Collaborative Inquiry in Co-constructing ICT-mediated Curricula for Chinese Literacy in Singapore Context

Lung-Hsiang Wong, Ping Gao, Ching-Sing Chai, Chee-Kuen Chin, & Tze-Min Chung
Learning Sciences Lab., National Institute of Education, Nanyang Technological University, Singapore
E-mail: lunghsiang.wong@nie.edu.sg

Abstract. This collaborative inquiry project brings together Chinese Language teachers, curriculum specialists and researchers to co-construct Information and Communications Tools (ICT) mediated Chinese curriculum for primary school students in Singapore. The findings indicate that as the teachers were not used to voicing their concerns in free-flowing meetings, they experienced tension. However, all the participants agreed that collaborative inquiry is effective for teachers' professional development. There were also positive changes of teachers' views about the incorporation of ICT in Chinese learning.

Introduction

Collaborative Inquiry (CI) is a systematic approach to promote collaboration between researchers and practitioners to advance both knowledge and practice (Darling-Hammond, 1996; Bray, 2002, Batliwala, 2003), and to make meaning from their experience (Yorks & Kasl, 2002). This is a potential approach in Teachers' Professional Development.

This proposal reports the findings of a 3-month collaborative project in Singapore involving 14 teachers of Chinese Language, two curriculum specialists from Ministry of Education (MOE), and four teacher educators as researchers from the National Institute of Education. The participants came together to co-construct an Information and Communications Tools (ICT) mediated Chinese learning curriculum for primary school students. The two major research questions were first, what are the impacts of the CI on the professional development of teachers, teacher educators and ministry officials? Second, how do the participants from the three parties negotiate the meaning of CI?

Study Description

Six face to face meetings were conducted. The sessions usually started with researcher-led discussions on specific topics, followed by teacher-generated discussions on dealing with challenges in classroom. The teachers grouped themselves into three inquiry groups, one of which decided to develop a school-based curriculum on creating "audio dramas" with IT tools. The other two groups worked on two different ICT-mediated Chinese writing curricula.

Participants

The collaborative inquiry participants include 14 Chinese Language teachers from 12 primary schools within the same school district, two representatives from the Ministry of Education (MOE), and four researchers from the National Institute of Education.

Research Methods

We apply qualitative methods to study how the project impacts on the participants' perspectives of the CI processes and the use of ICT in CL learning.

Data Collection and Analysis

We incorporated several data sources: field notes online forum discussion, a focus group discussion during session 6, and one-to-one interviews after session 6. The data were then analyzed through the constant comparative method adapted from the grounded theory approach (Strauss & Corbin, 1990).

Findings

Three themes emerged as follows:

1. Participants Viewed Collaborative Inquiry as an Approach to Professional Development

a) The professional development of teachers. The participants gradually developed a positive attitude towards CI and found it an effective approach in their professional development. They became more active in contributing ideas, experiences, actually designing lesson plans, and even implementing them in their classroom.

"At first, the teachers were not sure at all. Through the early discussions, they explored and planned how to do it. Then they discussed the difficulties they face. Slowly, they heat up. Then they found the 'feel'. There were more interactions during the last three times and they were very involved. They knew they ought to do it and they have obtained some results from it. They had a sense of achievement." *(Celine, 18 May 2007).*

"Yes, this is TPD but different from the traditional one... Traditional method – I focus on and learn something. Collaborative inquiry – I can apply what I've constructed immediately and continue." *(James, June 21, 2007)*

b)   The professional development of the MOE officials. Like the teachers, they had also experienced positive changes in their attitude toward the approach. As they have put it: "CI is much better than theory-based programs. If we can do it well, it is good upgrading for the teachers." *(Celine, 25 June 2007 – Interview).* Both of specialists are also keen on observing the teachers' subsequent school-based experiments in order to discover practical challenges in ICT integration such as whether ICT should be incorporated into exams.

c)   The professional development of the researchers. The impacts of the collaborative inquiry are firstly, it has resulted in cross-disciplinary collaboration between the Learning Sciences and Asian Language and Culture Departments at the National Institute of Education. Furthermore, we have better understanding of the characteristics of local teachers. We were also able to gradually change our roles from leaders to facilitators.

2. Changes of the Teachers' Views about the Use of ICT in Chinese Language Learning

The teachers started off with little confidence in using ICT in class. They were also doubtful how much ICT would help raise the standards of the pupils. Their confidence increased and their doubts decreased as they got more involved in the inquiry. It was because they could raise their problems and obtain advice from colleagues. The co-designed curricula have also offered them concrete, systematic plans to achieve their aim.

3. Negotiating Meaning among the Three Parties

The participants had different expectations when they came together in the inquiry. The researchers wanted to examine whether CI is a viable Teachers' Professional Development approach for Singaporean teachers; the Ministry officials treated Chinese writing as their "burning inquiry question"; and the teachers had to meet the varied demands of their respective school administrators. Despite the tension, participants have learnt about each other's job nature and limitations, and expectations of their peers. The following is a comment on the mood of the group during the last sessions: "Teachers share with us their problems and we see it with our own eyes. There is synergy amongst the three parties, and we understand each other's jobs, etc. better. And we know who to approach if we need support. It is a network that we are building" (Elaine, 18 May 2007 – Focus Group).

Discussion and Implications

The encouraging findings are that all the participants agreed that collaborative inquiry is an effective approach to conduct Teachers' Professional Development. Furthermore, the involvement of national-level education officials in a teacher-researcher CI group is unprecedented. It is a strong indication of the importance being attached to CI by Ministry. The project has also helped built the confidence of teachers in incorporating ICT in their teaching. On the other hand, our teachers took time to adapt to a less-structured approach. The participants also experienced tension due to the different expectations they had for the collaborative inquiry. Our findings tallied with findings by researchers in the field (Pomson, 2005; Bray, *et. al.*, 2000).

References

Batliwala, S. (2003). Bridging divides for social change: Practice-research interactions in South Asia. *Organization*. 10(3). 595-615. SAGE Publications. 2003.

Bray, J., Lee, J., Smith, L., & Yorks, L. (2000). *Colllaborative Inquiry in Practice: Action, Reflection and Making Meaning*. London: Sage.

Bray, J. (2002). Uniting teacher learning: Collaborative inquiry for professional development. *New Directions for Adult and Continuing Education*, 94, Summer 2002.

Darling-Hammond, L. (1996). The quiet revolution: Rethinking teacher development. *Educational Leadership*, 53(6), 4-10.

Pomson, A.D.M. (2005). One classroom at a time? Teacher isolation and community viewed through the prism of the particular. *Teachers College Record*, 107(4), 783-802.

Acknowledgements