

Analysis of the Application Value of Action Research in the Training of Doctor of Education in China

Xiaochun Liu ^{1, a,*} and Yanbing Wang ^{2, b}

¹967, West Anning Road, Education College, Northwest Normal University, Lanzhou, China CPC Committee Branch, Shanxi University of Finance and Economics, Taiyuan, China

²967, West Anning Road, Education College, Northwest Normal University, Lanzhou, China; International Office, Pingdingshan University, Pingdingshan, China

^a44976573@qq.com; ^bfrankwyb0375@163.com

*Xiaochun Liu

Keywords: Action research, Doctor of education, Value.

Abstract. The past 10 years have seen the development of Doctor of Education in China. However, there are some problems in the training, like the Ed.D students lacking of practical ability, the practical deviation of training objectives, and the convergence training with Ph.D. in education, which has restricted the improvement of the training quality of Ed.D. Action research is highly regarded in the field of educational practice research with its focus on combining theory with practice and solving practical problems. It is an effective method for Ed.D training in China with its unique value: providing reform ideas, solving practical problems and improving the quality of training.

Introduction

Since 2009, 15 universities including Peking University have been approved as the first pilot units for Doctor of Education training. During the 10 years, China's Ed.D training has made great achievements: the Ed.D enrollment universities have been expanding steadily; the enrollment scale has been increasing year by year; the training model has been gradually matured; the curriculum system has been gradually improved, and it has trained a number of advanced compound teaching and management professionals for schools at different levels. However, it is undeniable that, as a "new thing", there are problems such as the low degree award rate and the convergence training between Ed. D and Ph.D in Education, which result in the lack of "practical" characteristics of training objectives, students' weak practice ability and the unsatisfactory quality of training.

Action research is a research method that the researcher involved directly for the problems existing in the practice of teaching and management with the aim of solving the actual questions through researching by action. Through action research, researchers can improve the ability to find problems in practice and then use scientific steps and methods to solve problems and reflect.

The practical characteristics of action research are the same as the training objectives of the practice ability for Ed.D. In the process of Ed.D training, action research has unique application value for solving the problems of practical deviation, and it has important inspiration and reference meaning for the reform of the Ed.D training in China.

Problems and Cause Analysis of Ed.D Training in China in the Past 10 Years

The Enrollment Scale Is Continuously Expanding While the Award Rate is Seriously Low

The State Council's Degree Office has expanded its enrollment universities with the gradual emphasis on the Ed.D during the past 10 years. In 2019, the Ed.D enrollment universities expanded from the initial 15 to 27, and the number of enrolled students also increased. From Table 1 and Figure 1, we can see that during the period of 2010-2017, the total number of enrolled students in Ed.D universities was basically stable, with an average of 11 students enrolled in each institution. Since 2018, the number of enrollment has increased significantly, and the average enrollment of

universities has exceeded 30. This reflects that the government attached the importance for Ed.D construction and development, and the structural adjustment of doctoral degrees.

Table 1. The enrollment statistics of the first pilot 15 universities

| Name | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | total |
|---|------|------|------|------|------|------|------|------|------|------|-------|
| Peking University | 17 | 16 | 15 | 17 | 16 | 15 | 15 | 15 | 14 | 14 | 154 |
| Tsinghua University | 19 | 19 | 18 | 15 | 11 | 10 | 11 | 12 | 12 | 12 | 139 |
| Beijing Normal University | 14 | 17 | 23 | 17 | 17 | 15 | 18 | 16 | 18 | 64 | 219 |
| East China Normal University | 7 | 14 | 16 | 14 | 20 | 19 | 25 | 30 | 25 | 33 | 203 |
| Nanjng University | 9 | 6 | 4 | 8 | 8 | 8 | 9 | 9 | 7 | 7 | 75 |
| Nanjng Normal University | 10 | 8 | 8 | 8 | 7 | 8 | 8 | 7 | 9 | 12 | 85 |
| Central China Normal University | 10 | 10 | 4 | 8 | 4 | 4 | 9 | 11 | 50 | 50 | 160 |
| Huazhong University of Science and Technology | 20 | 20 | 18 | 16 | 10 | 9 | 9 | 9 | 20 | 20 | 151 |
| Xiamen University | 7 | 10 | 19 | 10 | 12 | 15 | 17 | 12 | 22 | 25 | 149 |
| Zhejiang University | 8 | 8 | 9 | 10 | 13 | 6 | 7 | 11 | 15 | 21 | 108 |
| Shannxi Normal University | 5 | 6 | 7 | 6 | 6 | 6 | 8 | 10 | 23 | 35 | 112 |
| Northwest Normal University | 5 | 6 | 4 | 5 | 4 | 4 | 6 | 4 | 14 | 24 | 76 |
| South China Normal University | 8 | 6 | 6 | 6 | 10 | 10 | 10 | 10 | 13 | 22 | 101 |
| Northeast Normal University | 6 | 8 | 7 | 8 | 8 | 7 | 8 | 9 | 60 | 75 | 214 |
| Southwest University | 16 | 12 | 14 | 10 | 10 | 10 | 10 | 10 | 19 | 36 | 147 |
| Total | 161 | 166 | 172 | 158 | 156 | 146 | 170 | 175 | 330 | 459 | 2093 |

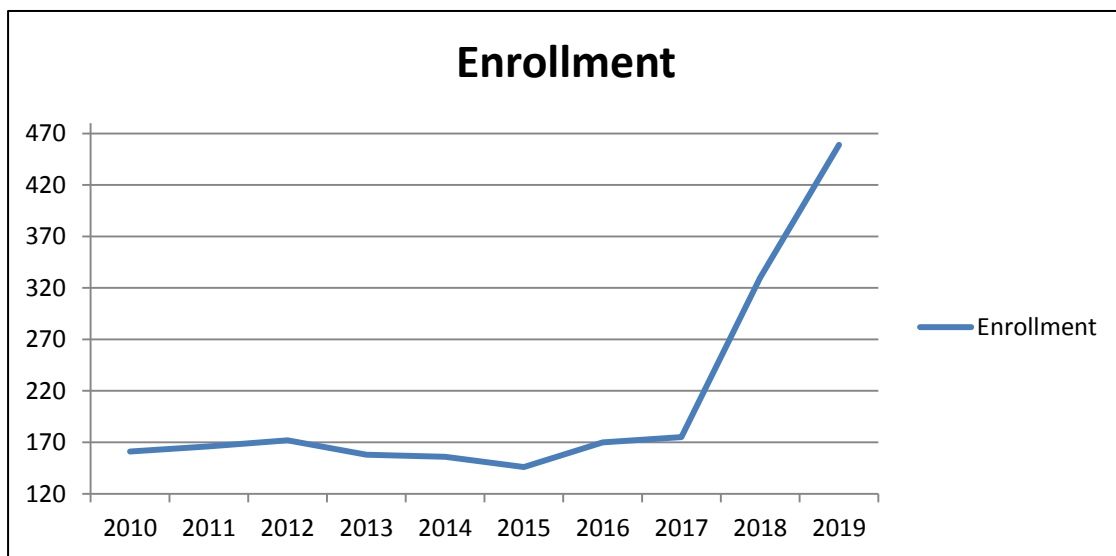


Fig.1 The enrollment trend of the first 15 pilot universities

At the same time, however, the problem of low degree award rates has gradually emerged. The Ed.D program in China adopts a four-year academic training system. The doctoral applicants are supposed to complete the mid-term assessment tasks and complete the dissertation in a set time to obtain the degree. In fact, the proportions of being awarded the degree within 4 years are very low.

Table 2. Statistics of Ed.D Degree award for Grade2010-2013 in the first pilot Universities(Updated to Sep.2017)

| Name | total | Pct(%) | Grade 2010 | Pct(%) | Grade 2011 | Pct(%) | Grade 2012 | Pct(%) | Grade 2013 | Pct(%) |
|---|-------|--------|------------|--------|------------|--------|------------|--------|------------|--------|
| Peking University | 11 | 17 | 5 | 29 | 1 | 6 | 4 | 27 | 1 | 6 |
| Tsinghua University | 7 | 10 | 2 | 11 | 0 | 0 | 4 | 22 | 1 | 7 |
| Beijing Normal University | 23 | 32 | 4 | 29 | 11 | 65 | 8 | 35 | 0 | 0 |
| East China Normal University | 12 | 24 | 2 | 29 | 1 | 7 | 7 | 44 | 2 | 14 |
| Nanjing University | 4 | 15 | 3 | 33 | 0 | 0 | 1 | 25 | 0 | 0 |
| Nanjing Normal University | 21 | 75 | 9 | 90 | 4 | 50 | 3 | 38 | 5 | 63 |
| Central China Normal University | 17 | 53 | 4 | 40 | 7 | 70 | 3 | 75 | 3 | 38 |
| Huazhong University of Science and Technology | 17 | 11 | 6 | 30 | 1 | 5 | 0 | 0 | 1 | 6 |
| Xiamen University | 7 | 15 | 2 | 29 | 3 | 30 | 2 | 11 | 0 | 0 |
| Zhejiang University | 6 | 17 | 3 | 38 | 2 | 25 | 0 | 0 | 1 | 10 |
| Shannxi Normal University | 7 | 29 | 1 | 20 | 3 | 50 | 2 | 29 | 1 | 17 |
| Northwest Normal University | 15 | 75 | 5 | 100 | 3 | 50 | 4 | 100 | 3 | 60 |
| South China Normal University | 12 | 46 | 5 | 63 | 1 | 17 | 3 | 50 | 3 | 50 |
| Northeast Normal University | 4 | 14 | 3 | 50 | 1 | 13 | 0 | 0 | 0 | 0 |
| Southwest University | 18 | 35 | 5 | 31 | 0 | 0 | 9 | 64 | 4 | 40 |
| Total | 172 | 26 | 59 | 37 | 38 | 23 | 50 | 29 | 25 | 13 |

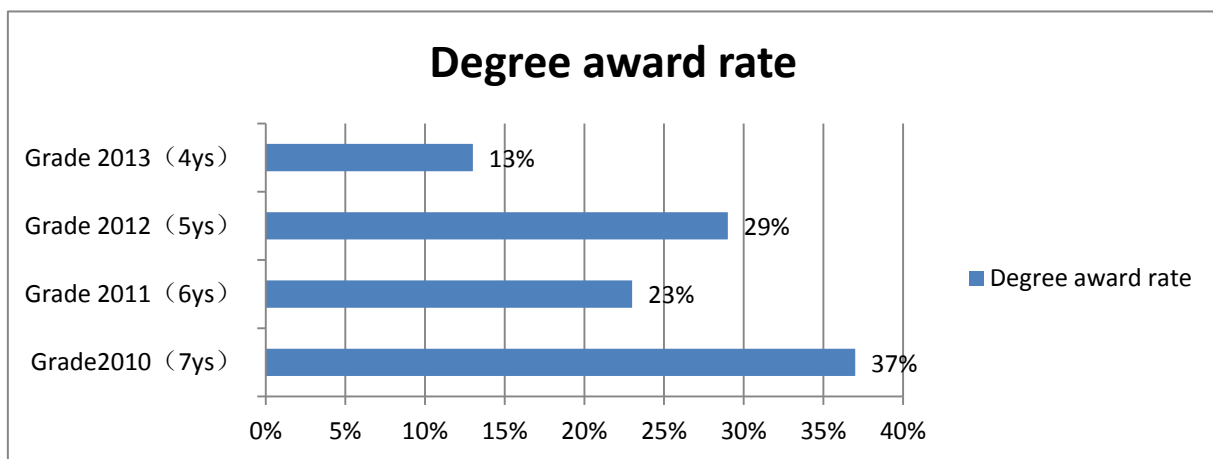


Fig. 2 Comparison of Ed.D degree award rate between Grade 2010 and Grade 2013(updated Sep.2017)

We take the Grade 2010 and Grade 2013 as an example. From Table 2 and Figure 2, we can see that from 2010 to 2013, 15 universities enrolled 657 Ed.D students, but as of September 2017, only 172 students were awarded degrees. So the award rate is only 26%. The Grade 2013 award rate is only 13%. Among the 15 universities, 7 are less than 10%, of which 4 are 0. The first Ed.D enrolment in 2010 has been in school for more than 7 years, and 63% of them have not been awarded a degree on time. According to the maximum 6-year training plan, most students will be suspended from school. Similarly, the degree award rate for Grade 2011 within 6 years is only 23% and Grade 2012 within 5 years in only 29%.

The data is really shocking. From the perspective of the degree award rate, there has been a certain problem in the Ed.D training.

The Convergence of Training between Ph.D. in Education and Ed.D is Serious, and There has not been Formed the Characteristic Training Mode

The problem of convergence about the training between Ph.D. in education and Ed.D is the same for American universities and the United Kingdom. Ed.D is rooted in Ph.D. in Education. At the beginning of the establishment, the two have made a clear division. Since the establishment of Ed.D, the universities have deliberately or unintentionally diminished the distinction between the two, which has also blurred the boundaries between the two. Although some pilot universities have made some bold reforms and innovations in terms of enrollment and training methods, The problem of convergence is still serious. The professional training model has not been formed and the Ed.D program lost its own characteristics.

Admissions Standards.

Although the recruitment for Ed.D emphasize: “School management personnel of all levels with considerable achievements and strong research capabilities” (for educational leadership major), “Primary and middle school teachers with considerable achievements and strong research capabilities” (school curriculum and teaching major), but in the actual enrollment process, whether it is the ordinary recruitment or “application-assessment” system, the enrollment unit emphasizes the “scientific research ability” of the enrollment target and ignores the achievement evaluation in the practice field. This also makes a group of applicants who are interested in academic education but are usually busy with administrative affairs and neglecting scientific research could not be admitted because of the lack of "scientific research ability", which reflects the convergence with Ph.D. in education.

Training Mode.

In the past 10 years, although each enrollment university has developed a training program for Ed.D, it has basically formed a curriculum system consisting of four major modules: public courses, educational theory courses, educational research methods, and educational practice courses. In the actual implementation process, its training mode continues the traditional teaching mode of “basic theory-research method-practice”. The implementation of curriculum plan is limited to the classroom teaching form, which is separated from the practical situation. The practice part is often neglected. So, the training model of Ed.D is exactly the same with Ph.D in education.

Assessment and Evaluation.

Through the comparison of the conditions for the evaluation of Ed.D in all enrollment universities, we found that the curriculum assessment between Ed.D and Ph.D. in education is almost the same. In fact, the Ed.D dissertation is full of imitation traces in the topic selection, research design and research value. Its framework structure, academic review and the request for defense are basically based on the Ph.D. in education, which does not reflect the practical characteristics of the Ed.D dissertation. As a result, there is no distinction between the dissertation of Ed.D and Ph.D. in education. And there is no application value for the work the Ed.D students are engaged.

At present, there are 83 Ed.D dissertations that can be searched in China CNKI. In terms of the theme, many dissertations belong to the pure academic theory type. The themes, which meet the requirements of the Ed.D, taking the work practice as the starting point, and aiming at solving the practical work problems, account for a very small part. In addition, from the perspective of the disciplinary distribution of the dissertation, nearly 7.8% are not within the field of education. These problems have objectively confirmed the problem that the Ed.D dissertation is lack of practicality.

Analysis of the Causes of the Problem

There are many reasons why the Ed.D has low degree award rate within the set time and the convergence during the training between the Ed.D and Ph.D. in education. Here we mainly analyze it from the school and individual respectively.

School Training

First, the training philosophy and model of the training institutions are backward. Some universities have insufficient understanding of the Ed.D training; there are deviations in the implementation of the training programs; the curriculum system lacks characteristics; the evaluation system is single. And the training and assessment of students' practical and problem-solving abilities are ignored. All of these makes the Ed.D students are also very confused, and they are not clear about the direction and goals of his/her study and probably influence his/her graduation on time.

Second, the number of tutors is insufficient and the structure is unreasonable. Some universities are lack of Ph.D. tutors. The students' number that tutors guide is too large to guarantee the quality of training and guidance. In addition, the Ed.D tutors are often the same ones who guide the Ph.D. in education. It is not easy for the Ed.D tutors to grasp the characteristics of Ed.D training, and lack of experience in the "practical" guidance, which makes the training are prone to Ph.D academic trend.

Personal Point

The first is the contradiction between "work" and "learning." For the Ed.D student, most of them have been working in management or teaching positions for many years. Most students are in a state of half work and half study. So it is hard for them to guarantee the continuity of study time because they have to return to work as long as they finish study. There are no time and energy for systematic study, which leads to unsatisfactory learning results.

The second is the contradiction between "life" and "learning." The average age of the Ed. D students is over 30 years old. Take the class of the author as an example, the oldest student is 45 years old and the youngest is 31 years old. These students are in the so-called "middle-age crisis" stage and are the "pillars of the family". They have to take care of their parents and their kids. So it is very hard to balance family and study for them.

Third, the understanding of "academic" and "practice" is not true. Most universities adopt the form of concentrated lecturing for the Ed.D program. The learning period is short, and the learning content and the learning form are roughly the same with Ph.D. in education, which leads to the vague understanding of Ed.D professional learning. They would be confused about how to improve practical ability and solve practical problems in work, let alone publishing and writing dissertation.

Based on the above reasons, the training of Ed.D in China is worrisome at present. The lack of practicality has led to the lack of ability to participate in and solve educational practice problems after graduation. The quality and reputation of the institution has been severely affected, far from the expectations of the state, society and itself, so that "Ed.D has become a primary choice for school administrators seeking an accelerated degree." [3].

Analysis of the Application Value of Action Research in the Training of Ed.D

So what kind of training method can effectively solve the problem of the lack of practice for Ed.D? In fact, some foreign universities and some scholars in China have put forward some solutions and tried to use the tool of "action research". The Ed.D programs at Harvard University and Arizona State University have adopted action research as the core teaching method and achieved good results. Professor Zhao Juming from Huazhong University of Science and Technology also pointed out that "Action research is an effective method to Ed.D training" [4]. Facts have proved that the methods, steps and core elements of action research are highly

compatible with the practical training objectives of Ed.D. It is an effective way to solve the above problems and has unique value for the Ed.D training.

Action Research

The Origin and Development of Action Research.

"Action Research" as a term first appeared by J.Collier in his publication "American Indian Administration as a Laboratory for the Construction of National Relations" in the United States in 1945. It was originally derived from a methodological attempt to solve practical problems at work. [5] After that, American social psychologist K. Lewin systematically expounded the purpose, methods and steps of action research as a problem-solving strategy. In the 1950s, under the advocacy of S.Corey, action research was widely used in the field of education and has been greatly developed because it is a good solution to balance "theory" and "practice" in the field of education. Later, scholars such as S.Kemmis further proposed that research and research problems must be derived from educational practice. It aims to help researchers understand the value and limitations of specific educational activities through analysis and reflection on practical educational issues, thus enhancing the rationality of action and promote social justice. [6] At this point, action research has become an important way to solve practical problems in education, management and other fields of education.

Characteristics of Action Research.

The first is to study for action. To solve practical problems and improve the quality of work is the primary goal. Its main function is to solve problems in educational practice by teachers or educators, and to improve teaching, management quality and research work ability. Therefore, the purpose of action research is to improve the practice process, not the theoretical output.

The second is to study in action. It focuses on the combination of "research" and "action", emphasizing the cooperation between "researchers" and "actors". Action research requires researchers to study the actual problems while they are working, so that the actual work process becomes a research process, and the research results can be applied to educational practice faster.

The third is studied by actors. It emphasizes that actors must participate in actual research and constantly reflects on issues and actions in research. The actor must be an insider, and he is supposed to actively participate in research activities and reflect on the course of action, combine research work with reform actions, and is closely linked to specific education reform practices.

The Process of Action Research.

Because of the different theoretical backgrounds, action research produces different patterns and types, but the principles of each mode of operation follow roughly the same. The process can be described as: planning (clarifying problems, analyzing problems, proposing plans) → actions (collecting data, implementing actions) → observing (systematic observation of the entire course of action) → reflection (collecting data, evaluating processes, making research reports) → re- plan (adjust, correction) → re-action (test) → rethink----, is a spiral cycle process, as shown in Figure 3.

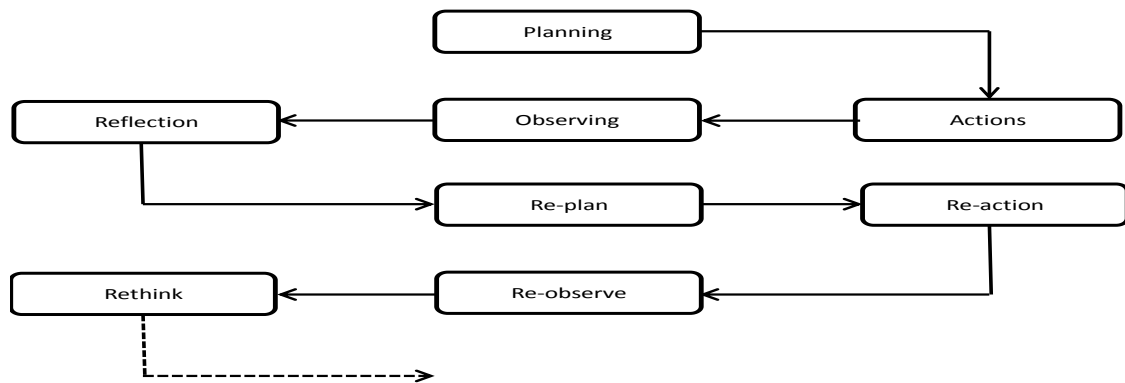


Fig. 3 Process of action research

The Important Role and Value of Action Research in the Ed.D Training

The action research, with its characteristics of emphasizing solving practical problems, has an important role and value for the Ed.D training in China.

Action Research Provides New Methods and Ideas for the Reform of Ed.D Training in China

The “practical deviation” of the Ed.D training forced the institutions to make fundamental changes to the current training program. Carrying out action research in training can effectively solve the problem of disconnection between theory and practice in the learning process, and can cultivate students' ability to connect theory with practice and solve practical problems in education work. Through systematic action research course study and case study training, doctoral students can fully grasp the methods of action research, and then combine their own work, carry out targeted action research on existing problems, and realize the effective combination of theory and practice.

Action Research is Conducive to the Resolution of the Convergence of Ed.D Training and Ph.D. in Education Training

The implementation of action research can help institutions and tutors to clarify the different training goals of Ph.D. in education and Ed.D. It can guide students in a targeted manner and help to cultivate the rigor of students' study, enabling students to quickly enter the learning state, clarifying learning methods and paths, and thus achieve effective learning results within a limited time. At the same time, the method of action research is helpful to cultivate students' thinking and ability to find, reflect and solve problems, so as to effectively solve the problem of convergence with Ph.D. in Education.

Action Research Can Help Improve the Quality of Ed.D Training and the Realization of Training Objectives

Generally, the Ed.D students have to serve and work for their units with the ability to solve complex problems. However, the current quality of Ed.D training is not satisfactory, and their practical ability is insufficient. What’s more, the degree award rate is quite low and the dissertation value is not high. Carrying out action research, through study and training and reforming dissertation can help train students to become reflective practitioners, effectively enhance the value of dissertation, improve the quality of training, and thus enhance the social recognition of Ed.D, and then achieve the initial goals.

Conclusion

The adoption of the training model and evaluation indicators with action research as the core content can effectively solve the problem of convergence with Ph.D. and practical deviation, and thus it can achieve a high degree of unity between training objectives and models. We believe that with the joint efforts of the education sector and educational researchers, China's Ed.D training will certainly conform to the trend of the times, It can create a path that fosters the development of Ed.D in line with China's actual development and characteristics.

References

- [1] Tables 1 and 2 are quoted on <http://edm.eduwest.com/>
- [2] Gao Wei, Zhu Xudong. Problems and Countermeasures in the Implementation of Ed.D System in China, *J. Educational Development Research*, 2019, 39(03): 62-70.
- [3] Wei Yumei. Where the Doctor of Education to go: The Argument and Reform Trend of Doctoral Degree of Foreign Education Doctors, *J. Modern University Education*, 2016(01): 59-68+113.
- [4] Zhao Juming. Discipline, Curriculum, Degree: American debate on the cultivation of graduate students in higher education and its enlightenment, *J. Higher Education Research*, 2002 (4).
- [5] Song Huping. *Action Research*. Beijing: Educational Science Press, 2003.
- [6] Xie Wei, Shi Fanghua. Reform Practice and Enlightenment of Doctoral Dissertations in American Higher Education, *J. Foreign Education Research*, 2015(10).