the Chinese government has paid much attention to teacher continuing education and professional development, especially since the new curriculum reform policy (called “xin kegai”) was carried out across the nation at the beginning of the 21<sup>st</sup> century (Paine & Fang, 2006; Yin & Yin, 2012). Some of the teacher professional development efforts, however, are viewed to be unhelpful in changing classroom practice (Huang & Bao, 2006; Syed, 2006; Spires, Morris, & Zhang, 2012). Teachers often participate in these events out of obligation, not because of their intrinsic interest or motivation (Syed, 2008; Yin & Yin, 2012). Besides, many teacher professional development events, like many K-12 classrooms in China, are lecture-based, and they do not address specific instructional needs in terms of modeling how to make pedagogical changes (Gu & Wang, 2006; Syed, 2008). Accordingly, there is often a perceived irrelevance between educational theory and classroom practice in Chinese teachers’ professional development. These considerations were taken into account while implementing professional development with the Chinese teachers participating in this study.

The purpose of this chapter is twofold: (a) share a model of professional development on new literacies that is being used with teachers in China; and (b) share qualitative data from three teachers’ perceptions of the professional development, their classroom practices, and challenges they are confronting as they implement changes in their instruction.

## BACKGROUND

Driven by continuous social and economic development and the need to stay competitive in the global economy, never before has the Chinese government placed so much emphasis on improving its education quality across the nation. Realizing that teachers play a critical role in improving overall education quality, the central government has carried out a series of reform policies, which aim to improve teacher quality through continuing education and professional development. Over the past decades, improving teacher quality has been a top priority in the Chinese government’s K-12 educational reform agenda.

In 1993, the central government created the *Teacher Law*, which for the first time officially identified teaching as a profession (Ministry of Education, 1993). In the same year, another document by the Ministry of Education, *Outline for Education Reform and Development in China*, placed teachers at the center of the nation’s social development and international competitiveness. This document asserts, “A strong nation lies in its education, and a strong education system lies in its teachers” (p. 8, cited in Paine

& Fang, 2006). In 1999, the *Provisions on the Further Education of Primary and Middle School Teachers* was published by the Chinese Ministry of Education; it aimed to involve all primary and secondary teachers in continuing education and professional growth (Zhang, 2010).

In China, there has been a long history of seeing teachers' content knowledge as the most important measure of teaching ability. However, as more criticism develops surrounding the traditional teacher-centered content delivery method and the crammed curriculum at schools (Zhao, 2014), teacher continuing education and professional development has shifted to focus not only on teachers' content knowledge but also on effective classroom delivery methods (Zhong & Wu, 2004). Since 2001, as the Basic Education New Curriculum Reform started, teacher training in pedagogy has been receiving more attention (Paine & Fang, 2006; Yin & Yin, 2012; Zhou, 2014). The new curriculum reform aims at developing a generation of lifelong learners who can think critically and solve real-life problems effectively to meet the new demands of social development in the 21<sup>st</sup> century global economy. All teachers are required to participate in training before teaching the new curriculum. These professional development programs aim at developing teachers' understanding of the new curriculum and training them in pedagogy-related issues including how to foster student higher order thinking skills and scaffold diverse learners in the classroom.

In more recent years, with the continuous development of technology, the central government has come to realize the transformative power of educational technology in the nation's educational modernization. Great investment has been made to introduce technology to K12 schools across the nation and to train teachers in effective uses of technology. For instance, entering the 21<sup>st</sup> century, the Chinese Ministry of Education established the "Xiaoxiao tong" (school to school internet connection) project to help schools create a more constructive, connected, and immersive learning environment for students. Under this context, teacher training in technology integration has become another important area of teachers' continuing education. Meanwhile, technology has been utilized a lot in delivering teacher training, which helps to overcome constraints on training resources, especially in rural and remote areas in the country (Zhu & Zhou, 2009, cited in Yan & He, 2011).

## **Approaches to Teacher Professional Development in China**

China has adopted a series of reforms directed at teacher professional learning that requires teachers to adapt to new goals and methods of teaching (Dello-Ivacovo, 2009; Ding, 2010; Quian & Walker, 2013). One of the most common approaches of China's teacher professional development is school-based professional learning activities. School-based in-service teacher training has a long history in China. Almost every school requires teachers to participate in various school-based professional learning events, including but not limited to mentoring, collaborative lesson planning, lesson observation, open classes, and teacher reflection activities and meetings (Wong & Tsui, 2007).

Since the 1980s, a new model of school-based teacher professional development called "Action Education" has become popular and has been adopted by many areas in the nation (Gu & Wang, 2006). The Action Education model was first implemented from 1977 to 1986 in Shanghai's Qingpu District as an experiment. With this model, teachers examine their teaching context, design lessons collaboratively with colleagues and experts, implement the lesson, and identify gaps between the lesson plan and actual implementation outcomes. Two important elements of this action-based teacher professional development are the post-lesson reflection with colleagues and experts and the follow-up actions taken by teachers (Gu & Wang, 2006). In a nutshell, Action Education aims to build a connection between teachers' edu-

cational theory learning and application of knowledge to achieve the ultimate goal of teacher self-growth and student learning (Gu & Wang, 2006). These features have made this model of school-based teacher professional development a great success in terms of improving teachers' understanding of their own teaching practice and improving student-learning outcomes.

Besides these mandatory school-based daily professional learning activities, various training programs organized by the upper educational authorities provide another important channel for teachers to meet the continuing education requirements. One unique feature of the teacher training mechanism in China is its top-down nature. In most cases, participation in various national, provincial, municipal, county, or district level training programs organized by upper educational departments is mandatory and counts towards teacher appraisal and personal promotion.

### **Progress but Change Is Slow to Come**

Various training programs have proven to have a great impact on improving the overall quality of the teaching force. Research has revealed that teachers value the professional development opportunities and believe that these events provide them with different channels to gain systematic knowledge in educational policies and theories, develop a new understanding of themselves as educators and their students, and enhance their awareness of continuous professional growth (Zhang, 2010; Wang & Tsui, 2007). In some instances, the higher teacher quality has also been found to enhance student academic learning (Gu & Wang, 2006; Wong & Tsui, 2007).

Along with the progress made in teacher quality and school effectiveness comes more and more criticism of the hierarchical top-down nature of teacher professional development (Yan & He, 2011; Zhong & Wu, 2004). One drawback of teacher professional development in China has been that teachers do not have enough autonomy in their own professional development. As mentioned previously, teachers usually participate in these events out of obligation not because of their intrinsic interest/motivation (Syed, 2008; Yin & Yin, 2012, Wong & Tsui, 2007). Therefore, teachers do not always feel self-motivated or committed.

Besides, there has been a perceived disconnect between the training content and teachers' daily classroom practice and needs. Although different formats of teacher training have emerged to improve the training's overall effectiveness, most teacher professional development events remain too theoretically-oriented and lecture-based (Gu & Wang, 2006; Syed, 2008; Zhong & Wu, 2004; Yan & He, 2011). Teachers' specific instructional needs, concerns, and challenges are not addressed during these professional development seminars (Syed, 2008). Due to the lecture-centered nature, teachers are not given chances to share/exchange ideas and teaching practices or to engage in hands-on activities. The irrelevance of training content and its failure to address teachers' specific teaching needs has led teachers to lack motivation to participate in training. A lack of ongoing support is another reason why it is difficult for teachers to translate theory into classroom practice (Yan & He, 2011; Zhong & Wu, 2004).

School-based professional development events have also been perceived to be not as effective as expected because most events remain too superficial (Zhong & Wu, 2004). Teachers have reported mixed perspectives towards the mandatory school-based professional development events. On one hand, teachers reported that school-based professional learning such as collaborative lesson planning, observation of other teachers' classroom, and reflection meetings gave them opportunities to learn from each other, and therefore were especially helpful for less experienced teachers (Gu & Wang, 2006). On the other hand, teachers felt that the effect of collaborative professional learning was limited because they

did not usually want to share best practices with each other. This is not surprising considering the fact that teachers are facing fierce competition from fellow teachers in terms of career promotion and other material benefits. Some teachers do not want to provide constructive feedback to others simply because they do not want their colleagues to feel uncomfortable. Therefore, much of the teacher professional development effort has not been viewed by participating teachers to be effective in improving classroom practice (Huang & Bao, 2006; Syed, 2006; Spires, Morris, & Zhang, 2012; Yan & He, 2011) and has not brought about the broad change that was mandated by the Ministry of Education (Zhao, 2009; Zhong & Wu, 2004; Zhang, 2010).

### **Call for Innovative Changes**

There has been a call for innovation in teacher professional development to focus more on teachers' active learning rather than exclusively on lecture and transmission of knowledge from experts to teachers (Yan & He, 2011). More diverse training approaches have also been advocated to meet the individual needs of teachers. For example, the Ministry of Education (2011) has called for the use of a combination of small class, inquiry, discussion, and scenario-based training for teacher continuing education. To move forward with the goal of educational modernization, training teachers in effective technology uses, using technology to deliver distance training, and collaborating with other countries to provide international training opportunities for teachers are also continuing to receive more attention (Li & Ni, 2011; Ministry of Education of China, 2011; Zhang, 2010; Cheng & Wu, 2016).

These international and modern goals for education are not without caveats. Critical researchers warn against China's modernization inside and outside of education as becoming Americanization or Westernization (Keping, 2003; Zhikun, 1994). Hierarchical, western-created structures, such as developing and developed world status, tend to politicize knowledge and ways of teaching, with power relations manifesting in pedagogical practices (Bernstein, 1977; Bourdieu & Passeron, 1977). Decolonizing teaching methods emphasize that "American" does not mean "best" and that the goal of professional development is not to Americanize learners (Chinn, 2007). With this critique in mind, a "community of inquiry" framework (Kennedy & Kennedy, 2010) was applied to the partnership with the Chinese teachers. A safe space for discussion was established where authority was distributed and knowledge was co-constructed. This was especially important since the lead researcher was American and the majority of the participants Chinese.

### **Community of Inquiry Theoretical Framework**

Community of inquiry has been defined as an "educational methodology capable of teaching critical thinking through actually doing it in group dialogue form, and guided by an experienced facilitator" (Kennedy & Kennedy, 2010, p. 2); in other words, a collaborative, dialogical group working towards a common goal. Community does not imply that everyone is the same, but instead that plurality is accommodated and unique contribution valued (Bruce & Bishop, 2008). Community of inquiry theory has its roots in Dewey and constructivist theory (Garrison & Arbaugh, 2007; Kennedy & Kennedy, 2013). Dewey viewed *community* as a cooperative group sharing equality and inquiry as active learning in authentic contexts, and he viewed both as central to learning (Dewey, 1938/1991). A community of inquiry utilizes democratic processes to problem solve and recognizes that the individual knowledge of each member may be critical to solving the problem but only if each member has a voice (Bruce & Bishop, 2008).

## ***Community of Inquiry as Teacher Professional Development in China***

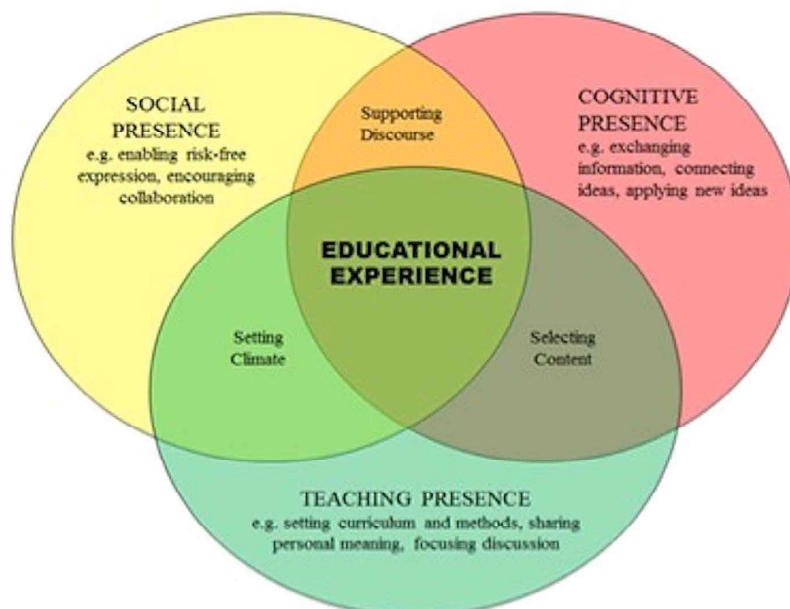
Three overlapping dimensions of community of inquiry comprise social presence, cognitive presence, and teaching presence, as shown in Figure 1 (Garrison, Anderson, & Arbaugh, 2000). Social presence refers to the interpersonal relationships central to a community of inquiry (Garrison, Cleveland-Innes, & Fung, 2004). Each member is an active and equal member of the collaboration, and members learn from each other through questioning, dialogue, and feedback (Kennedy & Kennedy, 2010). Cognitive presence refers to garnering intellectual curiosity and problem solving (Garrison, Cleveland-Innes, & Fung, 2004). In collaboration, group members construct new knowledge (Kennedy & Kennedy, 2010). Problem solving occurs through dialogue, analysis, and reflection, which requires communication and thus overlaps with social presence (Garrison, Cleveland-Innes, & Fung, 2004). Teaching presence signifies a facilitator of the inquiry process (Garrison, Cleveland-Innes, & Fung, 2004). The facilitator's role is to model and coach productive dialogue as well as to set and scaffold the democratic processes. Authority is considered distributed amongst participants in a community of inquiry with the facilitator as co-inquirer (Kennedy & Kennedy, 2010).

## **A STUDY OF TEACHERS ACQUIRING NEW LITERACIES IN A CHINESE SCHOOL**

### **Methods and Research Context**

The head of Beijing Royal School (BRS) invited Dr. Hiller Spires and a team from the Friday Institute for Educational Innovation at North Carolina State University to conduct the New Literacies Teacher Leader

*Figure 1. Community of inquiry diagram  
Adapted from Garrison, Anderson, & Archer (1999)*



Institute onsite at the school in Beijing. He was eager for his staff to be exposed to new technologies and pedagogies. In preparation, the research team conducted a needs assessment to see what the faculty were interested in learning about in terms of new technologies and pedagogies. Additionally, the researchers investigated prior to their visit which specific Web 2.0 tools were available in China so these tools could be used by the teachers during the Institute. Beijing Royal School, which was founded in 1996, is a K-12 private international boarding school and currently has over 2000 students and 500 teachers, 40% who are foreign. The school offers a challenging curriculum with 22 Advanced Placement classes.

The researchers were eager to understand the context in which the teachers were working and to what degree the ideas and practices that were introduced during the Institute could be applied at the school. The researchers employed a multiple case study design (Yin, 2014) to capture and analyze participant data. The three research questions posed were: (a) *How do three Chinese teachers perceive the community of inquiry model of professional development?*, (b) *How do the Chinese teachers transition from traditional to new literacies classroom practices?*, and (c) *What challenges do the teachers perceive as they implement changes in their pedagogy?*

## **New Literacies Teacher Leader Institute**

The New Literacies Teacher Leader Institute (NLI) was initially launched by the New Literacies Collaborative (newlit.org) at the Friday Institute for Educational Innovation at North Carolina State University. The goal of the Institute was to provide an intensive week of new literacies experiences for teachers so that they could begin integrating technology into their instruction. Specifically, the Institute focused on understanding and practicing new literacies associated with online reading comprehension, multimedia and video, and social networking. Using a combination of the technological pedagogical content knowledge (TPACK; Mishra & Koehler, 2006; Spires, Hervey, & Watson, 2013) and the project-based inquiry (PBI) framework (Spires, Lee, Young, Leu, Coiro, & Castek, 2009), teachers integrated technology into content lesson plans. To date, the Institute has been conducted in Raleigh, NC; Cambridge, MA; Beijing, China; Providence, RI; and Suzhou, China.

## **The Project-Based Inquiry (PBI) Model**

As part of creating a community of inquiry among the teachers at BRS, the teachers learned how to use the PBI model as a pedagogical approach to learning. During the weeklong Institute at Beijing Royal School, the teachers worked in dyads in a design studio environment, which fosters collaboration and access to technological tools and scaffolded support. Teachers used this time to design and implement innovative lessons to be used in their classrooms using PBI. This particular PBI approach has been researched in a variety of instructional contexts including teachers participating in a summer Institute (Spires et al., 2009); teachers enrolled in a new literacies and media graduate course (Spires, Hervey, & Watson, 2013); and middle grade students in an English language arts class (Spires, Hervey, Morris, & Stelpflug, 2012). Teachers in the current study used the PBI process to create an instructional product that was shared during the Design Studio Showcase. The PBI included a 5-phase process: 1) Ask a compelling question; 2) Gather and analyze information; 3) Creatively synthesize information; 4) Critically evaluate and revise; and 5) Publish, share, and act.

## ***Community of Inquiry as Teacher Professional Development in China***

In collaborative dyads, teachers were required to ask a question that integrated the areas of new literacies and technological pedagogical content knowledge (TPACK; Mishra & Koehler, 2006). They generated a specific question that was addressed through an inquiry process. A template was provided to teachers as they developed their PBI plan based on their questions. Teachers conducted research with the aim of creating an innovative lesson that integrated the areas of new literacies and their TPACK. The teachers' goal was to be intentional about designing and implementing a lesson that stretched their instructional capacity, pushing them beyond their comfort level with technology.

The researchers modeled for the teachers how to engage in appropriate online search strategies for their project. Teachers made decisions about which technology tools to use to best represent their new knowledge construction. Teachers conducted self-evaluations and peer-evaluations of their products based on a rubric that was provided by the Institute facilitators. As a culminating activity in the Design Studio Showcase, teachers shared their products with Institute members. In creating their PBIs and sharing them through Web 2.0 technologies, teachers were afforded the enriched opportunity of engaging in intellectual discourse around their PBI products that extended beyond the immediate setting of the Institute.

### **Participants**

A total of 65 teachers (45 were female) participated in a New Literacies Teacher Leader Institute in Beijing, China. Fifty-five of the teachers were Chinese, and the remaining teachers were from other countries (e.g., U.S., England, Germany). The study used a multiple case study approach to obtain a picture of how three Chinese teachers used the professional learning community to transform their pedagogy and adapt new learning to their classrooms (see Table 1). The teachers (two taught English and one Physics) were selected based on administrative approval, which is important in Chinese culture, and ability to communicate and teach in English for the interview and observation.

### **Data Sources and Data Collection**

Data sources for the multiple case study (Yin, 2014) included: (a) teacher-generated work products from the Institute, (b) classroom observation of teachers integrating technology during their classroom instruction, and (c) post-observation teacher interviews. The classroom observations were conducted by the researchers onsite at the school two months after the professional development session. The researchers positioned themselves at the back of the room and recorded notes during the full class period, which lasted for 50 minutes. Following the observations, the teachers were interviewed one-on-one in a 45-minute session using a semi-structured questioning format.

*Table 1. Description of participants*

<b>Case</b>	<b>Grade level</b>	<b>Content</b>	<b>Experience</b>
Xiaoting	10th grade	English	4 years
Huimin	10th grade	English	10 years
Zhijie	11th grade	Physics	6 years



## **Data Analysis**

Data was initially coded using an open coding method (Creswell, 2013). Observation notes, interviews, and artifacts were analyzed to develop an initial list of codes that represented teachers' perceptions and challenges as they implemented change. Researchers analyzed each case individually and then conducted cross-case analysis (Merriam, 1998). Data was analyzed with the community of inquiry framework.

## **Findings**

The research questions asked how three Chinese teachers perceived their transition to new literacies pedagogical methods. The next section describes the instructional practices of the three teacher participants followed by cross-case analysis findings.

## **Profiles of Three Participating Chinese Teachers**

Three teachers who participated in the Institute agreed to be interviewed and observed for the purposes of this study: Xiaoting, Huimin, and Zhijie (pseudonyms).

### **Xiaoting**

In her fourth year of teaching, Xiaoting taught English for 10<sup>th</sup> grade Chinese students. She expressed that she was passionate about teaching and was interested in making her classroom interactive and interesting for her students, using new literacies. As a result of the NLI experience of participating in discussion and collaboration, Xiaoting stated that she had been intentional in making a shift from having the students take practice English tests as a primary mode of instruction. She now included activities that required that students speak, write, and create visual products as a means of practicing the English language. She mentioned that she used the PBI approach to scaffold students as they created original products.

When researchers observed her class, they noticed that desks were clustered in groups of four, and Xiaoting moved around the room interacting with groups as they worked on collaborative projects. At one point, a student was making a multimedia presentation, in which he addressed the question: How much time do you have left to live with your parents? The student had created an emotional visual project that illustrated how he honored his parents, including many activities that he currently does with his parents. He used video, PowerPoint slides, and music to present his content. The student was required to write and speak in English for his project. When we interviewed Xiaoting, she stated that she was comfortable having the students create products using technology and that she enjoyed being a facilitator in the classroom as students designed their projects. She said that the students readily participated in the new classroom format, talking with each other and collaborating on products during class. While the students embraced the new learning inside class, they were still focused on passing the English tests and spent a lot of time outside of class taking practice tests to ensure they made the appropriate scores. Xiaoting realized the importance of conducting critical inquiry with web materials; however, she said that she had not yet provided instruction on how to conduct web searches.

## Huimin

In her tenth year of teaching, Huimin taught 10<sup>th</sup> grade English to Chinese students. Huimin told us that she used PowerPoint in the classroom but none of the new tools that she learned about in the NLI. The class was structured with the teacher at the front of the room and the students sitting in rows of desks. Her lesson that the researchers observed was titled, “What is Success?” She proceeded to prompt students to answer the question, by raising their hand, one at a time, speaking only in English. Huimin then went through a series of slides with pictures of famous people (e.g., Bill Gates, J.K. Rowling, etc); she asked the students to raise their hands if they recognized the people. She led the class in answering a series of teacher-generated questions about what they knew about each person, requiring them also to read phrases in English that were on the slide. Periodically, Huimin introduced a new phrase and then asked the class to repeat the phrase back in “correct” English. Additionally, she asked questions and then had students write the answers in English; students compared what they had written with each other to check for accurate spelling of words.

After class, researchers asked Huimin if she was interested in having the students use technology in class to support their English language learning. She noted, “I am not comfortable using technology other than PowerPoint. Even if I was, my students do not have laptops to use in class.” She further elaborated that it was inconvenient to take the students to the computer lab, which was on a different floor of the building, in order to conduct research on the internet. She noted that many of the students had devices that they could use outside of class if they wanted, but she did not require this type of activity.

## Zhijie

Zhijie had taught 10<sup>th</sup> grade Physics for six years. During the NLI, researchers provided access to websites with Physics content lessons since he and other teachers mentioned that it was difficult to find appropriate content for their Physics classes. He wanted to construct his class so that students spent most of the time solving problems in teams, something he learned from the inquiry model of the NLI. When researchers observed Zhijie’s Physics class, he used a lesson on Forces, specifically Hooke’s Law from Xtremepapers (<http://www.xtremepapers.com/revision/a-level/physics/>), which was introduced to him earlier at the NLI as an engaging and content-rich text. Students sat at tables in groups of four. Zhijie gave a short lesson on Hooke’s Law and then had two students come to the front of the class to demonstrate spring extension ( $F = k(x)$ ). Zhijie modeled how to solve for  $X$ , moving back and forth from Chinese to English depending on whether he thought students understood what he was saying. Next, he instructed students to solve a new problem using the same concepts collaboratively in groups. The goal was to investigate the position of a wooden rod suspended in water as the depth of the water was varied. Students were immediately engaged in the task as Zhijie walked around the room monitoring their progress.

When researchers interviewed Zhijie, he expressed his appreciation for the online resources that were shared with him during the NLI. He mentioned that he used videos in class to illustrate concepts but had not had students create their own videos. He stated that he would like to incorporate student-generated videos into the lab sessions but had not yet figured out how to do that. He felt that student-generated content would enable students to share what they had learned with an authentic audience outside of school. Zhijie further demonstrated his awareness that teaching expectations were changing in China

when he said, “Classroom interaction means linking what is required by the curriculum with students’ lives.” He expressed the most important thing he learned in the NLI was to design the classes so that students interacted and collaborated with each other, rather than listening to him lecture for the entire class. He felt that students learned more through active inquiry in groups than passively listening to lectures.

## **Cross-Case Analysis**

Through a cross-case analysis, two challenges emerged that began to illustrate the complex nature of Chinese teachers acquiring a new literacies approach to teaching within their classrooms. The researchers noted that the three participants seemed to fall along a continuum of application of new literacies.

### **A Community of Inquiry Model of PD Requires a New Mindset**

Chinese cultural traditions directly impact teacher identity and educational practices in the classroom (Gu 2006; 2012). Chinese tradition instills great authority in teachers, and participants saw that position of authority as both a source of respect and responsibility. As Huimin noted, “I believe that the teacher should be the source of knowledge for students. It is difficult to have students use technology and gain information from other sources.” In other words, it was difficult for Huimin to shift her mindset from the teacher being the sole source of authority in the classroom to a model of distributed authority. In the process of making meaning of the new pedagogies, the teacher participants searched for connections and differences between the new educational theories they encountered in the NLI and Chinese philosophical traditions.

All three teachers seemed concerned with how to blend elements of traditional Chinese culture with the new and ever-changing information available in their modern society. Zhijie noted, “To be literate in the 21st century should mean carrying on and developing traditional culture like Beijing Opera, shadow plays, and tea culture, but also expanding literacy to include the use of new information technologies, which will help to promote innovation and the quality of people.” He believed that the new should not replace the old, but should rather be studied in addition to the old. Xiaoting commented, “We need to tell students that in modern society new knowledge comes out quickly. Only by making full use of internet resources, and searching information with convenience and promptness, can we have better application of the information.” As mentioned in her case, Xiaoting had not carved out time in the class to teach new literacies skills, such as finding reliable sources. She believed information on the internet could be valuable to students, but she had not turned this belief into a practice in her classroom.

The teachers reflected the current curriculum reform efforts in their country as Zhijie explained, “The dominant form of education in China still features teachers as presenters and students as the audience.” Huimin noted disconnections between how she was taught as a child and how she is expected to teach now, asserting that teachers “need continuous training” in order to stay abreast of the new literacies associated with technology. She did not feel comfortable asking students to use a new technology until she felt that she was an expert with the technology herself. While Xiaoting wanted to incorporate more technology in her teaching, she expressed frustration with the intermittent availability of the internet at her school and that students were not allowed to bring their laptops and smartphones to class.

## Navigating Challenges of Pedagogical Change Requires Time and Commitment

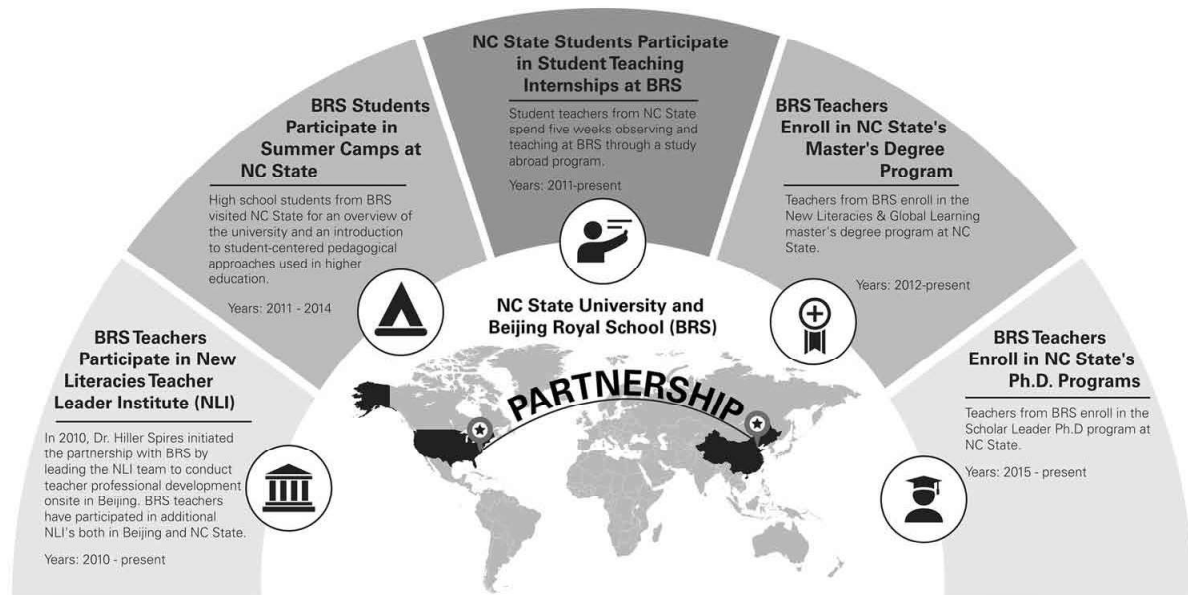
The three teachers expressed interest in continuing to learn from each other as part of their school professional development culture. Zhijie said, “We need more time during school to learn from each other.” The research team facilitated the process of professional learning communities at BRS by having teachers meet regularly (by subject area and/or grade level), engage in a community of inquiry, and demonstrate to their colleagues’ new strategies that they were using in their classes. They debriefed on what was working well and what was not working well and had their colleagues provide suggestions. The previous organizational structures at the school did not support this type of ongoing professional development. The administrators initially were open to trying the process and allowed the teachers to work with the researchers through Skype conferences as they implemented professional learning communities by subject areas. Huimin said, “We need professional and administrative support in order to make these types of changes in our teaching.” It was challenging for administrators to fully support this process approach to teacher development. Since the primary goal of the school was to have students score high on TOEFL in order to gain entrance to prestigious colleges in the West, it was difficult for them to fully understand the value of professional learning communities for their teachers. Since the initial New Literacies Teacher Leader Institute was conducted, the school administration has supported some of their teachers to spend a year onsite obtaining their graduate degrees in teacher education at NC State University. This strong support underscores the commitment the school leadership has for continued professional development for their teachers.

## **FUTURE RESEARCH DIRECTIONS**

Future research will include more in depth analysis of the changes that Chinese teachers embrace as they conceptualize and apply new literacies pedagogies in their classrooms. Since the Chinese government launched a new round of teacher education reform in the 1990s, there has been momentum for classroom innovation in teaching and learning. The focus on the deep integration and professional knowledge of teaching is prominently displayed in contemporary Chinese policy documents and by all accounts will continue to be important. The vital issue for Western researchers who study Chinese education to understand is that professional development must be adapted to Chinese culture and contexts in organic ways in order for changes to be internalized. This was obvious even with the community of inquiry model that was used in the current study. Expecting Chinese teachers to readily apply the elements of the community of inquiry model, namely a social, cognitive, and teaching presence, given the authoritarian culture of the school was unrealistic. The changes are more likely to take place over time as societal systems adapt, as was mentioned earlier. With the strong influence inherited from a Confucian epistemology that emphasizes knowledge for the human good (Li, 2012), a community of inquiry model would not be applied in a Chinese school context in similar ways that it would be applied to a Western school context.

Additionally, future research will address the full partnership between Beijing Royal School and the College of Education and Friday Institute at NC State University. Since the initial professional development session that was conducted on-site, the partnership has flourished to include several additional dimensions. See Figure 2.

Figure 2. Dimensions of the partnership between Beijing Royal School and NC State University



In addition to onsite professional development sessions, the current partnership includes (1) BRS students visiting NC State for summer camps; (2) NC State students conducting teaching internships onsite at BRS; (3) BRS teachers obtaining their master's degrees at the College of Education at NC State; and (4) BRS teachers enrolling in Ph.D. programs at the College of Education at NC State. By all indications, the partnership will continue to evolve since both partners have created a mutually beneficial collaboration and both groups are committed to cross-cultural understandings and collaborations. Of particular interest is how the partnership has been sustained through a combination of cross-cultural exchanges as well as the ongoing use of technological tools to maintain communication. Deep friendships have been developed that have been sustained over time and prove to be the anchor for the partnership.

## CONCLUSION

Clearly, the teachers in this study were interested in continuing to make changes in their instructional approaches and were seeking support to make such changes. The partnership continues as the teachers and administration explore making deep-level transformations to their school culture, including giving teachers the opportunities to observe and learn from more-experienced teachers, applying educational theories in culturally sustainable ways to classroom practice, and implementing mobile learning models.

The community of inquiry approach to professional development underscored creating a shared vision of the work that was to be done and a co-construction of meaning. The researchers took a stance that the goal of professional development with the Chinese teachers was not to Americanize learners (Chinn, 2007) but rather to create an innovative learning environment where new literacies pedagogies were embraced and adapted to the local cultural context of the school. As was mentioned, many challenges surfaced as the professional development unfolded, including understanding each other's language and

## ***Community of Inquiry as Teacher Professional Development in China***

culture, understanding norms within the Chinese educational system, as well as the specific expectations unique to the school. Despite the challenges, the partnership continues, by and large due to an investment in personal relationships among teachers and staff from both partners.

Implementing innovative pedagogies with technologies in Chinese schools is an ongoing process as the teacher participants indicated. The new curriculum reform proposed by the MOE aimed at developing a generation of lifelong learners who think critically, are creative and innovative, and solve contemporary problems to meet the new demands of the 21st century global economy. With the continuous development of technology, the government is embracing the transformative power of educational technology within the nation's educational modernization efforts. Traditional Chinese culture, however, views teachers as intellectual and moral authorities, and historically students have revered their teachers. Thus, for teachers to maintain authority with their students is often an issue of cultural identity (Li, 2012; Zhu, 2007). This simple paradox characterizes educational reform in China. American partnerships with Chinese teachers and students utilizing a community of inquiry model provide opportunities to share high impact educational practices as both countries strive to provide students with a 21st century education, that most importantly can help prepare them to be good stewards of an interconnected, global community.

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## KEY TERMS AND DEFINITIONS

**Cool Tools:** These are free digital tools that teachers can use to engage student interest and enhance student learning (also referred to as Web 2.0 tools).

**Community of Inquiry:** A collaborative, dialogical group working towards a common goal.

**Design Studio:** This is the specified time during the Institute when teachers collaborate with a partner to design and create a PBI.

**Design Studio Showcase:** This is the time during the Institute where partners share their creative PBI plans with their teaching colleagues and Institute leaders.

**New Literacies:** Literacies that have emerged through technology and the non-print based cultural shift in how information is retrieved, shared, and created.

## ***Community of Inquiry as Teacher Professional Development in China***

**New Literacies Collaborative:** The NLC ([newlit.org](http://newlit.org)) is comprised of a multidisciplinary team of researchers and educators who promote research, professional development, and global connections around new literacies and is located at the Friday Institute at North Carolina State University.

**Online Reading Comprehension:** The reading strategies needed to successfully read and understand information found online.

**Performance Based Assessment:** A form of assessment that allows students to demonstrate what they know how to do or create in addition to what they know.

**Project-Based Inquiry (PBI):** In the PBI process, teachers and students pose a compelling question, search information, creatively synthesize information, evaluate and revise information, and finally share and publish their work.

**Scaffolding Instruction:** This describes specialized teaching strategies to support learning when students are first introduced to a new subject. In order for learning to progress, scaffolds should be gradually removed as instruction continues, so that students will eventually be able to demonstrate comprehension independently.

## APPENDIX

Table 2. Template that was provided to teachers as they developed their PBI plan. From the NLI, retrieved from <http://nli2010beijing.wikispaces.com/Project-Based+Inquiry>

Guiding Questions	Describe Learner Outcomes, Teacher Actions, Student Actions, Resources, Materials, Content, Websites, Videos, Digital Tools as Appropriate.
I. What is the compelling question you would like your students to answer? Do you have any sub-questions to engage students?	
II. How are new literacies featured in your compelling question?	
III. How will you organize or group your students for the PBI?	
IV. What prior knowledge do your students need to have to complete this PBI lesson? What lesson(s) would come before the PBI?	
V. How will you scaffold and support your students' gathering and analyzing of information? How will you monitor this process?	
VI. How will you scaffold and support your students' creative synthesis of information in their PBI product? How will you monitor this process?	
VII. What intellectual elements in students' PBI product will be evaluated. What forms of assessments will you use (e.g. rubrics, checklist, etc).	
VIII. What technology tools will students use in creation and sharing of their PBI product?	