Retraction

Retraction: Research on the Professional Development of College Teachers Based on Computer Network (*J. Phys.: Conf. Ser.* **1992** 032030)

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The authors of the article have been given opportunity to present evidence that they were the original and genuine creators of the work, however at the time of publication of this notice, IOP Publishing has not received any response. IOP Publishing has analysed the article and agrees there are enough indicators to cause serious doubts over the legitimacy of the work and agree this article should be retracted. The authors are encouraged to contact IOP Publishing Limited if they have any comments on this retraction.

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Research on the Professional Development of College Teachers Based on Computer Network

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Abstract. The application of computer network in the field of higher education has greatly promoted the development of education. However, as the main body of professional teaching activities, the comprehensive quality of teachers, especially the professional development planning, has been difficult to guarantee the needs of higher education. Based on this, this paper first analyzes the professional development planning of university teachers on account of computer network. Secondly, it studies the quality and ability structure and professional development of university teachers under the computer network, and finally gives the professional development path of university teachers under the computer network.

Keywords: Professional Development, College Teachers, Computer Network

1. Introduction

With the iterative development of modern technology represented by computer network, it has been widely used in many fields and achieved remarkable results. Especially in the field of higher education, the application has greatly promoted the development of education. As the core link of university education, teachers' professional teaching plays an irreplaceable function in ensuring the teaching quality and level of universities [1]. At present, the professional level of university teachers has become one of the organic components of its core competitiveness, and is an important element to promote the university personnel training to adapt to and match the social needs.

At present, most university teachers still adopt the traditional teaching mode in the process of professional teaching, that is, teachers are still the main body of professional teaching activities, while students are still passive participation. This kind of specialized teaching mode often has several limitations as shown in Figure 1, which makes it difficult to improve students' participation and learning initiative. Not only that, the professional and professional development of university teachers has been greatly restricted, which is not conducive to teachers' level and ability to better adapt to the development needs under the network conditions [2]. This requires universities to make full use of the characteristics and advantages of computer network, improve teachers' professional quality and information literacy, and expand the development space of teachers.
In addition, universities should improve teachers' professional development system on account of the application trend of computer network in the field of education, make up for the deficiencies and defects of existing development approaches, and help teachers better find their own development orientation and development direction. In the current wave of university education reform and innovation, university teachers should also seize the development trend of computer network education, improve their professional level, so as to better adapt to the function of network teaching. Therefore, the research on the professional development of college teachers on account of computer network has important practical value for training teachers and students with network information literacy and better serving the long-term development of education.

2. Professional development planning of university teachers on account of computer network

2.1. The professional development objectives of university teachers

With the iterative development of computer network technology and information technology, the current professional development of university teachers put forward more stringent requirements. In this context, teachers should improve their information literacy as soon as possible, so as to better adapt to and criticize the development trend and characteristics of education in the era of computer network [3]. On the premise of improving their moral quality, values and sense of responsibility, university teachers should also strengthen their theoretical and practical ability of professional disciplines and fully apply network information technology to innovate teaching methods. In addition, university teachers should also promote their own professional research ability, especially the ability to find, analyze and solve problems, use the development law of Internet technology, cultivate their own comprehensive quality, and obtain modern education and teaching information and teaching reform experience as much as possible.

2.2. Professional development planning of university teachers on account of computer network

First of all, the professional development planning of university teachers should be on account of the scientific, professional, feasible, developmental and evaluable aspects, and carry out the design of the growth stage and the measures to be taken according to the specific objectives of each professional quality. Secondly, the professional career cycle of university teachers includes several stages, such as rising state, high level state and slow decline state. These stages can be divided into pre service preparation stage, post adaptation stage, rapid growth stage, rapid development stage, stable development stage, slow retreat stage and quiet retirement stage, the structure is shown in Figure 2 below.
2.3. Contents of professional development plan for university teachers

In the computer network environment, the professional development planning of university teachers mainly includes environmental analysis, self-analysis, measures and conditions and target positioning. At the level of environmental analysis, it is necessary to conduct a comprehensive analysis from the four dimensions of school, society, profession and teachers themselves [4]. The environmental analysis of these dimensions helps to lay a planning foundation for the development of teachers’ professional development. Secondly, in the self-analysis level of university teachers, it is mainly from the teachers’ interest and ability, professional development needs, advantages and disadvantages, school development planning and education development planning and other aspects of comprehensive analysis, so as to scientifically set teachers’ development orientation and development goals, and formulate corresponding tasks for development goals.

In addition, in terms of the measures and conditions for the professional development of university teachers, it is necessary to analyze and evaluate the improvement of their own quality, the improvement of objective conditions, the mode and approach of professional development, the strategy of professional development, the budget of time and funds, and the expected results and evaluation, so as to formulate scientific safeguard measures. Finally, in the implementation level of university teachers’ professional development planning, SWOT self-assessment analysis, PPDF analysis, CASVE cycle analysis and other theoretical and practical methods can be used to carry out the implementation of professional development planning.

3. University teachers' quality and ability structure and its professional development

3.1. Professional quality requirements of university teachers

At the level of professional quality, university teachers should have higher teaching ability, more solid professional knowledge, stronger sense of responsibility and management ability. And university teachers should have the ability to teach students in accordance with their aptitude according to the characteristics and personalized needs of the teaching objects [5]. It can be said that the professional quality of university teachers is a general designation of the psychological quality which is shown in teaching and scientific research activities, determines the teaching effect of university education, and has a direct and significant impact on the physical and mental development of college students. Generally speaking, the professional quality of university teachers includes three core elements: professional willingness, professional ability and professional knowledge. Among them, professional
willingness is the guide and guarantee, professional knowledge is the foundation, and professional ability is the core. The relationship of professional quality structure of university teachers is shown in Figure 3.

**Figure 3.** The relationship of professional quality structure of university teachers.

### 3.2. The connotation of professional development of university teachers

The professional development of university teachers is closely related to teachers' potential and development value, and is also related to the purposeful, directional and strategic extension and expansion of teachers' development potential [6]. Secondly, the professional development of university teachers requires teachers to constantly improve their professional skills, enrich their knowledge and skills and promote the rationalization and professional development of their own knowledge structure. In addition, university teachers should achieve the connotation of teaching practice in the aspects of extensive learning, innovative practice, in-depth research and promotion of achievements.

### 3.3. The main direction of the professional development of university teachers

Under the condition of computer network, university teachers should first change their functions and positions, so as to change their functions from managers to organizers, from instructors to participants, from leaders to guides, from arbitrators to promoters, and from teachers to researchers. Secondly, in the cooperation level of university teachers, university teachers should learn to cooperate, learn to innovate and learn to understand, so as to promote the exchange and cooperation with students and promote the realization of students' dominant position. In addition, under the requirements of the development of network, university teachers should be able to effectively use rich organizational professional knowledge, efficiently solve problems in the field of teaching, and be good at solving problems creatively.

### 4. Professional development of university teachers under the computer network

**4.1. Action research and professional development of university teachers' professionalism**

First of all, university teachers should update their educational ideas, raise their awareness of problems, cultivate their cooperative spirit and improve their ability of reflection. Secondly, university teachers should improve their professional knowledge structure, promote the formation and development of educational beliefs, promote the combination of theory and practice, and strive to upgrade to research-oriented teachers. In addition, in the behavioral teaching activities, university teachers should make clear the teaching objectives, present a clear syllabus of teaching content, and present the teaching
content in clear steps, and constantly summarize and practice to promote the continuous consolidation of their knowledge.

4.2. Professional development orientation of university teachers

First of all, school and university teachers should strive to make themselves become the establishment and maintenance of network teaching, constantly improve teachers' information literacy, and promote teachers to master the modern education technology related to network teaching. Secondly, the university should actively create the corresponding environment to help teachers become the leader of network teaching. On the one hand, it should help teachers to give full play to the function of network teaching guide, enhance their initiative in the application of network learning resources; on the other hand, we should help teachers transform into the function of network teaching assistants, and strengthen the effect of teachers' guidance. Finally, teachers should play a variety of functions in the network to help them fully understand and understand their own functions and tasks.

5. Conclusion

In summary, under the development trend of computer network education, university teachers should strive to improve their professional level, so as to better adapt to the role of network teaching. To improve the professional development system of teachers, make up for the shortcomings and defects of the existing development ways, and help teachers better find their own development orientation and development direction. Through the analysis of the professional development plan of university teachers on account of computer network, this paper studies the professional development goal and professional development plan of university teachers. Through the research on the structure of university teachers' quality and ability and their professional development under the computer network, this paper analyzes the connotation and quality requirements of university teachers' professional development. Through the analysis of the professional development of university teachers under the computer network, this paper studies the professional development orientation of university teachers.

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