

Study of Differences in Educational Qualifications of Elementary and Secondary School Teachers

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Abstract: By observing the academic qualifications of primary and secondary school teachers in recent years, we can find that more and more graduate students have joined the primary and secondary school teachers, and now some school recruitment requirements have changed to graduate students, and high school, middle school, and elementary school teachers all follow the same trend of educational upgrading. With the entry of highly educated teachers into primary and secondary schools, primary and secondary school teachers also face many challenges that require continuous improvement to truly improve the professional level of primary and secondary school teachers, thus promoting the quality of primary and secondary school education.

Keywords: Elementary and secondary school teachers, Education, Graduate students.

1. Introduction

With the advent of the knowledge economy, the way of knowledge production gradually changes from the traditional knowledge center to the application context. As the transmitter of knowledge, teachers play an important role in knowledge transmission, innovation and research, and the optimization of their academic structure is of great significance to improve the education quality system. Since the reform and opening up, China has introduced a series of policies to improve the education level of primary and secondary school teachers, and between 1978 and 2017, the overall education level of primary and secondary school teachers has been greatly improved, with the proportion of those with bachelor's degree or above increasing from 6.2% to 71.2%. Especially in recent years, the trend of graduates from prestigious schools with master's and doctoral degrees joining primary and secondary schools in economically developed regions has become more and more obvious. The first demonstration of introducing highly educated teachers in some key primary and secondary schools is a useful attempt to improve the education level of teachers in basic education.

2. Changes in Academic Qualifications of Primary and Secondary School Teachers

Since the beginning of the 21st century, with the inclination of national population policy and education policy, the primary and secondary school teaching force has been gradually expanding not only in size but also in educational level. Overall, the educational structure of primary and secondary school teachers consists of five main types: graduate, bachelor's, specialist, high school, and below high school. In the 1980s, the education requirement for high school teachers was a bachelor's degree or higher, for middle school teachers a specialist or higher, and for elementary school teachers a secondary teacher training degree. However, in the 21st century, the educational requirements for primary and secondary school teachers have changed significantly. From the data collected, we can find that the educational requirements for high school teachers at this time are graduate or above, junior high school teachers are required to have a

bachelor's degree or above, and elementary school teachers are required to have a specialist or above. This reflects that people's education level is improving and society is progressing. Data from the Ministry of Education show that the proportion of elementary school teachers with a bachelor's degree or higher has increased rapidly over the past decade, from 45.3% in 2015 to 64.4% in 2020, an increase of 19.1 percentage points, while in 2009, only 19.8% of elementary school teachers had a bachelor's degree or higher, and the proportion of high school and middle school teachers with a bachelor's degree or higher was higher compared to elementary school teachers, where the proportion of general high school teachers with graduate degrees increased from 7.15% in 2015 to 11.4% in 2020, an increase of 4 percentage points.

However, the educational upgrading of primary and secondary school teachers is still in a climbing period, and the statistics show that the proportion of specialist education among elementary school teachers still occupies a certain proportion, and from the school level, the education will play a very important role in the promotion of teachers.

3. The Value Implication of Building A Highly Educated Teaching Force in Primary and Secondary Schools

The current era has given teachers the new task of cultivating students' core literacy, and has also placed higher demands on teachers' knowledge, humanistic literacy, and overall quality. Based on this, primary and secondary schools need to introduce higher level teachers so as to lay a solid foundation for the cultivation of top-notch innovative talents. Therefore, the entry of highly educated teachers into primary and secondary schools is not only in line with the trend of basic education development, but also has important value for building a high-quality talent cultivation system.

3.1. To achieve the goal of literacy-oriented education with higher overall quality

Under the traditional education model, students learn knowledge mainly by imitation and acceptance, and teaching evaluation is mainly centered on testing knowledge reserves. With the change and development of the times, the core

literacy-oriented education model is becoming more and more important, and its core goal is to cultivate students' ability to apply their knowledge and skills to solve complex problems in the real society; at the same time, under the background of the transformation of knowledge production mode, the process of knowledge learning pays more attention to the balance between "learning" and "application", and focuses on cultivating students' critical thinking and applying their knowledge to solve problems. At the same time, in the context of the transformation of knowledge production mode, the process of knowledge learning pays more attention to the balance between "learning" and "application", and focuses on cultivating students' critical thinking and the ability to apply what they have learned to solve practical problems. However, teaching in primary and secondary schools still emphasizes subject knowledge and ignores the process of knowledge transformation, and teaching is mostly based on lectures, exercises and tests. For this reason, it is more important for school education to emphasize the holistic nature of education and to cultivate high quality, complex and comprehensive talents with core literacy as the guide. The key to improving the quality of talent training and enhancing basic education lies in a high-quality teaching force. As the guide of students, teachers can better improve students' core literacy in teaching only if they have higher moral level, professionalism and comprehensive quality themselves. Highly educated teachers not only have solid professional knowledge, but also can have a broad vision and profound humanistic literacy in continuous learning.

3.2. Teaching model innovation with a richer knowledge base

In the context of globalization and informatization, the development of technology has made education individual, diversified and open, and innovative education modes such as catechism and flipped classroom under the background of Internet have challenged the traditional education mode, and also put forward new requirements on teachers' academic structure and knowledge reserve. The speed of knowledge updating is getting faster and faster, and knowledge is spread more quickly and widely. The place of dissemination and the main body of transmission are no longer limited to schools and teachers, but diffuse to all fields and people in society, and the channel for students to acquire knowledge is no longer single, to the extent that the accumulation in individual fields has surpassed teachers, and the learning mode of students' independent inquiry is getting more and more attention. This requires teachers to constantly update their knowledge system, to master the knowledge of the subjects they teach, but also to accumulate interdisciplinary knowledge and to have comprehensive abilities such as scientific education methods. Based on the development needs of innovative changes in education and modernization of teachers' knowledge base, international countries such as Finland, Canada, and the United States have developed educational reform strategies that consider the cultivation of creative and high-quality human resources and innovative teaching models as the core forces in the process of globalization of basic education. The role of teachers has changed from traditional classroom leadership to individualized guidance and instruction, and teachers' critical thinking has become the key to innovative classroom teaching models. The training that students receive in basic education about accumulating learning methods, broadening the field of knowledge and improving the

knowledge structure will lay a solid foundation for their future learning. Highly educated teachers, who were well trained and nurtured as students, have a highly qualified and educated background and the ability to explore knowledge, which are of great advantage in guiding students' independent learning and improving their overall ability and creativity.

4. The Shortcomings of The Primary and Secondary School Teachers

In the context of the transformation of the knowledge production model, both primary and secondary school administrators and teachers themselves should be aware of the transformation of teacher identity and actively respond to the challenges. Although China has taken a series of measures to improve the quality and professionalism of its primary and secondary school teaching force, many deficiencies remain.

4.1. The educational structure of primary and secondary school teachers needs to be optimized

Internationally, some developed countries such as Finland, France, Germany, Japan, and Korea have raised the basic academic requirements for teacher entry to master's degree and above. In order to narrow the gap with developed countries in basic education and pursue higher standards of educational connotation, primary and secondary schools in China need to attract more high-level talents and optimize the educational structure of teachers. In recent years, the overall education level of primary and secondary school teachers in China has increased year by year, but there is still a gap with developed countries, and the proportion of highly educated teachers is relatively small and unevenly distributed. According to the Ministry of Education's statistics on the academic qualifications of full-time teachers at all levels of basic education in 2019, 3.51% of teachers at the junior high school level have postgraduate degrees or above, while only 1.36% at the elementary school level, and most of the teachers with high academic qualifications are distributed in first-tier cities such as Beijing, Shanghai and Shenzhen. In order to adapt to the social development trend and the new ecology of basic education in the era of knowledge transition and to improve the level of school operation, China should improve the academic level and comprehensive quality of primary and secondary school teachers in terms of ratio and distribution.

4.2. The overall reputation of the teaching profession needs to be improved

The professional prestige of teachers can be summarized as the subjective perceptions and attitudes of the public toward the teaching profession. For a long time, the status of primary and secondary school teachers has been simply defined as "teaching" and their professional reputation is not high. Teachers' professional prestige is challenged by many factors, such as salary income and social discourse. Research shows that the average salary of elementary school teachers in China is 22.65% lower than the average salary of workers in other industries, and the average salary of secondary school teachers is 27.84% lower than the average salary of workers in other industries, which is far from the level of their education. In contrast, the average salaries of primary and secondary school teachers in the UK and Japan are higher than those of employees in other industries by 35.00% and 16.00%, respectively, under the same educational level.

Therefore, the current remuneration system for primary and secondary school teachers lacks incentives for master and doctoral talents. On the other hand, compared with the academic prestige and industry recognition of university scholars, primary and secondary school teachers lack access to and discourse power over knowledge production and dissemination channels, and the results of their knowledge production are less likely to be recognized by the industry and the public. At present, there are still few journals and books, exchange seminars, and other platforms available for primary and secondary school teachers to publish their academic results, and it is difficult for the professional reputation of primary and secondary school teachers to be disseminated and widely known by the public.

4.3. Professional development platform for teachers with higher education needs to be improved

Highly educated teachers face many challenges in their professional development after joining the profession. First, under the teaching-oriented model, primary and secondary school teachers need to devote more energy to teaching, and it is difficult to get feedback and motivation from research, which affects the motivation of knowledge production and research of highly educated teachers in primary and secondary schools. Second, the current workload of primary and secondary school teachers is too large, and their sense of professional value is generally low. Relevant surveys show that in addition to teaching and research tasks, primary and secondary school teachers have to undertake assessment and evaluation, and cannot focus entirely on teaching and research, which reduces teachers' sense of professional accomplishment. Once again, the greatest challenge for teachers with advanced degrees in basic education is how to effectively enhance students' core literacy with the depth of their own knowledge and understanding. Some studies have found that in the early years of their careers, some teachers think highly of themselves and are eager to demonstrate their teaching effectiveness, but end up with mediocre results, thus lowering public expectations of highly educated teachers. At the same time, most schools and their administrators have high expectations of highly educated teachers, believing that the highly educated and qualified personnel they bring in should be in the leading position in terms of subject background, professional quality, and education and teaching, but they precisely ignore the demand of highly educated teachers who need vocational training due to their lack of experience at the beginning of their careers. In view of this, school administrators need to give highly educated teachers room for growth and a certain period of professional adaptation in the face of the many practical problems they encounter after joining the profession.

5. The Construction Path of Highly Educated Teachers in Primary and Secondary Schools

In order to realize the important value of highly educated teachers in the field of basic education, schools, government and society should work together to integrate resources and provide practical guarantees in terms of improving teachers' treatment and social status, optimizing career development systems, and building scientific management methods and evaluation systems.

5.1. Multiple measures to enhance the overall prestige of the teaching profession in primary and secondary schools

For a long time, the entry of highly educated graduates into primary and secondary schools has been considered a waste of talent. The fundamental reason is that the overall social status of primary and secondary school teachers cannot match that of highly educated talents, and the professional prestige of primary and secondary school teachers needs to be improved. First, the teacher access system should be improved to ensure the social status of primary and secondary school teachers. When the threshold of teacher admission is raised and the academic structure is optimized, more highly educated talents will be selected to join primary and secondary schools, and their academic background, professionalism and comprehensive ability will increase the opportunities for primary and secondary school teachers to have a voice in the field of knowledge production, which will gradually change the public perception of primary and secondary school teachers. Second, a reasonable compensation system should be established to stimulate teachers' professional enthusiasm. Relevant studies have shown that teacher pay is an important factor in attracting high-quality talent and improving the academic structure of teachers, as well as a key element in influencing changes in educational modernization. Governments at all levels should establish and improve long-term mechanisms for teachers' salaries and wages, set salary standards in line with teachers' qualifications and professions, and improve the incentive mechanism for income distribution, so that the policy of "the average salary and income level of compulsory education teachers is not lower than the average salary and income level of local civil servants" can really be put into practice. Once again, it is important to enhance the professional identity of teachers and improve their professional attractiveness. The government and schools should actively implement policies to protect the legitimate rights and interests of teachers and enhance their sense of professional pride. In addition, primary and secondary school teachers themselves should keep up with the times, improve their professional quality in the era of knowledge transition, adapt to the needs of the times, and improve their professional reputation.

5.2. Change the concept to realize the knowledge production potential of highly educated teachers

In the context of the transformation of the knowledge production model, schools need to guide teachers to change their mindset and rise to the occasion in their actual teaching practice. First, highly educated teachers in primary and secondary schools need to establish a sense of lifelong learning to respond to national development, social needs and students' needs. Based on the interdisciplinary nature of knowledge, highly educated teachers should constantly improve their knowledge structure, enhance their learning ability, expand their knowledge scope, and master skillful teaching skills and the latest knowledge in education and teaching to cope with the needs of school development. Secondly, as teaching subjects, highly educated teachers should adjust their mentality at the beginning of their career and improve their teaching ability by reflecting on teaching cases; after entering the adaptation period, they can focus their reflection on adjusting their teaching methods through

teaching context design. Again, the applicability of the new knowledge production model challenges the practical application ability of primary and secondary school teachers. Compared with the systematic training and internship experiences of graduates from teacher training colleges, most master's degree teachers from comprehensive institutions become teachers directly from students and lack practical skills. Therefore, highly educated teachers should make a breakthrough from themselves, seek a balance between knowledge and teaching ability, improve knowledge transformation ability, and realize effective knowledge transfer.

5.3. Scientific planning to ensure the sustainable growth of highly educated teachers

Teachers' professional development is a gradual process that cannot be achieved overnight, and education-related departments should create certain professional growth space for teachers' development. First of all, the leaders of schools and related departments should do a good job of top-level design to create a good professional atmosphere and growth space for teachers with higher education, and effectively guide teachers with higher education to adapt to their jobs as soon as possible. For example, they should provide induction training for new teachers with higher education and implement an induction mentorship system to improve their overall quality. Secondly, schools should develop personalized training programs for teachers with higher degrees and build reasonable career plans according to their strengths; focus on integrating resources and building platforms to provide more opportunities for the professional growth of teachers with higher degrees. Third, management departments and schools at all levels should reasonably divide and define teachers' workload, and give them sufficient time to carry out teaching and research activities, so as to maximize the release of talents with high education; especially after the "double reduction" policy, they should try to reduce the burden of students and parents while not increasing the workload of teachers in primary and secondary schools. The workload of primary and secondary school teachers should not be increased while reducing the burden on students and parents.

6. Conclusion

More and more highly educated talents are entering the primary and secondary school teaching team, which not only reflects that the education level of China's primary and secondary school teaching team is improving, but also reflects the continuous improvement of China's education level, and with the gradual improvement of the level of primary and secondary school education, the high-quality education

system is also gradually established, and the goal of quality education is also gradually realized, and the future reform of primary and secondary school education will also gradually move towards highly educated. The future reform of primary and secondary education will also gradually move closer to the direction of higher-educated talents. In the stage of basic education moving toward higher quality development, schools should not only focus on the overall development of students, but also promote the professional development of teachers. With the large-scale entry of highly educated teachers into primary and secondary schools, the positive interaction effect between them and the internal development of basic education will gradually appear in the future.

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