



How Does Action Research Influence on the Professional Development of University Teachers in China?

Yue Qin^(✉)

School of Education, University of Nottingham, Nottingham, UK
alyyq25@nottingham.ac.uk

Abstract. Nowadays, the balance of teaching and practice is important in higher education, which aims to develop lecturers' teaching and promote learning skills, while higher education also needs reflective practice to enhance teaching and learning practice [13]. However, in the past decade, the need for vocational permission of educational workers and high-quality teacher education has already appeared. Under this situation, action research (AR) is an inspiration, guidance, and method, the importance of AR is hard to ignore [14].

Keywords: action research · professional development · university teachers · influence

1 Introduction

Practice-based Inquiry (PBI) is a form of research that makes teachers take advantage of their special internal knowledge to understand their background, classroom, and students, which decides problems and focuses on areas that need to be developed [39]. Inquiry-based practice includes students' performance and teacher training action research [1]. Action research is an inquiry-based model to promote some aspects of teachers, like professional development [1]. Professional development of teachers is explained as professionalism in transition, which includes factors of learning, attendance, partnership, cooperation, and actions [33].

2 Impact of Action Research

The definition of action research is to improve the rationality and impartiality of participants' practices, improve participants' understanding of these practices, and understand the situation of practice implementation [5]. The core work of action researchers in education research is to integrate practice with inquiry, which aims to make the whole school system better [26].

Field experience has a crucial impact on teachers' development [43]. The accumulation of field experience is one of the key factors for teachers to carry out action research smoothly [18]. Effective field experience enables skilled teachers to observe children's behavior, collect and analyze teaching evidence that relates to practical problems in teaching and learning, and examine teachers' behavior [20]. To find out if field experience is useful or not from a teacher's point of view, questions 1 and 2 of the questionnaire are desired. (See Appendix 1).

The systematic and critical survey is regarded as a kind of inspection of stance [7]. Which could be the reason it can enhance the quality of teacher training [17]. Over the past 10 years, online survey in the application of educational research developed rapidly, online survey is used to illustrate various themes, like students' evaluation of teaching and learning and beliefs to pedagogy for sustainable development [9], and professional learning of higher education teachers [21]. Thus, I put forward question 3 in my questionnaire. (See Appendix 1).

Reference [32] suggest that attending action research makes teachers explore their views; fulfill goals of their teaching and learning; learn with students orderly; and realize they need to concentrate on research, which plays an important role in teachers' development. Action research is a tool for solving daily obstacles and problems for teachers [15]. Action research allows systematic, frequent, and critical inquiry to improve the practice of teachers' development. Teachers from Singapore also need to make action research and update their teaching practice on their findings [11]. Therefore, action research helps teachers solve problems and difficulties in their daily life, which includes reflection on teaching and learning, and the importance of attending research, it is beneficial to teachers' professional development put forward question 4 in my questionnaire by ideas showed above. (See Appendix 1).

Reference [10] said that chances of attending research in learning communities are an important part of teachers and teacher educators to make continuous education [44]. Described a series of results of collaborative research in his reviewed research, such as keeping an open attitude to new ideas, increasing self-confidence and self-esteem, maintaining positive and self-oriented attitudes toward their practice and students, research habits, and skills, they also take advantage of these habits and skills to analyze their teaching and learning. The importance of making conversations is emphasized in collaborative research as follows: Making conversation is a method to promote collective reflection of teachers and trainers [24]. For instance, when teachers communicate with others, they can reflect on their own teaching and learning styles by reviewing words in conversation. Collaborative research is a type of action research [11], collaborative research allows attendance of teachers in an educational environment, and it also allows teachers to cooperate with educational workers to become a researcher [25, 31]. Believed that when educators engage in research, which is beneficial to their professional development, and attend collaborative work also has benefits. Thus, collaborative research allows teachers cooper with other education workers and make reflection through conversation to promote the practice of teaching and learning. I put forward question 5 in my questionnaire by the ideas showed above. (See Appendix 1).

Research and reflective research are a way to promote professional development and practice, in the education field, cooperation between team and community has long

history, especially in field of development of teachers [36]. Community of inquiry (COI) is a group use similar procedure to pursuit same goals [23] and which allows participants attend conversation to serve for constructing knowledge. References [30, 44] reported that teachers pay great attention to cooperation, interaction, and conversations between groups. While in many countries, too many educational workers are not use this method (COI) [22, 29] stress on professional development of educators is produced by informal formation (like practice communities). In practice communities, they refer to “they have same attention to some topic, a series of problems or passion, improve deeply their knowledge and skills. Research community (or community of inquiry-COI), teacher educators implement collaborative research (a type of action research) of common topics arising from practice to inspect professional development and come up with key features (educators as experienced researchers) of crucial community. All of participants express they make progress in practice-based knowledge and ability, also include instructions of students. COI is a part of action research (Practice-based research) to promote teacher educators’ professional development [41]. Therefore, the goal of setting professional activities by universities is help educators and researchers to play a new role (it means there is a urgent need for promoting educators have ability to do research) It is obvious that COI pay great attention to teamwork, structure of local knowledge, inspect and promote practice of teachers, construct new courses and take part in cooperative research of life meaning. Similarly, according to this point showed above, I put forward question 6 in my questionnaire. (See Appendix 1).

Reference [6] give a universal definition of practice-based research; practice-based research is an inquiry that aims to gain new knowledge through partial practice and results of practice. However, as [16] suggest that practice-based research should start with problems produced by practice, or start with interaction with internal educational workers, which aims to promote teaching and learning, performance of students, professional development of educational workers, also, asking teachers make full preparations of teaching and learning practice-based research is one of the tasks in universities. Practice-based research is increasingly regarded as one of the tasks in universities [42]. Meanwhile [40], refers to: practice-based research uses different ways, represents various types, and make different explanation in accordance with ideological, and epistemological framework, such as action research, design research. According to this, I put forward question 7 in my questionnaire. (See Appendix 1).

Views on researchers might depend on whether they think it is a good characteristic or not [34], or whether they think roles of research might reduce roles of teachers. Teachers need make self-assessment of their own practice of teaching and learning [19]. They have re-established and redefined teaching and learning process by assessing their own teaching outcomes and learning experiences, which allows teachers to reflect on their earlier teaching experiences [19], which is crucial for teaching and learning experience, which needs improve conversation among teachers, and strengthen experience about learning, instructions and relationships [27]. As a result, various kinds of professional development activities (like COI) are aims to help educational workers become more skillful about research [12]. Therefore, a range of professional activities to support educators as s new role (researchers).

Not all educational workers believed that research is a part of their work, despite the importance of educational workers as a researcher is emphasized in international societies [8, 25] believed that educational workers not only a consumer of research, but also need explore their own practice program. By implement practice-based research, educational workers can enrich and promote their daily teaching and learning practice based on theory and make contribution for their professional development in this aspect. As [38] claim that if the aim of teacher educators is becoming a good teacher, they will attend research activities (like COI-a research activity of action research) to make sense of the teaching and learning practice.

When educators' professional development is promoted in research, which produces some benefits: (1) transaction of views, belief, understanding and attitudes with research, and their research roles (affective dimension); [38] (2) changes on their research aspects and research, knowledge, and skills (cognitive dimension); (3) changes on research opportunities (behavior dimension). Educators' professional development is beneficial to knowledge, skills, thoughts, belief and understanding in this field, the assumption of this point is increase knowledge, power and positive research ideas. However, as [42] found that after educators attend professional development activities, they can realize they lack skills. However, the process of understanding can promote continuous career development. According to the content mentioned above, I also put forward a question 8 in my questionnaire. (See Appendix 1).

3 Methodology

Practice-based inquiry is a type of inquiry based on research and relationships between practise partners and innovation produced by practice [28]. It is widely used to refers to research in real world with practice inquiry [4].

As internet penetration has increased, researchers have already realized the Internet provides opportunities of collecting data [35]. Compare with traditional (offline) method, popularity of online survey might depend on its advantages such as cheap, flexible, fast to get large, multiple samples, which reduces social expectations and experimenter expected effects [3].

Therefore, for the purpose of this assignment, I will use online questionnaires (include choice and open questions) as a research method for its operability and flexibility of long distance in my own context. I can get data directly as quickly as possible. The whole questionnaire includes eight choice questions and four open questions. Participants have free to choose which open question they want to answer.

Data will be collected from sources in China. In Quanzhou owing to some reasons, I choose five teachers from my university in Fujian with different institutions and analyze their answers to explore how does action research influence on teachers in China? five teachers that I choose, owing to they prefer to become researchers in their workplace, and they often accumulate field experience to promote their teaching and learning practice such as go to other universities to make academic communication.

4 Conclusion

The assignment analyzes influence of action research on teachers. First, introduction includes research context, include what kind of background of this study and some definitions. Definitions include practice-based inquiry and collaborative research. The second part is literature review to demonstrates theoretical knowledge of this assignment. Action research includes experience of action research, especially emphasizes field experience, and includes collaborative of action research, practice-based research. Collaborative research is also a kind of action research. The third part is methodology to illustrates a process of data production with more details. The fourth part is discussion, which mainly talk about results of questionnaires in details. Maybe some limitations exist in research, but the assignment might as a guidance to educators to some extent.

References

1. Aras, S. (2020) 'Action Research as an Inquiry-Based Teaching Practice Model for Teacher Education Programs', *Systemic practice, and action research*, 34(2), pp. 153–168. doi:<https://doi.org/10.1007/s11213-020-09526-9>.
2. Allen, P.J. and Roberts, L.D., 2010. The ethics of outsourcing online survey research. *International Journal of Technoethics (IJT)*, 1(3), pp.35-48.
3. Best, S.J. and Krueger, B.S., 2004. *Internet data collection* (No. 141). Sage.
4. Brownson, R.C. and Jones, E., 2009. Bridging the gap: translating research into policy and practice. *Preventive medicine*, 49(4), pp.313-315.
5. Carr, W. and Kemmis, S., 1986. *Becoming critical: education knowledge and action research*. Routledge.
6. Candy, L., 2006. Practice based research: A guide. *CCS report*, 1(2), pp.1-19.
7. Cochran-Smith M, Lytle S (2009) *Inquiry as a stance: Practitioner research in the next generation*. Teachers College Press, New York
8. Cochran-Smith, M. and Zeichner, K.M. eds., 2005. *Studying teacher education: The report of the AERA panel on research and teacher education*. Routledge.
9. Cotton, D.R.E. and Warren, M.F., O. Maiboroda, and I. Bailey. 2007. "Sustainable Development, Higher Education and Pedagogy: A Study of Lecturers' Beliefs and Attitudes." *Environmental Education Research*, 13, pp.579-597.
10. Cochran-Smith, M., 2003. Learning and unlearning: The education of teacher educators. *Teaching and teacher education*, 19(1), pp.5-28.
11. Darling-Hammond, L., Burns, D., Campbell, C., Goodwin, A.L. and Low, E.L., 2018. International lessons in teacher education. In *International handbook of teacher quality and policy* (pp. 336–349). Routledge.
12. Goodwin, A.L. and Kosnik, C., 2013. Quality teacher educators = quality teachers? Conceptualizing essential domains of knowledge for those who teach teachers. *Teacher Development*, 17(3), pp.334-346.
13. Gibbs*, P., Angelides, P. and Michaelides, P., 2004. Preliminary thoughts on a praxis of higher education teaching. *Teaching in Higher Education*, 9(2), pp.183-194.
14. Gibbs, P. et al. (2017) 'Literature review on the use of action research in higher education', *Educational action research*, 25(1), pp. 3–22. doi:<https://doi.org/10.1080/09650792.2015.1124046>.
15. Hatch, A., Greer, T. and Bailey, K., 2006. Student-produced action research in early childhood teacher education. *Journal of Early Childhood Teacher Education*, 27(2), pp.205-212.

16. Heggen, K., Karseth, B. and Kyvik, S., 2010. The relevance of research for the improvement of education and professional practice. In *The research mission of higher education institutions outside the university sector* (pp. 45–60). Springer, Dordrecht.
17. Hyson, M., Tomlinson, H.B. and Morris, C.A., 2009. Quality improvement in early childhood teacher education: Faculty perspectives and recommendations for the future. *Early Childhood Research & Practice*, 11(1), p.n1.
18. Jacobs, J., Hogarty, K. and Burns, R.W., 2017. Elementary preservice teacher field supervision: A survey of teacher education programs. *Action in Teacher Education*, 39(2), pp.172-186.
19. Katsarou, E. and Tsafos, V., 2013. Student-teachers as researchers: towards a professional development orientation in teacher education. Possibilities and limitations in the Greek university. *Educational Action Research*, 21(4), pp.532–548.
20. Korth, B.B. and Baum, A.C., 2011. Teachers supporting future teachers: A critical part of early childhood teacher preparation. *YC Young Children*, 66(3), p.20.
21. Knight, P., Tait, J. and Yorke, M., 2006. The professional learning of teachers in higher education. *Studies in higher education*, 31(03), pp.319-339.
22. Kosnik, C., Menna, L., Dharamshi, P., Miyata, C., Cleovoulou, Y. and Beck, C., 2015. Four spheres of knowledge required: An international study of the professional development of literacy/English teacher educators. *Journal of Education for Teaching*, 41(1), pp.52-77.
23. Lipman, M., 2003. *Thinking in education*. Cambridge university press.
24. Levin, M. and Martin, A.W., 2007. The praxis of educating action researchers: The possibilities and obstacles in higher education. *Action research*, 5(3), pp.219-229.
25. Loughran, J., 2014. Professionally developing as a teacher educator. *Journal of teacher education*, 65(4), pp.271-283.
26. Mertler, C.A. ed., 2019. *The Wiley handbook of action research in education*. John Wiley & Sons.
27. Melasalmi, A. and Husu, J., 2019. Shared professional agency in Early Childhood Education: An in-depth study of three teams. *Teaching and teacher education*, 84, pp.83-94.
28. McDonald, P.W. and Viehbeck, S., 2007. From evidence-based practice making to practice-based evidence making: creating communities of (research) and practice. *Health Promotion Practice*, 8(2), pp.140-144.
29. Murray, J., 2010. Towards a new language of scholarship in teacher educators' professional learning? *Professional development in education*, 36(1-2), pp.197-209.
30. Pardales, M.J. and Girod, M., 2006. Community of Inquiry: Its past and present future. *Educational Philosophy and Theory*, 38(3), pp.299-309.
31. Qing-li, H., Torres, M.N. and Shi-Ji, F., 2019. Collaborative action research for preparing teachers as reflective practitioners. *Systemic Practice and Action Research*, 32(4), pp.411-427.
32. Rock, T.C. and Levin, B.B., 2002. Collaborative action research projects: Enhancing preservice teacher development in professional development schools. *Teacher Education Quarterly*, 29(1), pp.7-21.
33. Sachs, J., 2003. *The activist teaching profession*.
34. Smith, K. and Sela, O., 2005. Action research as a bridge between pre-service teacher education and in-service professional development for students and teacher educators. *European Journal of Teacher Education*, 28(3), pp.293-310.
35. Skitka, L.J. and Sargis, E.G., 2006. The Internet as psychological laboratory. *Annual review of psychology*, 57, p.529.
36. Stoll, L., Bolam, R., McMahan, A., Wallace, M. and Thomas, S., 2006. Professional learning communities: A review of the literature. *Journal of educational change*, 7(4), pp.221-258.
37. Swennen, A., Jones, K. and Volman, M., 2010. Teacher educators: their identities, sub-identities and implications for professional development. *Professional development in education*, 36(1-2), pp.131-148.

38. Tack, H. and Vanderlinde, R., 2014. Teacher educators' professional development: Towards a typology of teacher educators' researcherly disposition. *British journal of educational studies*, 62(3), pp.297-315.
39. Taylor, P. (2013). Evidence-informed practice needs practice-based enquiry. [Online]
40. Available at: <http://www.consider-ed.org.uk/evidence-informed-practice-needs-practice-based-enquiry/> [Accessed 10 05 2018].
41. Vrijnsen-de Corte, M.C.W., 2012. Researching the teacher-researcher: practice-based research in Dutch professional development schools
42. Willemse, T.M., Boei, F. and Pillen, M. (2015) 'Fostering Teacher Educators' Professional Development on Practice-Based Research Through Communities of Inquiry', *Vocations and learning*, 9(1), pp. 85–110. doi:<https://doi.org/10.1007/s12186-015-9142-3>.
43. Willemse, T.M. and Boei, F., 2013. Teacher educators' research practices: an explorative study of teacher educators' perceptions on research. *Journal of Education for Teaching*, 39(4), pp.354-369.
44. Zeichner, K., 2010. Rethinking the connections between campus courses and field experiences in college-and university-based teacher education. *Journal of teacher education*, 61(1-2), pp.89-99.
45. Zeichner, K.M., 2003. Teacher research as professional development for P–12 educators in the USA [1]. *Educational action research*, 11(2), pp.301-326.

Open Access This chapter is licensed under the terms of the Creative Commons Attribution-NonCommercial 4.0 International License (<http://creativecommons.org/licenses/by-nc/4.0/>), which permits any noncommercial use, sharing, adaptation, distribution and reproduction in any medium or format, as long as you give appropriate credit to the original author(s) and the source, provide a link to the Creative Commons license and indicate if changes were made.

The images or other third party material in this chapter are included in the chapter's Creative Commons license, unless indicated otherwise in a credit line to the material. If material is not included in the chapter's Creative Commons license and your intended use is not permitted by statutory regulation or exceeds the permitted use, you will need to obtain permission directly from the copyright holder.

