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## **An emerging role of teacher-researchers in Hong Kong through a school-university collaborative research project**

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## **Abstract**

Teachers' engagement with research has long been advocated to enhance their professionalism. Yet classroom-based research is still relatively new to teachers in Hong Kong. This study aims at exploring the reasons behind the lack of a teacher-as-researcher ethos in Hong Kong. Teachers from four local primary schools participating in a school-university partnered project to promote collaborative inquiry project-based learning (IPjBL) were interviewed. Teachers from four different subject areas, including Chinese, General Studies and Information Technology teachers and teacher librarians, have worked collaboratively in equipping their students with the knowledge and skills across disciplines to implement IPjBL. IPjBL is a new teaching approach that offers opportunities for teachers to engage in research, taking on the dual role of both teacher-practitioner and teacher-researcher. In this study, five focus group interviews were conducted with the teachers involved to collect in-depth qualitative data on their experiences, comments and reflections on this school-university collaborative research project. The influence of this partnership on teacher professionalism will be examined in term of four aspects: the teacher as individual, teaching practice, curriculum design and school culture. The facilitating and debilitating factors impacting on teachers' development as researchers in Hong Kong will also be discussed. Findings have revealed that time constraints and teachers' conceptualization of "research" as something "complex that only academics at universities do" are the main reasons for their lack of interest in taking on the teacher-researcher role in Hong Kong. In contrast, expertise and school administrative support are found to be key elements conducive to teachers' success in conducting action research in the classroom. These findings have potentially significant implications for educators, school administrators and teachers in developing a school climate that promotes teacher professionalism and empowers teachers with the knowledge as well as skills to face the new challenges in their teaching practice brought about by ongoing education reforms.

## **Introduction**

In recent years, the Education Bureau (EDB) of the Hong Kong Special Administrative Region (HKSAR) has incorporated project-based learning (PBL) into its general studies (GS) curriculum for primary schools. Its goals are to facilitate students' development of students' basic knowledge, investigation skills, and problem-solving capabilities (EDB, 2002). Accordingly, a school-university partnered project was organized to promote the collaborative inquiry project-based learning (IPjBL) in four local primary schools. Teachers from four different subject areas — Chinese, General Studies, Information Technology and the teacher librarians — have worked collaboratively in equipping their students with the knowledge and skills across disciplines to implement IPjBL. IPjBL is a new teaching approach that offers opportunities for teachers to collaborate with other teachers both intra and inter-schools as well as scholars from university, reflect on their teacher professionalism as well as engage in research, taking on the dual role of both teacher-practitioner and teacher-researcher. The influence of this partnership on teacher professionalism will be examined in term of four aspects: the teacher as individual, teaching practice, curriculum design and school culture. Despite the desirability of teacher engagement with research, classroom-based research is still relatively new to teachers in Hong Kong. This study aims at investigating the reasons behind the lack of a teacher-as-researcher ethos in Hong Kong. The pull and push factors impacting on teachers' development as researchers in Hong Kong will be discussed.

## **Literature review**

### **Teacher research**

Many labels have been used for the kinds of research that teachers pursue in classrooms and schools such as “action research” (Elliott, 1991; Kenneth M. Zeichner, 1993), “practitioner research” (M. K. Zeichner & Noffke, 2001), “Collaborative inquiry” (Bray, 2000), “critical inquiry” (Aaron, et al., 2006), “self-study” (Bullough & Pinnegar, 2001) and “teacher-research” (Cochran-Smith & Lytle, 1993, 1999; MacLean & Mohr, 1999). Teacher research is a process in which educators determine research “problems” in the context of their schools and classrooms, propose investigative methods appropriate to the problems, systematically observe the results, analyze those results in light of their professional knowledge, and share the results with others, meanwhile enacting change in their

classrooms (Bissex & Bullock, 1987; Cochran-Smith & Lytle, 1999; Goswami & Stillman, 1987; Kincheloe, 2003; Loughran, 2002; MacLean & Mohr, 1999; Myers, 1985).

Teacher-research commonly makes use of qualitative data, including journals, oral inquiries and observational data (Cochran-Smith & Lytle, 1993) and often makes use of narrative formats of representation. As a powerful and applicable tool to examine and evaluate an issue or phenomenon in a systematic and rigorous way, school-based research carried out by teachers is the most explicit and effective way of creating educational knowledge (Hargreaves, 1998).

### **Benefits on conducting teacher-research**

Teacher research has been found to exert profound influence on those who have done it, particularly the teachers (Oja & Smulyan, 1989). Teachers engaging in research may have advancement in cognitive, affective and interpersonal aspects. Cognitively, teachers' content and pedagogical knowledge may increase since conducting research may improve their abilities in applying abstract educational theories into practical plans for teaching (Kirkwood & Christie, 2006). Conducting teacher research may also induce higher level of critical thinking when the teacher-researchers reflect upon the impact of their teaching practice on students' learning (Allen, Cary, & Delgado, 1995) and become more flexible and open to new ideas (Oja & Smulyan, 1989). Affectively, teachers may become more aware of and responsive to students' needs by generating a more learner-centered approach in teaching as well (Mclaughlin, 2004). Engaging in the research process of hypothesis generation, testing and drawing conclusions may also enhance their self-confidence and self-efficacy to deliver effective teaching during class (Boudah & Knight, 1998). With first-hand experience in conducting research, teachers often take leadership roles in their schools as they have gained the ability to be more proactive and act as agents of change in their schools (Price & Valli, 2005). Zeichner (2003) reported that teachers seem to develop a more analytic and focused approach that helps them to build a sense of professional renewal and intellectual engagement.

Collaborative effort on working through the research may facilitate the communication, interactions, and knowledge exchange between colleagues, students, administrators, parents, and other community members to improve teaching and learning as a whole (Shakir-Costa & Haddad, 2009). Hence, information can be utilized to improve and facilitate teaching and learning that benefit the entire school community. Teachers

benefit by developing more effective instructional strategies in accordance to their research and the benefits are maximized when those strategies are shared with other teachers. Students benefit by becoming more self-reflective through self-assessment and evaluation and by having their needs specifically addressed which ideally may result in improved performance.

Administrators can use the results of practitioner research to implement policies and make budgeting decisions that will enable students to meet the standards. Overall, teacher research creates an atmosphere in school where knowledge is shared, reflected upon and actively used to improve student and teacher performance. Research has renewed teachers' enthusiasm about teaching and fostered collaboration with colleagues to satisfy students' needs as well.

### **Research gap**

Teacher-research is a relatively new concept to teachers in Hong Kong. Very few research have been done regarding the action research conducted by teacher-researchers in Hong Kong. Thus, there is a need to fill this research gap by investigating the reasons behind the lack of teachers-as-researchers ethos in Hong Kong. The push and pull factors impacting on the development of teacher-researchers and the influence of school-university collaborative research project on teacher professionalism will be discussed.

## **Methodology**

### **Research questions**

The present study explores the following questions:

1. In the era of education reform, how does the school-university partnership project affect the execution of the teachers' teaching and teacher professionalism?
2. It seems that there is a lack of teacher-researcher in Hong Kong, so what are the facilitating and debilitating factors for teacher-researcher?
3. How to promote teacher-researcher in Hong Kong?

Five focus group interviews were conducted with 32 teachers to collect in-depth qualitative data on their experiences, comments and reflections on this school-university collaborative research project. Participating teachers come from four local primary schools

teaching four different subject areas in the Primary 4 level, which include Chinese, General Studies (GS), Information Technology (IT) and librarians. The curriculum development officer from two of the participating schools participated in the interview. There were one to two teachers from each school taking the role of teacher coordinator (TC) to lead the colleagues in their school. Each focus group interview lasted for 45 to 60 minutes with four focus groups consist of 6-10 subject teachers and one focus group involves 5 teacher coordinators.

## Findings and discussions

### How does the school-university partnership project impact teacher professionalism?

The influence of a school-university collaborative research project with the aim at promoting inquiry project-based learning to primary school students was examined and analyzed into four aspects, which include teacher as an individual, teaching strategy, curriculum design and school culture.

**Individual aspect.** Teachers have gained more knowledge and skills to implement IPjBL from the workshops held by university experts and the experience sharing among colleagues. Their newly acquired knowledge and skills could be consolidated though direct practice and transmitted to students during class. Chinese Teacher Louise said that,

I have curiosity and enjoyed learning new teaching method, IPjBL, and gradually gained better understanding through the implementation. I feel a sense of satisfaction from guiding students to do inquiry-based project.

Several teachers like Lily and Winnie also reported that they have learned IT skills such as the use of Pworks — a Wiki technology. Teacher coordinators Tiffany in particular claimed that they have advancement in communication and coordination skills by acting as the bridge between school and university experts.

**Teaching strategy.** This school-university partnership project advocated the collaborative teaching approach that four kinds of subject teachers: Chinese, General Studies (GS), Information Technology (IT) teachers and librarians worked collaboratively in equipping the students with the knowledge and skills across disciplines to implement IPjBL. In general, teachers agreed that more cooperation and communication with colleagues in

experience sharing and exchange of teaching practices were beneficial in developing more effective teaching strategies. Chinese teacher Claudia said that,

We have to coordinate carefully the teaching plans and schedules of different subjects in order to support students in doing the inquiry-based project, and more importantly to avoid repetitive teaching of similar skills to increase the efficiency of teaching.

**Curriculum design.** The implementation of this new teaching approach has imposed profound changes in the curriculum design. IT teacher Kitty said that,

We amend the syllabus to teach students Powerpoint and Excel in Primary 4 instead of Primary 5 to assist them in making some graphs and charts for the presentation of their inquiry-based project.

Teacher librarian Tina also made a remark on curriculum change in Library Studies that,

Information searching skills for students to gather information online from electronic databases have become a topic to teach.

Chinese teacher Chloe also rearranged the curriculum by adding more intensive trainings on how to summarize and organize information. It is understandable that some teachers encountered difficulties in designing curriculum and teaching plan for inquiry project-based learning since it is a new teaching approach without any previous experience and relevant skills and knowledge. Yet teachers hold positive attitudes towards the experimentation of this new teaching approach in which one of the teachers, Louise, believed that,

The goal and philosophy of inquiry project-based learning are in line with the direction of the curriculum development in education reform as it advocates active learning from students.

**School culture.** This school-university partnership has positive impact on the school culture as evident in a remark from a teacher coordinator Felix,

It helps promote and gradually shape the school culture that teachers become more open-minded and innovative and have the courage to

take the first step to explore and attempt new teaching practice. Also, participating teachers may play a more active and even leading role in constructing a new school climate.

Moreover, this collaboration fosters inter-schools interaction. According to teacher coordinator Louise,

It is not a common practice for teachers in Hong Kong to share their teaching experience with colleagues, no matter inside or outside schools.

Another teacher coordinator Felix added that,

This school-university partnership facilitates inter-schools exchange and sharing of teaching experience, knowledge and insights gained from this project.

### **Why is there a lack of teacher-researcher in Hong Kong?**

The reasons for the lack of teacher-researchers in Hong Kong can be divided into macro and micro factors. Systematic macro factors consist of the observable phenomenon regarding the role and duty of teachers in Hong Kong while the micro factors refer to the lack of research skills and time constraints.

***Role and duty of Hong Kong teachers.*** The traditional role and duty of teachers in Hong Kong do not include conducting research. In Hong Kong, there is a clear distinction between the roles of teacher practitioner and researcher. In fact, this school-university collaborative research project was the first time for most of the participating teachers to engage in an educational research during their career as a teacher. Consistent with the findings from Berger, Boles and Troen (2005), most of the teacher interviewees described themselves as unfamiliar or even intimidated by the concept of research since they regarded research as something “complex” and “sophisticated” that only a few academics at universities do (Campbell, 2003). This expert mystique surrounds educational research is very prevalent among teachers in Hong Kong that research is conducted by university experts and teachers have nothing to get involved in. Watkins’ interview with teachers (2006) also recognized that research is not something that every teacher wants to engage with.



**Lack of research skills.** To be qualified as a teacher in Hong Kong, he/she has to study the Postgraduate Diploma in Education programmes. The trainings equip potential teachers with a variety of skills ranging from subject-specific curriculum design to education policy and moral education. However, research skills are very often being neglected in their training and their ability to conduct classroom-based research is never a vital aspect to evaluate their performance. Hence teachers in Hong Kong are neither well-prepared nor motivated to initiate educational research in their classroom. This explains the reasons for the lack of teacher-researcher in Hong Kong.

**Time constraint.** Apart from teaching and marking assignments, teachers bear heavy workload on leading extra-curricular activities, doing administrative work and pursuing further studies to face the challenges brought about by the education reforms. Teachers are indeed fully occupied by those daily tasks that it is difficult to spare time for research. Teachers from different schools, Chloe and Winnie, made similar remarks that,

It is very time-consuming to explore new teaching approach. We are willing to make this attempt but time is a barrier.

Also, research is never the priority of works to be accomplished in teacher's mind and schedule compared with other agendas assigned by EDB. In line with Watkins' (2006) findings, even though teachers possess the necessary research skills, they are seldom given the opportunity or time to engage in research project. Therefore, the current school-university partnership research project provides a precious opportunity for teachers to gain first-hand experience in doing research.

### **How to promote teacher-researcher in Hong Kong?**

To overcome the above obstacles which hinder teachers to conduct research, internal and external support, collaboration from school principal, colleagues, students and their parents, as well as support from experts in universities are crucial facilitators for the development of teacher-researchers.

**Administrative support from school.** School principal plays an important role in the development of a school culture that encourages teachers to conduct research in their classroom. Teacher coordinator Tiffany said that,

Support from school administrator is essential for the implementation and success of the research project. The principal plays a leading role to urge all teachers to take action.

For the positive outcomes of the research to persist in the long-term, careful planning on the succession of teachers is one of the administrative concerns (Linda) that teachers with previous research experience should transfer their knowledge and skills to successive teachers. Moreover, the opportunity to share the research outcome at least with colleagues within school if not across schools is vital as a kind of recognition of the time and effort teacher-researchers invested in the work. This kind of inter-school sharing and knowledge exchange not only stimulate teachers to reflect upon their teaching practices but also provide insights and incentives for teachers to engage in classroom-based research.

Furthermore, the implicit and explicit support and cooperation from colleagues are essential to assist the teacher-researcher in implementing the research in class. Teacher coordinator York emphasized that,

Curriculum Director has to adjust the timetable and teaching schedule of different subjects among various classes to assist the research process.

This heightened collaboration between teachers facilitates their communication and understanding on the roles of different subject teachers.

***Students participation and parents support.*** Students' active participation is necessary for the success of classroom-based research project. GS teacher Howard said that,

Students are no longer merely receptive in learning as they form into groups to discuss on the project.

Parents' attitude and support towards research are also crucial since their consent must be obtained before the intervention begins. According to a remark made by teacher Lily,

Parents concern very much on their children's examination results and exert pressure on teachers to spend more time on teaching textbook material within the syllabus.

Therefore, it challenges teacher-researchers' time management skills to balance the time and effort spent on both teaching and conducting research. No doubt parents' support and students' participation are indispensable for teacher-research.

**University and expertise support.** For the success of teacher-research, the universities play an important role as well. University scholars provide relevant expertise, knowledge and skills to support teacher-researchers both intellectually and technically. Chinese teacher Claudia reported that,

I have learned more IT skills and information literacy from trainings provided by experts in university. For example, electronic database can be a fruitful resource to find information and e-platform for students to have discussion online; media education also reminds me how to compare and differentiate the information/news from diverse newspapers with distinct perspectives in news reporting as well as the importance to select reliable and credible newspaper as a source of information.

Apart from hands-on trainings, GS teacher Winnie suggested that,

University experts may help preparing some practical materials such as teaching plan as guidelines to well equip teachers and hence build up their confidence in implementing this new teaching method to students.

All these may enhance teacher-researchers' self-efficacy in conducting classroom-based research.

In addition, the sharing of teaching experience among teachers across schools is far from a norm in Hong Kong. Thus, university can be a vehicle to foster inter-school sharing and exchange of knowledge and experience through seminar inviting teacher-researchers from different schools to share their research outcomes. This may not only recognize the effort of existing teacher-researchers, but also attract other teachers to become teacher-researchers.

## Conclusion

Through the focus group interviews with teachers who participated in a school-university partnered project to promote IPjBL, we found that involved teachers had

intellectual growth, more coordination with colleagues to make teaching more effective, amendment in curriculum design in response to students' needs and develop an open-minded and innovative school culture that is favorable to teacher-research. All these may enhance their teacher professionalism and competency.

The reasons for the lack of teacher-researcher in Hong Kong include macro factors such as the traditional role and duty of teachers do not include conducting research as well as their perception of "research" as something "complex that only academics at universities do" and micro factors such as the lack of research skills in professional teacher training and the time constraint due to the tension from other school agenda.

Both internal and external supports are crucial motivators for teacher-researchers. School principal plays a leading role in establishing a school climate where colleagues collaboratively design the teaching pedagogy meeting students' needs, students actively participate in learning and parents enthusiastically cooperate with school practice. In addition to university expertise support, teachers are well equipped to take dual role of both teacher practitioner and researcher.

In face of the challenges of the ongoing education reforms, it is speculative that developing the role of teacher-researchers may be a potential way to enhance teachers' professionalism and competency to sustain teachers' career.

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