

# The Coupling Possibility and Limiting Constraint to Promote Educational Equity by Information Technology

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Abstract: The effect of IT on education will be greatly affected by the formation of the inner and outer fairness of education, the dissemination of knowledge and the promotion of equality. The idea of fairness and equity, the duplication of high quality classroom resources, the replacement of outstanding teachers Resources, and satisfying students' personalized learning needs. However, the influence of information technology in Promoting equity in education is limited. As regards promoting equal access to education, Technology cannot reconstruct a set of more equitable "entrance" rules to solve the disparity in the enjoymentof Quality education due to the involvement of various family economic capital in the choice of schools in diverse Educational stages. With regard to the promotion of equity in education, the Gap between the "enjoyment" and the "use" of information technology among differentiated groups. In terms of Promoting the fairness of educational process, information technology can expand the coverage of high-quality Educational resources by replicating the "teaching" of better teachers, but there are still limitations in the function Of "education", such as caring for children's internal spirits, cultivating their morality and emotions. In terms of Promoting equity in educational outcomes, information technology, as an instrumental means, cannot fundamentally Reverse the inequalities in education opportunities, education processes, and educational conditions by themselves, and So that a fair result can be achieved for all. In the future, along with the transformation of educational fair value proposition And the development of information technology, the coupling possibility and constraint mechanism of information Technology to support education justice will create new uncertainties, and the interplay of these will require To be looked at in the long run.

Key words: Information Technology; Education Equity; Coupling Mechanism; Limiting Constraints

#### Information technology should straighten out the root cause of educational fairness

With the rapid development of modern technology, information technology has far-reaching and far-reaching significance for the development of education. In the context of the implementation of "equality and quality", information technology has outlined the development blueprint of transcending space and group differences and achieving high-quality resource sharing, which has gradually been regarded as the focus of promoting the development of education equity and is also a major trend of future social development.

In terms of the policy of the Outline of the National Medium and Long-term Education Reform and Development Plan (2010-2020), The Ministry of Education of the People's Republic of China (2010) clearly pointed out that "informatization will bring great changes to China's education and should be given full attention"; the Third Plenary Session of the 18th CPC Central Committee proposed that "establish and improve the coverage system of education resources, and gradually narrow the gap between regions, urban and rural areas, and schools" (Information Office of the People's Republic of China, 2013); and the Action Plan of Education Informatization 2.0 pointed out that: "Education informatization breaks through the time and space limit, rapidly replicates and spreads, and enriches the presentation means, which is an effective way to promote education fairness and improve education quality"

(Ministry of Education of the People's Republic of China, 2018); China's Education Modernization 2035 will build a major strategic goal of "building a digital education resource sharing system" (the State Council of the People's Republic of China, 2019). It can be said that China has strategically confirmed that information technology is an important way to promote educational justice.

In the academic research, the relationship between information technology and education equity has always been a very meaningful issue. However, there is no consensus in the academic community on whether information technology can really promote education equity. At present, there are three major theories: technology progress theory, technology limit theory, and technology gap theory. The technology-driven theory points out that "compared with human teachers, Al can become more fair and more equitable, so that every student can gain knowledge from their own needs, thus gain growth, and truly achieve personal teaching goals." Anthony:

Selden et al., 2019). The characteristics of information technology such as fast, timely, wide range of information dissemination and strong reproducibility (Ren Youqun, 2016) can effectively empower China's "unbalanced" and "inadequate" problems in the new era (Hu Xiaoyong et al., 2020). "In future teaching, material and digital resources can be flexibly converted to meet teachers' needs for knowledge." (Yang Xianmin et al., 2021) The technology limit theory points out that "technology is always limited, and new technology is expected to be high, but does not show a strong transformation ability" (Chen Xiaoshan et al., 2021). Although information technology plays an important



role in promoting the fairness of educational achievements, its function must also take "information technology and its application to information technology" as the prerequisite (Hu Qin et al., 2021). In this front-style strip, "human" is the key. Only human beings can cultivate human beings, and machinery cannot replace teachers (Gu Mingyuan, 2019). In the process of promoting the informatization of education and the digitalization of educational resources, we must firmly establish the working idea of "emphasizing technology, organizational system and technological innovation" (Ministry of Education of the People's Republic of China, 2022). The technology gap theory points out that "restricted by the level of economic development, personal information literacy, education level and other factors, the popularization of information technology in education has not only not closed the gap, but also widened" (Zhu Sha et al., 2017). Children in big cities like Beijing, Shanghai and Guangzhou may be born with computers, iPads, networks, mobile phones and game consoles. Their cognition, attitude and behavior have been affected by digitalization. In contrast, children in remote mountainous areas do not even know what the Internet is about. In the "Internet plus" era, this inherent difference in information technology quality has worsened it in a sense. (Yu Mingya et al., 2017) So, will it promote equality in education or make inequality worse? Answer this question according to the following three basic reasoning. The first point is the value appeal of education justice in the next step in a clear time and space environment and the main constraints it faces; The second part discusses the role of information technology in resolving the above significant constraints and the extent to which it can eliminate these significant constraints; Third, we should pay attention to whether information technology will produce new problems when removing the existing significant limiting factors, which will affect the fairness and justice of education

# 2. Research on the values and constraints of educational justice in the new era

To explore whether information technology can promote education fairness, we must seek the combination of information technology and fairness from specific value demands, which is the prerequisite for exploring this issue. The definition of "education justice" is listed as "preface" because "it is relative, not absolute or deterministic" (Guo Yuanxiang, 2000). "Education equity has the characteristics of stage and relativity", which should be studied in a whole social environment (Wang Shanmai, 2008). In other words, the proposition of educational fair value is not a concept of absolute norms, time and space, dynamic and sustainable development. The value pursuit of this concept in a certain time and space environment is not only restricted by the level of economic. social and educational development at that time, but also deeply affected by the value pursuit of different subjects in the material environment where people live. According to the characteristics of the stage and relativity of education justice, the value proposition of education justice in the new era should be based on the new era of education development, the high quality stage of education development and the appeal of education stakeholders who embody the people's center. Therefore, it is a "time and space coordinate" of educational justice in the new era to move from "learning" to higher and broader education equality. From the perspective of space and time, education must meet the development needs of the differentiated "human" society, so that we can better grasp the fairness of information technology and education.

From the perspective of social background and human development needs, it is believed that educational justice is not only the requirement of opportunity and process, but also the final evaluation of personal future career. Gu Mingyuan said, "Fair education is to give every student the opportunity to learn and develop fairly, including fair and fair admission opportunities and relatively balanced educational resources, so that every student can make full use of their potential and achieve future achievements" (Gu Mingyuan, 2016). This means that the fairness of educational opportunities, conditions, processes and results should be taken into account when studying the relationship between information technology and educational opportunities and in the process of overcoming existing inequalities.

### 2.1 The value connotation and constraints of equal educational opportunities

The most important value appeal of educational justice is equal opportunity, which is also a prerequisite for the implementation of other equal appeals. Based on the significance of its value, the famous Swedish economist Tolston Hussen gave five operable factors: first, the total quality of schools, laboratories, libraries and other "hardware resources" related to teaching quality: The second is the external material conditions that are closely related to education and teaching, such as the geographical location of the school, family economic conditions, and means of transportation; The third is the psychological factors such as parents' academic expectations for their children, parents' positive and negative knowledge: Fourth, teachers' educational attitude, teachers' attitude. students' learning motivation and other psychological problems in school situations; Fifth, students' learning opportunities in terms of time in class and extracurricular assignments (Xiong Chunwen, et al., 2011). Hu Sen believes that the current equality of educational opportunities is not only the equality of opportunities for "all students can go to school" with "enrollment rate" as the measurement standard, but also the equality of opportunities for students at different levels in receiving various high-level education with "quality" as the measurement standard

#### 2.2 The value and constraints of education equity

Conditional equality is an extension of opportunities and an objective evaluation of the "quality" of high-quality education, including the material and external support it provides, which is reflected in the allocation and enjoyment of resources for schools, the external support for different groups and the equality of government, society and family. This is to enable different students to receive basically the same resource allocation and environmental support through the establishment of standardized schools and systems for environmental support. On the Value Appeal of Condition Equality

Judging from the differences between urban and rural areas, regions, schools and groups in China, the current inequality of education in China is shown as follows: inequality caused by differences in education quality;

Classrooms and other facilities are complete, but some rural primary schools are still in danger of "survival crisis". Among the external factors, Zhang Renjie doubts whether different groups can get external support, and points out that "human beings are born



with inequality, and they are cultivated by different genes and social classes in the first two years after birth."

(1988, Zhang Renjie) Therefore, whether it can eliminate and eliminate the internal and external factors of inequality in education, especially how it can eliminate the inequality caused by personal differences caused by congenital factors, has undoubtedly become an important topic to explore whether it can promote education equality.

# 2.3 The value and restrictive factors of the fairness of educational procedures

Different from the value of "conditional justice", "teaching process justice" advocates that the initiative of individuals with different family backgrounds, personality characteristics, academic performance and other differences in the field of education should be taken care of fairly, which is expressed as "equal treatment" of the main body of education and respect for the individual differences of students in teaching, that is, "giving" and "wanting" based on the needs of the main body. In terms of the main needs of "giving", although it is not as significant as the inequality of conditions, its damage to children is not less than in other cases. In teaching, discrimination, bullying, scornful eyes, lack of verbal and physical communication, and the gap between the values and the actual situation in education will cause great psychological trauma to children. Rosenthal's theory of influence was put forward by Robert Rosenthal and Lenoya Gibson. In the process of teaching, any external "giving" will have a positive and negative impact on the subjects. If a child who has not yet grown up receives a lot of ridicule and discrimination during his study, no matter how good his external environment is, his suffering will have a negative impact on his study. When investigating the dropout of rural students, Yuan Zhenguo pointed out that "80% of dropouts are not due to financial problems, but because they are often ignored and ridiculed" (Yuan Zhenguo, 2018). This is an extreme case of more than 20 college students in Luoyang, Henan Province who were "punished by crazy body" and "slapped more than 20 teachers", as well as the profound and long-term trauma to children caused by the unfair teaching method. Therefore, "giving" is of greater significance to the subjects. French philosopher Jean-Paul Sartre, starting from the theme of "want", regarded "want to be" as the fundamental feature of his subjectivity (Jean-Paul Sartre, 2017). Therefore, when examining the fairness of the teaching process, the "to be" based on the "human position" will be another observation perspective to examine the teaching process. Any domination of "educational justice" that is divorced from human needs is contrary to the subjectivity status of "for people" in the field of education. "If a person accepts some external force, then he will be pushed to another level instead of standing on the human side." (Lu Jie, 2008) Therefore, in the teaching of information technology, how to put the student body at the core of teaching, provide different physical experience for different students in different forms, and fill the gap between external "giving" and "wanting", To test the role of information technology in teaching

The value meaning and restriction factor of "fairness of educational achievements" refers to that in the current situation, students can adapt to and guide the future development through the teaching of knowledge. Its basic characteristics are: the reality of teaching and the uncertainty of teaching results. This shows that, in

its connotation, the fairness of educational achievements not only reflects the fairness of the current knowledge dissemination results, but also reflects Mr. Gu Mingyuan's concept of "achievement and success". The ancient Greek philosopher Praato said: "A man is not only controlled by what he sees, but also by what he imagines." (Lu Jie, 1998). When discussing the issue of education fairness, we should seek the "can be" and "to be" that individuals desire from the external perspective, so as to achieve the effect of "already become" which is the pursuit of higher education fairness. Therefore, the question of whether information technology can promote the equality of education from the perspective of human development history in the longer term should be extended to the question of whether information technology can help mankind to achieve its ideal person, in addition to exploring the relationship between information technology and educational opportunities, educational conditions and educational process.

After "dismantling" the values of educational equity, combined with the reality of the development of education in the new era and the differences in the field of education, from the perspective of the "human" subject, this paper expounds the views of educational opportunity fairness, condition fairness, process fairness, and result fairness. From the above analysis, it can be seen that in each stage of education development, education justice has the overall value proposition and the value of each period; It contains the values of important things at present and the values of being a person in the future. Therefore, to explore whether information technology can promote education equity, we must adhere to the "human" point of view, explain the technology in solving the problems restricting education equity in general, and explain the impact of technology on education equity in general, and integrate people into the coupling of information technology and education opportunity equity, condition equity, process equity, and result equity, so as to analyze the interaction between technology, education, education

# 3. The coupling between information technology and education equality

## 3.1 The impact and limitation of information technology on the equality of educational opportunities

Under the actual situation that the enrollment rate of compulsory education reaches 99.96%, the gross enrollment rate of junior high school is 102.5%, the gross enrollment rate of preschool education is 85.2% (the Ministry of Education of the People's Republic of China, 2021) and the quality of compulsory education is unbalanced (the Ministry of Education of the People's Republic of China, 2021), the issue of equality of educational opportunities should be changed from the equality of compulsory education "in school" to the equality of preschool education, high-quality compulsory education and higher education. In other words, if information technology can promote equality in education, it can promote equality in preschool education, high-quality compulsory education or higher education.

#### 3.1.1 Equal access to early childhood education

Under the current situation of 85.2% of the total enrollment rate of preschool education and the problems of "difficulty in entering kindergarten" and "high cost in entering kindergarten",



whether information technology can promote the equality of opportunities for preschool education depends on whether it can promote the popularization of kindergartens, especially how to help children who have not yet received preschool education services to overcome the problems of economic disadvantage, remoteness, inadequate supply of kindergartens, backward ideas, etc, So as to help them enter the kindergarten; Second, at a time when the kindergarten service level is low, can it help children from different families to obtain basically the same kindergarten service, so that children from all levels will not "lose at the starting point".

Although advanced childcare concepts and high-quality care and education services can be used by information technology, in fact, the application of information technology is still very limited in improving the equality of educational opportunities. Information technology cannot provide high-quality education teachers for children from remote and economically disadvantaged families, nor can it improve the family economic situation and children's education support system. In the information age, in the cross-model and cross-organization teaching model, "dumb" children lack effective information application. At present, the fairness of information technology to children's education opportunities still faces many "impossible" problems.

#### 3.3.2 Equal access to quality education

(Huai Jinpeng, 2021) believed that whether information technology can promote the development of compulsory education in the context of "having completely solved the problem of out-of-school at the stage of compulsory education in history" (Huai Jinpeng, 2021) included at least two perspectives: first, whether information technology can effectively eliminate the differences in the development of regional, urban and rural, inter-school and group education in compulsory education, so that every school-age person can enjoy the same education; The second is whether we can take advantage of the "school-age children and young people, regardless of gender, nationality, race, family property status, religious belief and other factors, have the same opportunity to enjoy compulsory education" in the Compulsory Education Law when the current compulsory education in China has not been completely solved

The analysis of causation is the fundamental way to solve the problem and "suit the remedy to the case". At the stage of compulsory education, there are regional, urban-rural, inter-school and group development gaps, which are not only related to regional educational resources, family background and other congenital resources, but also closely related to the principles of resource allocation such as "urban priority" and "key middle schools", the county-led county-level educational support gap, and the countylevel investment intention under the performance evaluation. Whether information technology can offset the constraints that cause differences in education development should be a key indicator of whether information technology can promote the development of compulsory education. In addition, today, when the quality gap of compulsory education in China has not completely disappeared, the access to high-quality compulsory education is mainly achieved through the "school district room" of "economic school selection", and whether information technology can offset the impact of the economic background of the family on the quality of compulsory education of children, thus establishing a new "screening standard" in line with the quality of education, so that different people can enjoy equal compulsory education, It needs to be explored and

tested from multiple perspectives. Based on the above two points of view, this paper believes that the interaction between information technology and equal opportunities in education is very complex. Therefore, it is easy to believe that information technology can effectively promote the development of education. Obviously, it is premature to judge the equality of compulsory education.

#### 3.3.3 Equal education

In China, the total enrollment rate of higher education has reached 57.8% and has been popularized. The higher education system has distinct levels. The key to whether information technology can promote the equality of opportunity in higher education is whether it can help the different people to enjoy the quality and reputation of the higher education system equally after receiving the equal basic education, or can offset the impact of the unequal basic conditions on the access to better education. To test whether this role is effective, It can be seen from the following aspects: "With the continuous improvement of the development of information technology, will the opportunity balance of higher education be improved?" In fact, despite the rapid development of information technology in recent years, due to the rapid development of information technology, the opportunity equality of college education has not been improved. After the expansion of college enrollment, the probability of urban residents attending college is 6.3 percentage points higher than that in rural areas; (Li Chunling, 2010) In recent years, among the high-level college graduates represented by Peking University and Tsinghua University the critical arguments of "expensive education" and "useless education" have provided strong evidence for this.

## 3.2 Possibility and limitations of the equal impact of information technology on education

"The rational allocation of educational resources is the fundamental to achieving the starting point fairness, and also the breakthrough to achieve the issue of education fairness." (Xiong Caiping, 2016) Information technology "Breaking through the time and space constraints, rapid replication and dissemination, and rich presentation means are a powerful means to promote education equity and improve education quality. The theoretical basis for its main support is that information technology can break the gap in education status caused by the imbalance of resource allocation, so that the different groups in different regions can share high-quality education resources. Needless to say, information technology has unique advantages in reducing the teaching situation Sex provides us with an opportunity to solve the inequality that has existed for thousands of years. At present, China's regional gap, urbanrural gap, inter-school gap and other issues, the use of information technology to some material, financial and other aspects have a certain complementary role. In addition, in the same university, "using network and digital technology, we can solve problems in the classroom in the best way, so that students in each class can equally enjoy better educational resources, thus shortening the difference in resource allocation between us" (Xu Jicun, 2016). For example, children in "three districts and three prefectures" can use the Internet to obtain high-quality education and teaching information in Beijing and Shanghai, while rural children can use smart phones for online teaching. At the same time, modern technological means can not only provide online teaching for students in primary schools with weak economy, but also provide



systematic education and teaching skills training for teachers, so as to "teach fish" and improve the quality of the whole education. Therefore, in government documents and academic papers, there is a question about how to use information technology to improve the popularity of quality education.

However, it should be pointed out that there are two prerequisites for the impact of information technology on education: first, the differences in various fields can be used for education and teaching. Second, the ability and preference in the application of information technology and the ability and preference to promote technological progress play a role in promoting the quality of teaching, that is to say, the technology application institutions have the ability and desire to use information technology to improve the quality of teaching. In fact, science and technology is both a tool and a resource. In contrast, there is a "gap" between information technology and resources. The essence of the "gap" is the difference between the "enjoyment" and "use" of different groups, which not only restricts their goal of achieving equality, but also creates a new "digital gap". From 1995 to 2000, the National Telecommunications and Information Administration Commission (NTIA) of the United States has published four series of reports on "Backing up in the Network", including "Backing up in the Network", and Susan P. Crawford, the special assistant of the former President of the United States, Hussein Obama, published them in the New York Times "New Digital Divide" (Wang Mei et al., 2014).. The "digital divide" is not simply a "yes" in two, but a deeper problem, such as the attitude and ability of the holder, that is, from the "thing" to the "person" (Zhusha et al., 2017).

From the perspective of "have you", according to the 49th Statistical Report on the Development of Internet in China, the Internet coverage rate between urban and rural areas in China is still very low. By December 2021, only 57.6% of rural areas in the country, and 42.4% of rural residents do not have access to the Internet (China Internet Information System, 2022). This leads to the dilemma of "no network available" for college students living in rural areas in the process of enjoying information technology. At the same time, due to the market-oriented payment of information technology, poor college students living in poor areas not only have the problem of "no" in the area they live in, but also have the problem of "unavailability" due to the large amount of costs in the construction process.

From the perspective of "people", "use" and information technology, it is not only difficult for vulnerable groups to access information technology resources, but also their ability and willingness to use information technology are significantly different. Different types of networks have a significant impact on different family use tendencies, and have a certain correlation with their educational gap. The Statistical Report on the Development of Internet in China pointed out that "the use of young people in rural areas and rural areas in China is very different, and there is a big gap from depth to width, and from all aspects." The proportion of urban youth Internet users using search engines, social networking sites, news, shopping and other social functions is significantly higher than that of urban youth, while non-adult Internet users use short videos, animations Comics and other leisure software. " (China Internet Information Center 2022) After being controlled by choice bias and family environment, online learning tendency has a significant positive effect on children's math, reading and scientific achievements, while the effect of "social games" on the Internet is significantly reduced. Students who spend less than 30 minutes online have significantly higher academic achievements than other students; In terms of the tendency of network application, the family's economic, social and cultural conditions play an important role in learning achievement, and are the most important reason for the inequity of education effect; If children from poor families form a learning tendency on the Internet, the Internet can shorten the difference in scores caused by home ownership, thus reducing the unfairness of educational achievements (Chen Chunjin, 2017).

Although with the development of economy and society, the allocation of information technology resources in the field of education and family has been gradually solved, the gap between the power and desire of people who use these resources is not easy to be eliminated after mastering these resources. Especially without sufficient supervision and guidance, it is more like a "double-edged sword" than a "booster"

# 3.3 The equal role of information technology in the process of education and its limitations

The fairness of teaching process will play an important role in the fair evaluation of learning experience, learning interest and teaching objects. One of the defendants in the above-mentioned case of "A student beat a teacher 20 years later" wrote in the court. "Zhang Mou once worked as a head teacher for me for a year, teaching English. He caused great trauma to my spirit. After more than ten years, I have been having nightmares, helplessness, despair and crying". Although this extreme situation can not fully reflect the fairness of the whole education process, "the more hidden and profound injustice of China's education is also hidden in the life process of school institutions. Every link of the daily operation of schools, under the seemingly reasonable inertia, links China's education equality risk circle, leading to more inequality (Li Tao et al., 2017).

"Education is a process of mutual influence." (Feng Jianjun, 2016) "The relationship between people will affect people's body and spirit." (Lu Jie, 1984) Therefore, the process of teaching is carried out in the "communication between people". Fundamentally, the fairness of teaching process is to make differentiated individuals receive "equal treatment" in "communication". This "communication" refers to the mutual influence and mutual influence between teachers and students in teaching. "equal treatment" includes the distribution of resources in teaching by different subjects, as well as psychological factors such as language, personality, psychological cues, etc. "People" and "people" are the subjectivity of education, are the core spirit of the justice of the education process, and play a decisive role in the justice of the whole education process. Whether information technology can improve the fairness of teaching process depends on how it plays an important role in promoting the development of "people" and helps to eliminate the generation of inequality formed by "people". In this context, "teachers are the key factor to realize the fairness of the educational process" (Zhang Wengui, 2018). "If there are deficiencies in human resources and financial resources, teachers can compensate for the above shortcomings in a sense, which cannot be replaced by other hardware." (Wu Zhihui, 2017) "If there is no positive role for teachers, the allocation of educational resources will become less effective " (Shi Zhongving 2018) Therefore, can it help teachers treat students "equally", It



has become an important consideration of the issue of information technology to promote the fairness of teaching process.

In the interaction between teaching and learning, information technology has played a certain role in replacing the role of "people". That is to say, in teaching, information technology can help or replace the "teaching" of teachers with its unique advantages. In this process, because technology takes the "equal treatment" approach in "treating" individuals with "indifference and no position" and in educational activities, because technology itself has strong subjective preferences and prejudice and other transcendental value constraints, it has played a certain role in achieving the justice of the educational process. However, technology has certain limitations on the functional substitution of "people", especially for the teachers of "education", its role is very limited. "The continuous emergence of predictions such as" teacher substitution theory "and" teacher substitution theory "is a reflection of the lack of understanding and confidence of prophets in human education, and is a kind of" arrogant "" instrumental "thinking. At present, the implicit value transmission of "people" based on "education" in teaching is still a "wasteland" where the current technical role can be fully utilized. A teacher is a dynamic difference with value presupposition and emotional functions. He should "act like a machine" treat different students from the deenest level of the soul "without discrimination" on the premise of respecting students' personal characteristics and development rules, especially because of their academic performance, intelligence, learning ability, gender appearance, family background, human relations and other reasons. However, anyone who has been engaged in education and teaching must realize that teachers should be able to "treat each other equally" at all times in their study. In this difficult work, information technology often acts as a "bystander". In addition to paying attention to the interaction between teachers and teachers, teaching process justice should also pay attention to the communication between students and classmates. Based on the current teaching practice, school bullying is a kind of anomie behavior between students and classmates (Ministry of Education of the People's Republic of China, 2017), and is a reflection of the unfair educational process that seriously affects students' learning experience and physical and mental health in peer interaction. Among them, the inequality of school bullying and the inequality of educational opportunities, educational conditions and other aspects shape each other, resulting in "children with weak economic capital, cultural capital and social capital are more vulnerable to and vulnerable to school bullying and infringement, and girls, left-behind children and migrant workers have become the main victims of school bullying in recent years" (Wei Yemei et al., 2016). Whether information technology can effectively improve or eliminate the physical or mental damage caused by the use of body or language with its unique intervention advantages becomes another perspective for information technology to make up for the fairness in the teaching process. Although the Internet can nourish individual emotion, interactive paradigm, habit formation and social development. This is a very important issue.

From the perspective of human communication, "physical sense is the starting point of perception and intuition of the world" (Schopenhauer, 2017). However, we tend to infer the impact of technology on objects from the inevitable perspective of technology, while ignoring the sense of ontology. "The concept of body has led the research of artificial intelligence and robotics, and has become

the mainstream of cognitive science." (Ye Haosheng, 2011) In teaching and learning, technology empowerment is a way to change the uncertainty of "the most variables" from the uncertainty of "the most variables" to the restriction of the most operable variables. Although information technology can bring immersive situational experience to subjects, there are still fundamental differences between scenarios based on technology developers and technology supervisors and dynamic life and learning environments. Therefore, information technology plays a role in the cognition and knowledge acquisition process of teaching objects.

# 3.4 Possibility and limitations of the fair impact of information technology on educational outcomes

The fairness of educational achievements not only reflects the teaching achievements in different periods, but also reflects the accumulation of educational achievements in different periods and the future achievements that can be achieved by individuals after receiving the same education. More specifically, the fairness of education does not mean that different people can equally obtain the same academic achievements or have roughly the same chance of success in the future after receiving good education. It is more fair to let everyone get the same level of teaching after compulsory education. This form of inequality refers to that when people with the same level of study and effort receive external support from the family, they receive external support from the family, which leads to higher level and higher level of education opportunities. At the same time, because of the unfair system of "marriage", it leads to the possibility of future achievements of people with the same level of study, comprehensive quality and skills. Whether from the perspective of access to educational opportunities at a higher level or higher level, or from the perspective of the possibility of success of different individuals after education, the criterion for measuring the fairness of teaching results should not be a fixed "point", but an overall "domain" based on the basic observation of "roughly equivalent". In the "domain" where the educational effect is "roughly equal", how does information technology resolve the differences in higher education opportunities brought by familycentered external support? The "marriage" between educational achievements and injustice leads to a huge gap in personal future achievements, Especially in "from primary school to junior high school, from middle school to senior high school, from high school to high school, from middle school to university, from low level to low level, from high level to high level, from education to education, from education to education, from education to education, from education to students, from students to middle school, from middle school to high school, from school to school, from students to students, from students to school, from students to high school, and then to high level, All this is determined by network technology. Most farmers have passed many tests and have been admitted to second-tier and third-tier universities. Even if they have obtained university degrees, they have to face a higher threshold to find a promising and stable job (Li Chunling, 2014). From the actual situation of education, among all the obstacles information technology is a key factor in how to improve the fairness and universality of teaching results.

With the elimination of the gap between higher and higher levels of education opportunities caused by family-centered external support, the binding effect of the network supported by information



technology on the inequality caused by the direct intervention of external forces such as the family is increasingly obvious. This binding effect is mainly manifested in the external supervision of the network on education fairness and the public opinion caused by the destruction of family social capital on education rules The cost of public opinion and other violations continued to rise. In the Internet era, due to the restriction of personal career development and education opportunities, the injustice of personal career development has been caused. In this process, this inequality has gradually formed on the basis of building social justice and in the social soil of equality. Information technology is a driving force of external constraints, enabling different individuals to accept the basic qualities consistent with their personal characteristics, and thus achieve roughly the same achievements. In a sense, it can reverse the traditional unequal education model in a sense. However, in this case, information technology has played a more "inhibiting" role than "eliminating" from the root. That is to say, information technology cannot fundamentally prevent intergenerational communication through integration with teaching. In the process of "inhibition", the performance of its educational achievements is not only manifested in external performance such as academic achievement, career acquisition and career development, but also in "improving human health". Therefore, whether the integration of information technology and education can help "support, promote, guide, improve and rehabilitate human mental health" (Kiang, 2020) is also another important factor for information technology to promote education equality. However, the existing practice has not been able to directly support this view under the current situation.

#### 4. Conclusion

Needless to say, information technology has brought a profound impact on the education sector. These effects will break the restriction of the monopoly of high-quality education resources with excellent teacher resources as the core on education equity by shaping the fair soil inside and outside education, spreading the concept of fairness and justice, replicating high-quality classroom

resources, making up for excellent teacher resources, improving students' personalized learning needs and other ways, and promote remote schools to share the best courses and best teachers through the Internet Broaden students' access to knowledge shorten the lack of educational resources for differentiated groups, and promote the development of education equity. Although technology is critical, it is not possible for everyone to do it. Information technology also has its limitations in promoting equality in education. Any excessive trust in technology will make people "disappointed". For example, in promoting equality of educational opportunities, information technology has failed to reconstruct a more just "entrance" rule to break the difference in the enjoyment of high-quality education caused by the financial investment of families in different educational periods; From the perspective of improving the fairness of education, there is also a gap between "enjoyment" and "use" among different groups of people; Information technology can improve the equality of teaching process and expand high-quality teaching resources by imitating what more outstanding teachers call "teaching". However, its "education" role, such as caring for children's hearts, moral cultivation, and emotional cultivation, still has certain limitations, and has certain defects in "personal experience" and "interpersonal communication"; In terms of improving the fairness of educational results, information technology alone can not reverse the inequality of educational opportunities, educational processes, educational conditions and other aspects from the root, so as to establish a fair outcome for all. When talking about the relationship between information technology and education equality, we should also be careful not to be confused by Amara's law, that is, overestimate the short-term effects of new technology while ignoring its long-term effects. Looking forward to the future, the value appeal of education equity will change with the changes of time and space, and information technology is also developing. Therefore, the impact of information technology on education equity will have uncertain factors. Therefore, from a long-term and dynamic perspective, the interaction between education and technology is very necessary.

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