The Transformation of Teachers’ Role in the New Era of Intelligence Education

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Abstract. As we all know, teachers play an important role in the field of education. Since ancient times, a teacher has been defined as the one who “proselytizes, instructs and dispels doubt.” This is the most basic positioning of teachers’ role. Nowadays, the arrival of the new era of intelligence education will surely lead to the great liberation of the teacher labor force, causing the problem of transformation of teachers’ role. Therefore, in the background of intelligence education in a new era, this paper discusses and analyzes the transformation of the role of teachers.

Historical Background

In the new era, the intelligent development of education has become a trend. As the New Generation Artificial Intelligence Development Plan (issued by the state council on July 20, 2017) required, we will improve the Artificial Intelligence (AI) Touring System, strengthen the requirements for talent reserve and talent team construction, encourage universities, research institutes, enterprises and other institutions to cooperate in the development of AI disciplines, and foster a high level of AI talents in China. And in 2025, we are supposed to realize the major breakthroughs in basic theories and to reach the world's advanced level of the application of some technologies. Then in 2030, on the whole, the theory technology and the application take a leading role in the world. Thus, artificial intelligence has risen to the height of national strategy.

Moreover, on August 6, 2018, under the joint support of the Department of Language Information Management of Ministry of Education of the People’s Republic of China, National Center for Education Development Research, National Education management information Center, and National Assessment Center for Education Quality, MOE, China, the First China Intelligence Education Conference was co-organized by the Chinese Association for Artificial Intelligence, China Association For Educational Technology (CAET), Capital Normal University, and Research Center For Language Intelligence of China in the scientific research base of State Language Commission, aiming at promoting the deep integration of artificial intelligence and education, and the balanced development of education. The conference kicked off the new era of intelligence education. For this reason, 2018 is known as "the first year of intelligence education” by all walks of life.

The Definition of Intelligence Education

“Intelligence Education” is a brand-new concept generated by the integration of education and rapid-developing artificial intelligence in recent years. Before this, there is no clear definition of it. In August 6, 2018, the First China Intelligence Education Conference, the Professor Jianshe Zhou, the director of Research Center For Language Intelligence of China in State Language Commission, pointed out that, “intelligence education AIEF (equals to artificial intelligence plus education, which equals to deep integration of artificial intelligence and education) scientifically customizes teaching content Fusion, based on accurate calculation of students’ knowledge base, subject orientation, thinking type, emotional preference and ability potential AI, and by virtue of artificial intelligence technology, cultivating students with individualized education. Besides, the short-term goals of Intelligence Education is to reduce loads, stimulate vitality, and strengthen abilities. To be specific,
we need to work on cutting down simple repetitive work of teachers, reducing students' unnecessary learning loads, boosting students' academic interest and level, and enhancing students' core literacy and survival ability. And then its long-term goal is to make a major technological breakthrough in the approach of selecting students for higher education based on knowledge accumulation tests, so as to truly realize personalized talent fostering and create a new way to filter students for further studies based on big data TruthID.”

The Liberation of Teaching Labor Force in the New Era of Intelligence Education

On January 18, 2019, the Minister of Education Baosheng Chen stated in the National Conference on Education, “in recent years, we have been trying to reduce burdens for students. However, today I want to emphasize that teachers are also in need of reducing their working loads.” He expressed that, varied social affairs irrelevant to teaching and research, such as forms, assessments, appraisals and evaluations have long posed to be a huge heavy burden to teachers and made them smothered. Therefore, this year we are going to reduce the burden on teachers as a major issue, the Ministry of Education will be issued a special policy for primary and secondary school teachers. We have to comprehensively clean up and standardize all kinds of inspections, assessments activities in schools, and implement a system of catalogues and lists. And those are not on the list or disapproved are not allowed to be carried out. Thus, teachers will be freed from lots of sheets dealings, and the schools and teachers will not be engaged in apportions at will. We must give back the time and energy to teachers, to let them set their mind conducting research about teaching, preparing and absorbing knowledge to improve their professional level.

For a long time, "three feet platform", "blackboard", "chalk" and paper version "teaching plan" is the teaching "standard configurations". Before class, teachers must look up redundant materials to prepare the lesson, take each student’s study condition, study ability into account, in order to decide how to import the knowledge and make the teaching plan. In class, the teachers instruct only by their own "silver tongue, with writing the key points on the blackboard, in this traditional and repeated way, which is way time and energy consuming to both teachers and students. After class, teachers have to assign a large amount of homework, to strengthen students’ understanding through review. Furthermore, they also have to review students’ homework in the day, if they are objective items, the teachers can afford; but for the subjective topics, especially thesis examines for Chinese teachers, are a very headache thing. For a class of the composition, the marking is a huge and repetitive work, but need to achieve the specific results, rather time-consuming. In that, teachers need to carefully review the wordings and sentences, paragraphs, themes and even the punctuation marks in students' compositions, this is quite tedious. But in the new era of intelligence education, we have solved this problem. The Research Center For Language Intelligence of China has developed and used “the System of IN Classroom Intelligent Composition Correction”, achieving intelligent corrects, ranging from punctuation, word segment in the article, theme, to emotional expression. They all can be reviewed in details. The system greatly liberated the labor of the teacher, made teachers from repeated and complex work into the teaching with more wisdom.

Transformation of the Role of Teachers

The new age of intelligence education will certainly bring a new question, at the same time of greatly liberating the labor force of teachers: Does this mean teachers are out of work? Nothing to do? A famous German philosopher Karl Theodor Jaspers wrote in his book What's Education, “Education is a tree shaking a tree, a cloud to promote a cloud, a soul awaken another soul.” Hence, liberating teachers from repeated and complex labor does not mean that teachers have nothing to do, but giving more holy responsibility to this work. This responsibility offers a kind of unprecedented heights to explore the future of education and a more profound way to go to the essence of and soul of education. Intelligence education era provides huge thinking space and self-exploration space, making teachers think deeper issues of education. Once education returns to people’s conscience, touch people's soul, and shape their personalities, teachers will find their happiness they should
have. Just as Mencius said, “gentlemen have three pleasures: Parents are alive, brother are not sick, this is the first happy thing; do not feel guilty when looking up to the sky, do not feel ashamed when bowing to people, this is the second happy thing; Getting the world’s talents and educating them is the third happiness. Gentlemen have three pleasures however, serving the world with their virtue is none of them.” In the new era of intelligence education, teachers will eventually enjoy themselves--"get the world's talents and educating them". The teachers of the future will certainly be intelligent and creative teachers, who will be liberated from the complex and heavy labor and dedicate in higher and more intelligence education work.

Transforming “Teacher Man” to Educating Role

In the traditional education, teachers for most case play the role of “Teacher Men”. But in the new era, they are supposed to transform their roles of “Teacher Men” into “educating roles”. Contrasted to the past of scarce resources and closed information, in the new era of intelligence education, with the rapid development of big data, cloud storage and intelligent terminals, the stock of knowledge is larger than ever before. Students can acquire knowledge anytime and anywhere without restrictions, but this is not the original intention of education. "If people forget everything they have learned in school, what they have left behind is education," Albert Einstein said in his lecture On Education at the 300th Anniversary of American Higher Education. He rejected the idea that schools must teach directly specialized knowledge and skills that will be directly used in later life. Just as Deyi Li, the academician of the Chinese Academy of Engineering, “lifelong learning, and the ability to acquire knowledge, coupled with judgment and thoughtfulness, may be more important than the stock of knowledge. Ability first, knowledge second, as long as learners have the ability to acquire knowledge, then their knowledge will be added.” The ability to judge and think are so vital that it is necessary for teachers to play the fundamental function of "educating people", to promote the healthy development of students' body and mind, pay attention to students' inner world, shape their pure and perfect minds, awaken their life vitality, and enable students to study and live happily and freely with personality development, lifelong development and healthy growth. Luckily, the era of intelligence education provides opportunities and possibilities for teachers to "educate". Only when teachers complete the transformation of the role of "educating", can education return to the original heart of human life development and promote the development of students from knowledge to life development.

Teachers Change from the Role of "Strict Teachers" to the Role of "Friends"

The current President of Capital Normal University, Professor Fanhua Meng, delivered a speech titled "From A Student to A Teacher" in the 2018 Graduation Ceremony. In the speech, he explained the quality of a teacher and the role he plays from the perspectives of "responsibility", "cultivation", "knowledge" and "benevolence". From my perspective, in the new era of intelligence education, teachers are not only the imparters of knowledge and the demonstrators of moral cultivation, but more importantly, they need to play the role of "friends" as an innovator, companion, enlightening person and collaborator. With the rapid development and extensive application of intelligence education, big data, and cloud computing, the era of intelligence education provide the broad space for us to get a fast and convenient access to infinite knowledge which is equal to everyone. Nonetheless, the integration of knowledge, extraction, and innovation, are not necessarily easy to master the ability from the start for each student, which need the teacher get fully integrated into the student's study and life, to inspire the students' mental development, constantly guide students to innovate in practice, as the activities of the organizers and participants.

For a long time, especially in traditional teaching, teachers have imbued knowledge to students in a rigid and uniform way, and the relationship between students and teachers is the transmitter and the receiver, and the sender and the executor of requirements. In this mode of education, students and teachers seldom get along equally as friends, which inevitably leads to students' natural fear of teachers. As a result, teachers cannot know students well, in order to achieve the purpose of emotional communication with students. At present, the new era of intelligence education has strongly impacted the traditional education mode, leaving every teacher upholding the traditional
education idea vulnerable. In the new era, intelligence education supplies a good development environment for teachers who are innovative and capable of making friends with students. Teachers transforming from "strict teachers" to "friends" is the inevitable development of intelligence education.

**Teachers Transform from the Role of "Pastor" to the "Designer" of Students' Personalized Development**

The word "Pastor" comes from Christianity and literally means shepherd. The primary role of the "Pastor" is to lead the faithful in their faith, heal and defend their fellow believers. In traditional education, the teacher acts as a "shepherd", the role of teachers, centralized and uniform in teaching. Influenced by traditional culture, the teacher is easy to set up their "authority" in front of students, so the students are “at their teacher’s back and call”. Students trained in such education environment, inevitably are lack of personality, not good at thinking, and lack of questioning and spirit of exploration.

I once heard a class in a school. When the bell rang, the students immediately sat straight with their hands back, and then seriously immediately got into the class after finishing their chants of "good morning, teacher" when the teacher stood at the podium. In the class, the students were very obedient to cooperate with the teacher: when the teacher mentioned each of his question, the students handed up with the standard gesture for the answer. The whole class was quite enthusiastic just like having accepted a military training. Generally speaking, the classroom discipline was quite good. Also, I audited an intelligent class: under the guidance of the teacher, the students in class started the class with cheer and relaxation; connected with the students’ tablet computers, the teacher's smart devices inserted his teaching content with vivid, three-dimensional and lively forms at any time, the students easily got very happy and dedicated in the intelligence of multidimensional space. In the quizzes, the intelligent system could quickly calculate the score of each student, intelligently analyze the test situation of each student, and give each student a personalized review plan. In such a class, the nature of the students is fully released, and the curiosity and curiosity of the students are stimulated, so that each student is enable to learn according to their own characteristics.

In contrast, in the traditional classroom, the teacher dominates the class, the students to yield to the authority of teachers, teacher professor "flood irrigation type" to the students’ knowledge, with strict classroom discipline with the release of the nature of the students, students learn much knowledge in this lesson, inspired the vitality of many students of innovation, cultivate the students' individual thinking, this is unknown. On the contrary, in the intelligent classroom, from the personalized introduction of course content to the diversification of teaching methods, teachers fully consider the individual characteristics of each student, making students easy to learn, eager to learn and happy to learn, fully releasing the nature of students and allowing students to carry out personalized learning in a lively and pleasant classroom atmosphere.

**Transforming from A Single Knowledge-based Teacher to A Cognitive Psychological "Consultant"**

In the new era of intelligence education, knowledge stock grows explosively, all kinds of information is filled with students' life. In terms of the growth of students, from pre-school education to secondary school education, this is the golden stage of their physical and mental development, as well as the key period for the students to form their outlooks on life, values and world. During this period, since students' ability to distinguish right from wrong is not that strong, teachers should not only teach students knowledge, but also guide students to form correct "three outlooks". Nowadays, the mental health education of students poses to be a problem that is widely concerned and valued by the education circle. There are events caused by students' mental health problems in various places, which rings the alarm bell for the education institutions to have a profound reflection, reminding teachers of paying special attention to students’ mental health problems.
To explore the root the problem, I believe the main reason is that under the exam-oriented education system, students, parents and teachers are too concentrated on pursuing the improvement of academic performance. And students are instilled the viewpoint of "academic achievement only", which distorts students' mind and causes great harm to students' health. Therefore, in this new era, teachers should play the role of a good student "consultant", to communicate with students in a timely manner, to correct students cognition errors in learning and living, so that students can return to a healthy and normal learning life. In the new era of intelligence education, teachers would better act as a consultant for students' cognitive psychology, so that students can live healthily in the correct "three outlooks", and cultivate students' excellent character of lively, cheerful, good at expression and high EQ.

**Summary**

In the background of the new era of intelligence education, this paper discusses the inevitability of teacher labor force liberation in the new era. Teachers will be more intelligent to engage in teaching work and even deeply realize the happiness that they should have. Along with the liberation of the teacher labor force, it will inescapably lead to the problem of teachers’ role transformation. This paper then elaborates the roles of teachers in the new era from the perspective of transformation of teachers’ role, namely, from the role of "strict teacher" to "friend", from "Pastor" to "designer" for students' personalized development, from a single knowledge-based teaching teachers to the "consultant" for students’ psychology cognition. After the role transformation, teachers will experience the joy of "getting the world's talents and educating them" in the new era, which is also the prerequisite requirement for teachers’ career development in the new era of intelligence education.

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