Paradigm Academic Press
Research and Advances in Education
ISSN 2788-7057
JUL. 2022 VOL.1 NO.1

The Fairness Dispute of Layered Optimal Teaching

Hong Zhang[1]

[1] East China Normal University, Department of Education, Zhongshan Road, 3663 N. Shanghai, China

Correspondence: Hong Zhang, East China Normal University, Department of Education, Zhongshan Road, 3663 N. Shanghai, China.

doi: 10.56397/RAE.2022.07.04

Abstract

As a controversial form of teaching organization, the fairness of layered optimal teaching has been questioned and defended in educational practice and theoretical research. The question of layered optimal teaching is mainly based on formal justice, criticizing the uneven distribution of resources caused by unequal opportunities; The defense of layered optimal teaching starts from the discrimination of the concepts of fairness and equality, and believes that fairness means "difference" and "compensation" on the premise of ensuring the basic right to education. In this article, it is demonstrated that education, as a unique field, has its own distribution principle, and the fairness of layered optimal teaching should be considered from the perspective of "complex equality". Furthermore, based on the principles of "demand" and "due", it is proposed that layered optimal teaching can promote the realization of educational fairness in the process of practice from three aspects: strengthening guidance, clarifying needs, scientific evaluation, reasonable stratification, dynamic management, and appropriate compensation.

Keywords: layered optimal teaching, fairness, complex equality

1. Introduction

Since Comenius put forward the teaching organization form of "class teaching system" in the middle of the 17th century, class teaching system has been favored by primary and secondary schools all over the world because of its high efficiency and low cost. However, with the development of society, the differences of individual social environment, family background, educational resources and other factors are gradually increasing. The huge personalized differences of students in the same class have greatly reduced the teaching effect under the form of class teaching system, resulting in problems such as "students with learning difficulties" can't keep up, "students with learning excellence" can't eat enough, and teachers' teaching is difficult to carry out effectively (Y. Ou, 2008). In view of the teaching resistance caused by the "one size fits all" class teaching, the outline of the national medium and long-term education reform and development plan (2010-2020) clearly points in China out that, "Pay attention to teaching students in accordance with their aptitude, pay attention to the different characteristics and personality differences of students, develop the advantages and potential of each student, and promote the reform of teaching management system such as hierarchical teaching and shift system" (State Council of the PRC, 2010). So far, layered optimal teaching, an old teaching organization form, has once again entered people's vision.

In China, the idea of layered optimal teaching can be traced back to Confucius' period. Confucius first put forward the teaching concept of "teaching students according to their aptitude", which pointed out that "above middle school, you can speak; below middle school, you can't speak". He advocated giving differentiated guidance based on students' talent characteristics. If we say that teaching students according to their aptitude in the Confucius period was put forward on the basis of individualized teaching, then the "activity group system" created by American educator Harris in St. Louis in 1868 is a typical layered optimal teaching under the

background of today's class teaching system. So far, there have been many layered models in the development of layered optimal teaching, such as teaching stratification, homework stratification, evaluation stratification, guidance stratification, etc. (Y. Huang, T. Hou, & J. Zhang, 2018). Although scholars have not reached a consensus on the definition of hierarchical teaching at present, the concept of "teaching students according to their aptitude" is indeed the basis. On this basis, Professor Gu in China proposed that "layered optimal teaching is a teaching organization mode in which teachers fully consider the objective differences of students, treat teaching design and Implementation differently, strengthen the separate guidance of different types of students, and make each student get the best development" (M. Gu, 1990).

Such a teaching mode of teaching students in accordance with their aptitude seems understandable, but the fact is not the case. Layered optimal teaching has encountered many difficulties and attacks in practice, among which the most controversial is the "fairness" of layered optimal teaching. Educational fairness is an important social fairness, which has a fundamental position in the whole social fairness system. Therefore, the organizational form of layered optimal teaching should be tested by educational fairness. The current academic attitude towards the fairness of hierarchical teaching can be roughly divided into two categories. One is that layered optimal teaching violates educational fairness and causes many educational problems; One is that layered optimal teaching promotes educational fairness, which reflects the essence of educational fairness. So where and to what extent do the two views hold? Is the layered optimal teaching based on teaching students according to their aptitude advocated by the state worth defending? The following will explore the justiciability of the fairness of layered optimal teaching through the elaboration of the current two views on layered optimal teaching.

2. Layered Optimal Teaching Damages the Formal Fairness of Education

The criticism of layered optimal teaching is mostly based on the perspective of equal opportunities to explore the unfair problems caused by the uneven distribution of resources. Among them, Professor Sato Manabu pointed out that layered optimal teaching, as a differentiated education, plays a role of exclusion and difference. Through the empirical research on the effect of layered optimal teaching by jeannic Oakes of the University of California, it is proved that layered optimal teaching does not improve the performance of any group, and also poses a threat to "inferior" students. For example, it is not conducive to the development of "inferior" students. Teachers usually hold a certain prejudice against "inferior" students, thinking that "inferior" students are only suitable for learning "inferior" level content knowledge. What is more fatal is that the implementation of layered optimal teaching has exacerbated the gap in students' learning ability, which is not caused by the gap in students' "ability", but by the differences in the teaching content of each group of students after stratification (M. Sato, Q. Zhong, 2010).

Peng followed the concept of "upper, middle and lower" to discuss the teaching organization form of hierarchical class walking in senior high school, and pointed out that "hierarchical class walking teaching will further widen the gap of College Students' learning ability, the difference of College Students' learning goals, the difference of master capital strength and other unfair situations" (X. Peng, 2020). This is because layered optimal teaching classifies students according to the development level of their intelligence and other qualities and abilities, which is bound to make the teaching content different to adapt to the different learning progress of students. Because the upper students have a good grasp of basic knowledge, teachers will enrich the teaching content, increase the difficulty and depth of the teaching content, and increase the training of students' thinking ability and migration ability in the teaching process. Because of the challenge of mastering basic knowledge, the middle or lower level students will weaken higher-level training in learning, and in the long run, the differences in students' learning ability will be expanded; In addition, students' learning goals are affected by many factors. In addition to students' own personality, intelligence, and way of thinking, they are also related to teachers' attitude towards students, students' own learning results, personal interests, and students' internal and external driving forces. The so-called "those who are close to each other are red, and those who are close to each other are black". Peer groups have a huge impact on students' development, and the grouping of people in layered optimal teaching is bound to bring "Matthew effect", This has also been confirmed in Zhu research. Through interviews with parents of students in stratified teaching classes, Zhu Yue revealed that children studying in class B may have less and less requirements for themselves because they "have no role models around them" (Y Zhu, 2020). Moreover, layered optimal teaching also puts forward requirements for teachers. The ability of teachers in a school is uneven. In the face of "superior" students with good foundation and fast progress, they naturally need teachers with strong ability to teach, and such teacher-student allocation virtually increases the difference and widens inequality.

In addition to the inequality discussed above, Jiang also pointed out the shortcomings of layered optimal teaching in terms of timing and applicable standards. He believed that the development of each student's advantage and potential requires certain timing and conditions. Premature "stratification" will not only bury talents, but also affect the future development of students; layered optimal teaching is mainly to layer students

from the cognitive level, but in fact, there are many factors that affect the learning effect. In addition to the above factors, there are also many factors such as emotion, attitude, habits, knowledge preparation and so on. The differences in these aspects are difficult to explain with layered optimal teaching. Layered optimal teaching only takes care of students' differences from the perspective of teaching methods and strategies, while "differentiated teaching" believes that it is not enough to solve the problem of taking care of students' differences only from the perspective of teaching methods and strategies (Z. Jiang, G. Hua, 2004).

To sum up, the current criticism of layered optimal teaching against educational fairness is mainly focused on the practical level of layered teaching. Although scholars agree with the recognition of students' individual differences and the consideration of layered optimal teaching for teaching students according to their aptitude, scholars believe that teaching students according to their aptitude should not be achieved through layered optimal teaching, because as a form of teaching organization, layered optimal teaching first violates formal justice. At the same time, the unequal distribution of educational resources makes students with more resources get better development. Whether it is learning ability, personal will or habits forms a larger gap with vulnerable students, resulting in the lack of substantive justice. Therefore, layered optimal teaching will only lead to a growing gap between good and bad, and the beneficiaries of learning only exist in a few people, which is unfair to most people.

3. Layered Optimal Teaching Ensures Substantial Fairness

Scholars' defense of layered optimal teaching promoting educational fairness begins with the discrimination of the concepts of fairness and equality. As mentioned above, the criticism of layered optimal teaching against educational fairness is mostly based on equal opportunities, and believes that layered optimal teaching does not achieve the formal equality of equal distribution of educational resources. However, is equality and fairness the same thing? Is it necessary to ensure educational equality to maintain educational fairness? Zhang believes that "equality" represents "no difference", emphasizing the objective fact that difference is inequality, and no difference is equality. While "fairness" means "without bias", "without prejudice", "fair and reasonable" rather than "no difference", so "fairness" emphasizes reasonable differences (A. Zhang, 2003). Ou further pointed out that fairness is often misunderstood as an equality in the form of education, which requires ensuring equality in the allocation of resources and the process of education. However, this equality actually ignores the huge differences among people in society. The same education for all people may instead deprive the choice opportunities of educatees with different backgrounds, families and abilities, forming substantive inequality. Therefore, educational fairness is to achieve substantive equality, which is based on the recognition of individual differences. It emphasizes that fair education should provide each educatee with education suitable for him, that is, education should provide conditions to enable each educatee to do his best (Y. Ou, 2008).

Zhang and Ou both demonstrated the meaning of educational fairness from the perspective of differences, while Huang and others demonstrated the meaning of educational fairness from the content and terms of policies and regulations formulated at the national level by reviewing the school reform history of 70 years since the founding of new China. It pointed out that education fairness "should not only reflect the balanced fairness of equal treatment, but also reflect the differentiated fairness of teaching students according to their aptitude and the value pursuit of preferential treatment for special groups" (Z. Huang, X. Sun, 2019). Similarly, Chu believes that educational fairness includes three reasonable principles of educational resource allocation, namely, the principle of equality, the principle of difference and the principle of compensation. The principle of equality, that is, every student enjoys equal educational opportunities and rights. The principle of difference is to allocate differentiated educational resources according to the different learning needs of different students. And the principle of compensation is to give certain and appropriate educational resources to vulnerable groups in education. Balanced class arrangement embodies the principle of equality, while layered optimal teaching mainly embodies the principle of difference and compensation (H. Chu, 2006). It can be seen that Huang, Chu and others supplemented the compensation principle of educational fairness on the basis of the principle of difference, and compensated the weak on the premise of recognizing the difference, which is a vivid interpretation of Rawls' principle of justice.

Jumping out of the debate on the equitable distribution of resources, Huang proposed that layered optimal teaching has its biological basis in promoting educational fairness from the perspective of individual differences and recent development areas. Individual differences require that "since differences are inherent to everyone, individual differences among students should be regarded as an integral element of teaching, and teachers should not regard student differences as negative factors and teaching burdens that must be overcome" (Z. Jiang, G. Hua, 2004). However, the recent development zone proposed "Every student has two levels of development, one is the current level, and the other is the problem-solving level with the help of adults. Teaching can promote the development of students only by starting from the difference between these two levels, transforming the nearest Development Zone into the current development level, and constantly creating a higher level of the nearest

development zone" (C. Li, J. Yu, D. Chen, 2019). Therefore, layered optimal teaching not only respects students' personality differences, gives full play to students' autonomy, and is conducive to students' rapid development. At the same time, it is consistent with the theory of "zone of proximal development". Through reasonable teaching, students can achieve the effect of "jumping and picking peaches", which promotes students' growth (Y. Huang, T. Hou, & J. Zhang, 2018). In this way, based on the objective law of individual differences and development level, layered optimal teaching realizes the optimal development of "excellent students" and "poor students", and also has a certain fairness to the teaching teachers, avoiding the dissatisfaction of the students and their parents at the two levels of "excellent students" and "poor students" in the natural division of classes when evaluating teachers. This dissatisfaction is largely not caused by teachers themselves, so it is also unfair to teachers (G. Li, L. Ning, 2003).

From the above points of view, it can be seen that scholars who support layered optimal teaching mostly start from the principle of difference, and believe that educational fairness is not equal to educational equality. To achieve educational fairness, we should dare to recognize differences, dare to teach according to differences, dare to teach differences, and cannot be neat and uniform according to a standard (M. Gu, 2007). Of course, the differences here are objective differences. In the process of stratification, it is necessary for schools to ensure the scientificity and effectiveness of stratification standards, and at the same time, they should also pay attention to giving certain help and compensation to vulnerable students, so that layered optimal teaching can solve the problems of educational resource allocation efficiency, student resource differences and students' personalized needs to a certain extent (Q. Zhao, L. Ma, Y. Fan, D. Zhao, A. Qian, 2020).

4. Complex Equality: The Answer to the Fairness Dispute of Layered Optimal Teaching

For the discussion of the dimension of stratified teaching fairness, the above research mainly focuses on Rawls' monistic distributivism. The identification of whether stratified teaching is fair starts from the concept of "social basic good". This theory of distributing all kinds of social benefits under the same principle in order to achieve equality under a single principle was named "simple equality" by Walzer. Walzer opposed this kind of deduction or application of the distribution principle in the field of education as a general theory of justice. He proposed that "education is a good thing with unique social significance, with the distribution principle contained in its own purpose, so as to form an independent field of justice" (L. Cheng, 2015). Based on the criticism of "simple equality", Walzer proposed "complex equality", "complex equality" believes that "the principle of justice itself is plural in form; different social goodness should be distributed through different institutions based on different reasons, according to different procedures; and all these differences come from different understandings of social goodness itself-the inevitable product of historical and cultural particularism (M. Walzer, 2009). Walzer calls the equality under the guidance of this principle of plural distribution complex equality. It also puts forward that complex equality needs to follow the distribution standard of "no social good X can be distributed in this way: the person who has social good Y cannot occupy x just because he has y regardless of the social significance of X", and adhere to the three principles of "free exchange, deserve and need".

Applying "complex equality" to school education is the school process, which is a complex and diverse field of justice containing the distribution of various good things(L. Cheng, 2015). layered optimal teaching, as an integral part of the school process, its complex equality can be expressed as: in the justice field of layered teaching, many good things are involved, such as curriculum resources, classroom teaching, teacher resources, the way teachers treat students, school facilities and equipment or rewards. The distribution of these good things can not be generalized, let alone mutual domination and arrogation. They should be distributed according to the social significance behind the good things. For example, teachers can give relevant rewards to students in the discipline according to their excellent performance in mathematics, but they cannot give rewards to students in other subjects or other school resources such as class cadre positions. At the same time, distribution should also take into account the principle of need and due. "Need" means that schools should first meet the basic needs of students in the distribution of good things. In the stage of compulsory education, they may be qualified citizens or independent nationals, or they may pass the academic level examination. "Deserved" requires schools to provide different resources or opportunities based on the diversity and diversity of students (L. Cheng, 2015). In other words, complex equality does not believe that the unequal distribution of resources based on differences violates fairness, but recognizes that "an individual can exclusively occupy all the good in this field by virtue of his own strength, as long as he / she does not occupy the good in other fields by virtue of the advantages accumulated in this field" (S. Zhang, 2017).

4.1 Strengthen Guidance and Clarify Needs

Clear demand is the premise of effective stratified teaching, so the definition of demand before stratification is particularly important. The compulsory education law and the right to education guarantee the right of every student to enter the school for education in China. The school's teaching plan aims to help every student achieve comprehensive development. However, due to the uniqueness of students, there are many differences in demand,

such as some students have good math scores and difficult English learning, some students have excellent cultural class scores but backward sports ranking, and some students are good at reasoning, fascinated by the high-level thinking training of mathematical and chemical courses, while some students are keen on poetry, and obsessed with liberal arts courses. All these needs are the important basis for teachers' layered optimal teaching. Therefore, layered optimal teaching needs to be based on respecting students' needs, and the right of choice should be handed over to students, so that they can make "layered" choices independently and reasonably. At the same time, for students who are not clear about their own needs, or who are afraid that they will be laughed at by others because of choosing a "poor" level, teachers should give proper play to their guiding role, fully communicate and communicate with students, get rid of their inner concerns, and help students choose the level most suitable for their development based on the principle of "autonomy and voluntariness".

4.2 Scientific Evaluation and Reasonable Stratification

The standard of stratification and how to carry out it are directly related to whether students' needs can be met and whether the educational fairness embodying the principle of "due" can be realized. So, what kind of stratification can make students get what they deserve, learn what they want to learn? In the evaluation mechanism of stratification, the current research has carried out many explorations. The most common is to divide students into ABC or upper, middle and lower levels according to their grades. Although this stratification standard has been attacked and criticized by many, this stratification standard is the most widely used in educational practice. In view of the crudeness and drawbacks of performance stratification, hierarchical models such as interest stratification, ability stratification and quality stratification have also emerged in educational practice. The author believes that the stratification standard cannot evaluate its merits and demerits in a one size fits all way, but should be considered from the stratification effect in combination with the concrete. For example, for compulsory courses, the hierarchical standard that takes into account both ability and achievement is more operational, which is not only convenient for teachers to teach, but also convenient for students to learn, so that students of different degrees can get the teaching they deserve within their ability. For art or elective courses, layering according to interests and specialties can better stimulate students' learning enthusiasm, mutual infection and common progress. Of course, in the process of stratification, it is not necessary to carry out stratification according to the grade. It can be layered according to the characteristics of different disciplines and based on different focuses, which can enable students to receive more specific training and avoid the grade pressure of "excellent students" and "students with learning difficulties" to a certain extent.

4.3 Scientific Evaluation and Reasonable Stratification

Dynamic management and appropriate compensation. Every student is an individual who is constantly developing and changing, and has a strong dynamic and plasticity. Therefore, layered optimal teaching must not be done once and for all, but adopt a dynamic management mechanism to maintain the flexibility of adjustment. The school should establish a process evaluation mechanism for students' learning, monitor and evaluate the students' learning status every week and month, and establish a growth portfolio for each student. At the end of the semester, it can be stratified again according to the students' performance in a semester and the results obtained in the test, so that each student can be improved on the original basis and obtain the education most suitable for their development. At the same time, schools can also use online resources to break the restrictions of space and time through technological changes, and carry out certain compensation teaching for students who are relatively backward or in a weak position in hierarchical teaching, so as to promote the healthy development of students.

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