

Confucius' New Teaching Idea "Sharing Teachers' Errors" and New Development for Chinese Pedagogy*

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Learning from errors is a very fundamental way of learning. Many a teacher in schools, and even colleges and universities mostly concentrates on encouraging students to learn from their own errors, but not so much from their teachers'. Confucius' educational thought observed through the scientific method of trial and error demonstrates the new teaching idea, sharing teachers' errors with students, which is expressed implicitly in *The Analects* more than 2,500 years ago. The new teaching idea "sharing teachers' errors" systematically we find in Confucius' thoughts can provide a new problem domain for Chinese pedagogy, which will lead to the change of understanding teacher concept, moral education, democratic education, teaching evaluation system, etc., and invite further research.

Keywords: Confucius, sharing error, trial and error, Chinese pedagogy

Introduction

Learning from errors is the most fundamental way for human progress. Students can learn from their own errors, but can they learn from teachers'? The answer is definitely positive. However, such a simple logic has in fact not been widely practiced in teaching. Teachers usually focus on students' errors and especially in elementary and secondary schools, attach great importance to the value of errors even without theoretical guidance, and encourage them to learn from their own errors and tolerate their trial and error (Santagata, 2005). For most educationalists, they have concentrated on students' errors rather than teachers'. The Roman educators Marcus Fabius Quintilian us regarded that if teachers were too severe to students' faults, they would be discouraged and at last hated their work and fear everything (Quintilian, 1985, p. 229). When teachers helped students to realize their own errors, he proposed that students feel happy (Quintilian, 1985, p. 271). But Quintilian us has not recognized educational significance of teachers' errors to students. The philosopher Bertrand Russell thought that classical education was almost entirely critical, and students learned to avoid errors and despise those who committed them (Russell, 1926, p. 113), which implicitly advocated respect for students' right to trial and error or right to be wrong (Zhou, 2018, 2019; Zhou, Tan, & Liu, 2020).

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Since modern times, Chinese education circles have mainly studied the ideas of western thinkers, such as Herbart (1893) as a representative of teacher-centered theory, John Dewey (1937) as a representative of child-centered theory, J. J. Rousseau (1979), Carl Rogers (1980), and so on, but most of them have not emphasized the educational significance of teachers' errors to students. Jaspers has also asked young persons to observe the world with their own eyes and angles, and then acquire the scientific mode of thought as an element of reason (Horn, 1993). From his opinion, Jaspers also respects young persons' right to trial and error implicitly. Carl Rogers (1980, p. 295) described the characteristics of traditional teaching: (1) A teacher is the owner of knowledge; (2) A student is the container; (3) Lectures are the main means of instilling knowledge into the container; and (4) The teacher has power and the student is obedient, which outlines a teacher-centered, indoctrinated, or instructional teaching feature.

Rogers (1980) recalled in his later years that he would like to create an atmosphere with students and facilitate a self-guided learning process and decided to try at the University of Chicago, which is called "non-directive teaching" (p. 300). Whether teachers share their own rational errors with students in the same context of non-directive teaching or not, the atmosphere in class is totally different. Similarly, in the context of teacher-centered or child-centered theory, there also exist enormous differences whether students can learn from teachers' errors or not.

Literature Review

There are many cases in which teachers' attitudes towards students' errors reflect different cultures (Broadfoot, 1992). English teachers usually do their utmost to protect students' self-esteem and avoid negative influence on them (Osborn & Planel, 1999, pp. 261-293; Santagata, 2005), but it was popular in England for children to be discouraged from commenting on each other's mistakes (Osborn & Broadfoot, 1992). French teachers have been observed to react directly to students' wrong answers, sometimes even yelling at them (Osborn & Planel, 1999, pp. 261-293; Santagata, 2005), but another case has shown that in France students sometimes can obtain teachers' encouragement (Osborn & Broadfoot, 1992). For Japanese teachers, they regard errors as having a positive function, and encourage their students to discuss them (Santagata, 2005), which is similar to the Chinese teaching practices. In mathematics classes, Chinese and American teachers treat students' mistakes very differently. U.S. teachers were more likely to follow errors with statements or immediate corrections, whereas Chinese teachers asked follow-up questions to prompt students' discussion (Schleppenbach, Flevaris, Sims, & Perry, 2007). As a mathematical educator, Wendy S. Bray (2013) would like to analyze students' mistakes and publicly discuss solutions. Students' attitude towards their own mistakes is deeply influenced by teachers' attitude towards them (Tulis, 2013). In the field of foreign language learning, error analysis of the students is a teaching method (Corder, 1967; 1975) and has obtained the support from the research lab, which few teaching theories have responded to (Peters & Shephard, 2018, p. 115).

For the study of sharing errors, the literature mainly focuses on the discussion among colleagues. There is a special report called "Faculty Focus" about teaching mistakes from the college classroom by the editor Mary Bart who called for some teachers to share their teaching mistakes with colleagues. This report includes 15 authors' sharing teaching mistakes in order to help young teachers reduce their mistakes during their early teaching career (Bart, 2010). As a retiring man, David Shallenberger (2015) hoped his lessons can provide some experience to other teachers about what can go wrong and suggest how to avoid their errors in the future.

In the field of medicine, the errors caused by doctors usually directly hurt the patient's body, so most of them are afraid of taking responsibility, and tend to conceal their medical accidents. However, few doctors out of conscience recognized that sharing their own errors with their peers, especially those who are not qualified, could help reduce medical accidents. Thomas A. Oetting, director of the University of Iowa's Ophthalmology Internship Program, regarded that sharing their own errors had been with colleagues throughout their career, and multimedia websites had really helped them spread that tradition (Mott, 2016). Janice Law, ophthalmologist at Vanderbilt University, emphasized that if they did not share their collective experience, new colleagues would continue to repeat their errors. She also links the ideas of sharing errors with lifelong learning (Mott, 2016). Stephanie (2016) thought that they could learn from errors, so that they could prevent the same errors from recurring. Starbuck (2009) held that an organization was not good at learning from their own errors, resulting in poor execution. Homsma, Dyck, Gilder, Koppman, and Elfring (2009) emphasized that employees were reluctant to share errors, because they wanted to escape potential blame. According to Tseng and Kuo (2010), errors happen when employees feel there is not enough tolerance for errors in their organization.

Some teaching cases have shown that not a few teachers would like to share their own errors with students. Stalder (2001) had described a simple game in which students are rewarded for catching a certain number of mistakes made by their teacher in a semester, which contribute to cultivating students' critical thinking and creating an atmosphere of equality between a teacher and students. But there still exists a pity, because he has not directly analyzed his own errors which are made during his lesson preparation and students will never know if teachers do not tell those to his students. The latter situation may be more difficult for teachers, and more important for students. Julie A. Oseid and Stephen D. Easton (2013) of the University of St. Thomas, School of Law have used the concept of sharing errors to train future lawyers. Debra Schwiertert (2010) realized the value of teachers' errors to students. He recalled the errors he had made in the research databases when he pursued his doctorate. He hoped that his errors could inspire his students to learn something and encouraged them to excel in their practice (p. 12). Concerning the authority of teachers, most of them have been worrying that sharing their own errors will have a bad impact on their images, but Pabon applauds that we should make a culture norm of sharing errors, and wants to break down some barriers to make us not view the errors in a hostile way (Stephens, 2016). Spalding (2014) suggested that during the story telling period, a teacher actively share their own errors with students, so the story always impress them (p. 69). In Chinese classrooms, teachers have tried to expose students' errors and through the comparison between the right and the wrong, students can grasp knowledge more firmly and improve their academic performance (Jin & Chen, 2003). Some teachers made "deliberate errors" in the teaching process to arouse students' positive thinking (Fu, 1997). When we wish teachers in elementary and secondary schools to share their own errors with their students, most of them would hesitate, then suggest that maybe college teachers do that, and vice versa.

The First New Curriculum Reform in the 21st century launched in 2001 in China (Zhong, 2005), and its basic educational theories are constructivism (Piaget, 1971) and multiple intelligences by H. Gardner (1983), but the background is that teachers would not like to share their own errors with students. As a result, many teachers' teaching practices of trial and error have not been recorded, which might have deviated from the goals of New Curriculum Reform and could provide useful resources for the next educational reform. So, the teachers' errors on the inspiration of students have become a "blind area" in western, especially Chinese educational

theories. Let us suppose that, if teachers do not cover up, do not escape, sincerely share their own errors with the students, and analyze them bravely, what impact will such a teaching idea have on students' daily learning, physical and mental development, as well as their emotions? At present, the research on this aspect is seriously lacking in the teaching practice of elementary and secondary schools and colleges in China, which is a "new continent" of education that needs to be explored urgently.

Why do teachers in elementary and secondary schools, as well as university teachers, especially those in the front line of scientific research, lack the identity of sharing their own errors? Lesson preparation is the premise of a good class, but why could the errors shown during it not be regarded as a precious teaching resource by teachers and educational thinkers (Deng, 2011)? According to the random sampling of 810 college students in Zhejiang Normal University of China, 7.7% of the students regard that their teachers have shared their own errors with students but are not systematic; 56.8% of them remember that teachers seldom do that; and 35.5% of the students are convinced that teachers have not shared them (Zhou, 2017, pp. 152-172). On the other hand, Confucius is one of the most famous educationalists in China in the past 2,500 years, and does he have such a kind spirit, sharing his own errors with his pupils? His educational thought is mainly embodied in three aspects of "heuristic education which requires the teacher to be good at stimulating students' imagination and potential ability using good metaphor; teaching students in accordance with their aptitude; and teacher's self-improvement by means of learning from his pupils", but sharing teachers' errors with students has not been concluded as an important teaching idea. Therefore, we would like to explore whether there is "sharing teachers' errors" in Confucius' educational ideas, and then reflect the possibilities of new development of Chinese pedagogy.

Confucius' Teaching Idea: Sharing His Own Errors With His Pupils

Confucius (B.C. 551-479) is one of the greatest ideologists and educationalists in China's history, who was the pioneer creating the biggest private school of his time. Before that, knowledge had been controlled or dominated by the aristocrat. During his era, the trend started to change, and children from poor families began to have the opportunity of learning knowledge. In his instruction, there is no separation into categories (Lau, 1979, p. 137), which means that everyone, regardless of the noble or the humble, can be educated. He devoted his life to education, except for the time he acted as an official. Based on his practice of operating the private school, Confucius accumulated abundant teaching experience and constructed his philosophy, which was recorded in *The Analects* by his pupils. He was the first person in China who expounds the proposition that a teacher is a learner. He said, "Even when walking in the company of two other men, I am bound to be able to learn from them" (Lau, 1979, p. 88). And he does not like to be regarded as a Saint, "How dare I claim to be a sage or a benevolent man" (Lau, 1979, p. 90)? But he would be very happy if being called him a person eager to learn, because he realized that everyone has the good quality to learn well. He said, "In a hamlet of ten households, there are bound to be those who are my equal in doing their best for others and in being trustworthy in what they say, but they are unlikely to be as eager to learn as I am" (Lau, 1979, p. 80).

So, what is the character of a person eager to learn? Firstly, he should be good at learning from others' virtues. Confucius said, "The good points of the one I copy; the bad points of the other I correct in myself" (Lau, 1979, p. 88). Secondly, he should be eager to ask questions and explore new problems. Especially, he should not feel ashamed to seek advice of those who were beneath him in social status (Lau, 1979, p. 78). Thirdly, he should keep on learning throughout his life, that is, long-life learning. Confucius evaluated himself,

"He is the sort of man who forgets to eat when he tries to solve a problem that has kept him from distraction, who is so full of joy that he forgets his worries and who does not notice the onset of old ages" (Lau, 1979, p. 88). And the last but most important character of such a person is that he never feels too old to learn, and he knows errors accompany everyone's life. By the way, the trial-and-error characteristics of learning have been ignored for a long time in China.

In teaching methods, Confucius' contribution can be summarized at least in three aspects. The first method is heuristic instruction, which requires the teacher to be good at stimulating students' imagination and potential ability using good metaphor. The pupil Yuan Yen had a deep impression by teacher's good metaphor, "The Master is good at leading one on step by step. He broadens me with culture and brings me back to essentials by means of the rites. I cannot give up even if I wanted to, but, having done all I can, it seems to rise sheer above me and I have no way of going after it, however much I may want to" (Lau, 1979, p. 97).

The second is about teaching students in accordance with their aptitude. As for how to identify their different aptitudes there have not been much detailed studies in China. In our point of view, the answer is to identify a person's aptitude or abilities mainly according to his character of making errors, in addition to finding correct answers. The master said, "In his errors a man is true to type." In some special situation, different people commit different errors to the same problem. The teacher could analyze the pupils' errors, and know their character, "Observe the errors and you will know the man" (Lau, 1979, p. 73). How can we separate different abilities of different people? The method of Confucius is to differentiate the person's abilities according to his character of making errors.

The third is about teacher's self-improvement by means of learning from his pupils. It is easy to say that teachers should learn from their pupils, but in actual teaching practice, it is very difficult. Learning from pupils demonstrated Confucian classical idea of democracy, which means that a teacher cannot use his authority to refuse or depress pupils' presentation of good ideas. Naturally, the teacher should listen to pupils' thinking if he wanted to make progress. Modest Confucius often obtains enlightenment from pupils. For instance, he confessed Tzu-hsia's help, "It is you, Shang, who have thrown light on the text for me. Only with a man like you can one discuss *The Poem*" (Lau, 1979, p. 68). Here, we should notice that Confucius were 44 years older than his pupil Tzu-hsia.

Indeed, three teaching methods above are widely known to educators in China, but Chinese scholars seldom studies Confucius' educational idea from the perspective of trial and error, and they have not evaluated different aptitude of a person according to the characteristic of pupils' making errors, so Confucius' new teaching idea "sharing teachers' errors with students" has been neglected in the past more than 2,500 years. As we know, "Human ideas (including the concept of rights) are conceived by trial-and-error practices, and improved through subsequent trial-and-error practices" (Zhou, Tan, & Liu, 2020), to which Confucius was no exception. Moreover, when we study his ideas, we have to face with one situation. The passage in *The Analects* is so short that many ideas expressed are not complete and comprehensive, and some ideas obtained from *The Analects* could not be fully understood. The following showed Confucius' idea of sharing teachers' errors in different circumstances. Here, teachers' errors are confined to the public domain, not to the private.

If a Teacher Does not Tell His Students His Errors, Few of the Students Will Know Them. Then, How is the Teacher to Deal With His Errors Which Could Enlighten Students?

Confucius did not say explicitly that we learn from our errors, but he did suggest trying a certain way to

learn, finding one's own errors through practice, and finally grasping new insight into it. For instance, when Confucius talked about the relation of learning and thinking, he said, "If one learns from others but does not think, one will be bewildered. If, on the other hand, one thinks but does not learn from others, one will be in peril" (Lau, 1979, p. 65). The question is how Confucius can conclude the aphorism. When Confucius educated his pupils, and he presented his ideas directly and explicitly, does not he just look like a Saint? But Confucius said, "I was not born with knowledge" (Lau, 1979, p. 88). He did not shy away from his practice of trial and error, and told his pupils the way that, before he summarized his aphorism, he once spent all day thinking without eating and all night thinking without going to bed, but he found that he gained nothing from it. It would have been better for him to have spent the time in learning (Lau, 1979, p. 136). Based on the trial-and-error practice, Confucius concluded a purely dialectical relationship between thinking and learning, which is regarded as a basic and important aphorism that Chinese teachers often use to criticize or encourage students in their learning. But when we knew about Confucius' "ridiculous" action, we really admired his intelligence that he could learn from his "ridiculous" action, and even made us surprised that he shared his trial-and-error practice with his pupils.

The concision of *The Analects* gives us a large space to imagine, and meanwhile leaves behind a lot of unsolved problems, such as Tseng Tzu said, "Every day I examine myself on three counts. In what I have undertaken on another's behalf, have I failed to do my best? In my dealings with my friends have I failed to be trustworthy in what I say? Have I passed on to others anything that I have not tried out myself" (Lau, 1979, p. 59)? If you have not undertaken on another's behalf, and failed to do your best, what will you do? If you have passed on to others anything that you have not tried out yourself, and even worse, you have found something wrong, but the students did not realize, what would you do? Of course, we could believe that Tseng Tzu would confess his errors, and analyze his errors with his students. But it is regretful that there exist no further records that described students' reaction in *The Analects*.

When a Student Vindicates His Point of View and Demonstrates What the Teacher Said is Wrong in Front of Several Other Students, How is the Teacher to Deal With His Errors?

When Tzu-yu, one of Confucius' pupils, was the head of the city Wu Cheng, Confucius went to visit it with many pupils. In the vicinity of it, there Confucius heard the sound of strange instruments and singing, and broke into a smile and said, "Surely you do not need to use an ox-knife to kill a chicken." What Confucius means is that it is not necessary to administer such a kind of small city using a complicated system. But Tzu-yu answered, "Sometime ago, I heard it from you, Master, that the gentleman instructed in the way loves his fellow men and that the small man instructed in the way is easy to command." The master realized his errors and said to his followers, "My guys, come here, and listen! What Yen says is right." Confucius did not want to cover up his errors and shouted to his pupils to remind them, "My remark a moment ago was only made in jest" (Lau, 1979, p. 143). It is natural that Confucius finds his error and immediately confesses it to his pupils in public, because he has a special spirit of sharing his own errors.

Presently, it is difficult for most teachers to openly confess that they make errors in answering their students' questions in China. If we are not ready to declare our errors in the front of classroom, then the only student who knows our errors will "clever" enough to prevent the other from knowing it. "When I as the author was a teacher in high school from 1993 to 1996, I knew that I was not brave enough to confess my errors. In that circumstance, the first reaction is that I would try to hide my error. Now, I hope I can overcome my

shortcomings, and realize that sharing my errors with students is more important than my authority."

When a Person Points out the Teacher' Error Difficult to Identify and Correct, How is the Teacher to Deal With it?

In Confucius' times, it was regarded as a basic moral law that men and women originating from the same clan were not allowed to marry. But Duke Chao broke it. So, Ch'en Ssu-pai asked Confucius whether Duke Chao was versed in the rites. Confucius said, "Yes." After Confucius went away, Ch'en Ssu-pai, bowing to Wu-ma Ch'i as Confucius' pupil who was 33 years younger than Confucius, invited him forward and said, "I have heard that the gentleman does not show partiality. Does he show it nevertheless? The Lord took as wife a daughter of Wu, who thus is of the same clan as himself, but he allows her to be called Wu Meng Tzu. If the Lord is versed in the rites, who isn't?" When Wu-ma Ch'i recounted this to Confucius, he had no any excuse to justify himself, and said, "I am a fortunate man. Whenever I make an error, other people are sure to notice it" (Lau, 1979, p. 90). Actually, Confucius had lots of choices to exculpate himself or keep silent, but he chose to confess his errors bravely in front of his pupil. He would not like to become a small man, because "when the small man makes an error, he is sure to gloss over it" (Lau, 1979, p. 154). However, scholars have noticed that in the book of *Spring and Autumn Annals* compiled by Confucius, he would like to cover up errors of the Kings, the relatives and the talented. So, he had the spirit of sharing his own errors with others, but he was unwilling to mention others' errors in public. A true Confucian scholar emphasizes the self-reflection instead of blaming others.

In summary, there are mainly two occasions that Confucius shared his errors: The first was when students did not know them; and the second was when he found his errors with the help of students, he realized that the error was important and let more of students know it. In the third, Confucius did not taken action like the second situation, but considering the third kind of errors so serious, Confucius did not take any measures to gloss them over, and just let his pupil record his error without any intervention. So, we can regard that Confucius and his student have completed the idea of sharing teacher's error. Therefore, we can conclude that like everyone else, Confucius' all kinds of wise sayings are obtained through trial-and-error practices, and he is also extraordinary because he has the spirit of sharing his errors. Tzu-kung said, "The gentleman's errors are like an eclipse of the sun and moon in that when he errs the whole world sees him doing so and when he reforms the whole world looks up to him" (Lau, 1979, p. 155). Why can the whole world see the gentleman's errors? Because he has the spirit of sharing his own errors, otherwise many of them would not have been known by everyone. So, Confucius' spirit of sharing his own errors has set up a new evaluation standard for good teachers, who practise it in class and have become a Chinese gentleman like Confucius.

Sharing Teachers' Errors in Class Provides a New Problem Domain for Educational Research, Especially for Chinese Scholars

The spirit of sharing teachers' errors or self-criticism in front of the students has been embodied in Confucius' educational thoughts. However, in the following more than 2,500 years after him, most of Chinese educational scholars have not summarized it, let alone put it into practice systematically. In addition, Chinese educational practices are deeply influenced by western educational theories. But since Comenius published the teaching theory of *Great Didactic* (Comenius, 1896), their educational theories have seldom paid attention to its significance in the teaching practice. Although Rousseau (1953) wrote the book of *The Confessions*, the

spirit of his repentance was not integrated into his educational thoughts. Finally, the whole history of education has witnessed that modern educational theories have not yet involved it. But for the development of any subject, new problems need to be raised from new perspectives. Albert Einstein linked the raising of new problems with the advancement of scientific knowledge, "The formulation of a problem is often more essential than its solution, which may be merely a matter of mathematical or experimental skill. To raise new questions, new possibilities, to regard old problems from a new angle, require creative imagination and marks real advance in science" (Einstein & Infeld, 1938, p. 95). Confucius' new teaching idea of "sharing teachers' errors or self-criticism in front of the students" can raise a series of new problems in many research fields of education, especially for Chinese pedagogy.

As far as heuristic education is concerned, how does it come into being? "Human ideas are conceived by trial-and-error practices and improved through subsequent trial-and-error practices" (Zhou, Tan, & Liu, 2020). Heuristic education guided by teachers is also a process of trial and error, which may not be successful on every occasion. Can teachers share their own errors with students when they fail to succeed in practicing it? Or can they practice self-criticism in front of the students? Those problems have not become the fields of educational research in China. Therefore, all of China's curriculum reforms since the founding of the People's Republic of China, as well as the research related to teaching activities since the reform and opening-up, are basically performed in the background of non-system, accident or even refusal to "share teachers' errors or self-criticism in front of the students" in elementary and secondary school. Consequently, the core concepts and theories of the pedagogy need to be reconsidered and reconstructed according to Confucius' new educational idea. Such as exam-oriented (Liu & Hu, 2005) and quality education (Research Group, 2006), Herbart (1893) school's teacher-centered theory and Dewey's (1937) student-centered theory, it is possible to derive new problems and find new development space in the context of "sharing teachers' errors or self-criticism in front of the students," which is conducive to the expansion and deepening of the research field. In view of that, the following contents mainly discuss the urgent problems in current education theories and practices from five aspects: teacher concept, teachers' morality and students' emotion, democratic education in class, educational resources, and evaluation system.

Firstly, the biggest challenge is the traditional understanding of the concept of a teacher, which has a wide range of meanings. For instance, the teacher is regarded as the person who imparts knowledge and solves puzzles for students in ancient China (Han, 2019), or he is also compared to candles, gardeners, etc., but his function is seldom discussed from the perspective of sharing errors. We can also define the teacher around "errors," such as the teacher "who makes errors before students and can understand how students made errors." Similarly, it is also necessary to define the concept of authority and experts from them. Educational experts from the United States and Mexico believe that to be wrong is not only a basic characteristics of a teacher as a human being, but also proves that he is the same kind of person as students by showing his errors in front of students¹. So, if "sharing teachers' errors or self-criticism in front of the students" is a part of campus culture, does it make students feel more belonging and identity to the school?

Secondly, teachers' morality has always been the core field of teacher education. The professional ethics

¹ On September 13, 2007, Catherine Emihovich, dean of the College of Education at the University of Florida, led more than 20 teachers from the United States, Canada, Mexico, and Israel to visit Beijing Normal University. On behalf of the School of Education of Beijing Normal University, the author with teachers and other students had a face-to-face academic exchange with the delegation.

of teachers, compared with other professions, is particularly more important, because their job is to cultivate the next generation. Concerning the practice of teacher education and teachers' morality, which may be related to many mental illnesses of students, has not been linked with "sharing teachers' errors or self-criticism in front of the students." The following is a specific case that the author experienced when he was a physics teacher in high school.

Two students discussed a physics problem and had different opinions, so they asked teacher Zhou for help. Teacher Zhou quickly pointed out that Student A was wrong, while Student B was right. Two days later, teacher Zhou met Student A outside the classroom who was very ashamed, and said hello to the teacher embarrassedly, then lowered his head and ran away. Teacher Zhou felt guilty and thought, "Should I tell him that when I was a student in high school, I did not even understand that problem, just like him. I did not fully understand it until I went to college." However, in order to maintain his authority, teacher Zhou hardened his heart, said nothing, and would rather accept the blame of conscience.

It is the fundamental responsibility for teachers to help students overcome their anxieties and make them more confidently in learning. However, in the above case, if teacher Zhou had told Student A the error he made when he was a student, students would have felt more confident. Then, students' inferiority complex, loss of face, injury to the body and other aspects would no longer exist, but teacher Zhou for fear of losing face refused to share his errors or self-criticism in front of the students. Hence, we put forward a moral problem of teachers, "When teachers know that sharing their own errors with students or performing self-criticism in class can help relieve students' learning pressure, anxiety, and even improve their self-confidence, but considering their own authority, they are not willing to share their errors or self-criticism in front of the students. So, are the teachers' behaviors ethical? Should they bear moral condemnation?" It also raises the problem of whether to continue with the original understanding of authority under the background of refusing to "share teachers' errors or self-criticism in front of the students," or to recognize the value of learning from teachers' errors and then re-define the meaning of authority?

Furthermore, how to reduce students' inferiority complex, depression, and weariness of learning, etc. has always been the subject of research of educational scholars. In the past, these common educational phenomena often occurred in this situation that teachers seldom "share their errors to students." Now, the problem is that if teachers take the initiative to share their own errors, what will happen to students' emotions? Is the relationship between teachers and students more tense or improved? What is the impact on students' learning confidence? As far as teachers are concerned, how do traditional teachers accept their new roles? How can education managers promote teachers to accept Confucius' new teaching ideas? That is also a subject worthy of study.

Thirdly, in terms of studying democratic education in class, Rui Xu's doctoral dissertation "Research on the Democratic Quality of High School Students" has studied the understanding of democracy of middle school students (Xu, 2006). Confucius' new teaching idea holds that the atmosphere of democracy in class would be quite different, whether teachers would like to take the initiative to share their errors or self-criticism in front of the students or not. Error-tolerant democracy (Zhou, 2018; 2019) regards that students and teachers has the right to trial and error, so teachers should respect students' right to trial and error, and encourage students to learn from their own errors. Meanwhile, teachers should realize that they have the right to trial and error authorized by students' families or societies, and perform the obligation of sharing their own errors or self-criticism in front of the students, as required by error-tolerant democracy (Zhou, 2018; 2019). Similarly, the connotation of educational equity and justice may also be changed according to Confucius' new teaching

idea.

Fourthly, in the aspect of educational resources, Yinyan Shi's (2005) dissertation of "Research on the Resource of Classroom Learning Errors" and Jihong Lai's (2006) dissertation of "Students' English Errors are also Curriculum Resources" focus on how to resource students' errors. In general, most of the researches on error resources have not yet involved teachers' made in the course of preparing lessons and teaching. Therefore, there is a lack of errors made by teachers in students' learning resources. Ping Deng (2011) has tried to study "On the Function of Teachers' Errors in Curriculum Resources," but most professors in the field of Chinese pedagogy, based on the concept of traditional authority, refuse to accept that. Under the educational guidance of Confucius' new teaching idea, the resources of errors made by administrative personnel in educational management also need to be strengthened.

Fifthly, in terms of the research evaluation system, "sharing teachers' errors or self-criticism in front of the students' requires teachers to present a more comprehensive thinking process to students. But not all teachers' errors are worth sharing, so what teachers should share are their rational errors. For instance, in elementary and secondary schools of China, teachers usually have to participate in various types of teaching evaluation competitions. Confucius' new teaching idea requires a new form of high-quality teaching evaluation that teachers are required to start his class from their own rational errors in the process. At present, this form of evaluation system is a great challenge for Chinese teachers, and almost all teachers will reject it. But we think it is worth studying. The control group can be used for research. A teacher adopts the educational concept of sharing his own errors in one class, while he in another one refuses to share them with students. What changes will happen to students' emotions and classroom learning atmosphere, etc.? The new evaluation system shows respect for teachers' right to trial and error.

Theoretically speaking, both Chinese and western educational theories have lacked the idea of sharing teachers' errors or self-criticism in public systematically. If it is integrated into the current educational theories, they should be rewritten or reconstructed, because traditional key concepts of teacher, authority, education, educational democracy, equality, justice, human rights, etc. in the pedagogy will usher in new development opportunities. Furthermore, Confucius' new teaching idea will cultivate the future leaders who are willing to perform the obligations of self-criticism in public to people, when they excise the right to trial and error in the innovative fields authorized by the people.

References

- Bart, M. (2010, March 5). Teaching mistakes from the college classroom. In *Faculty Focus*. Retrieved from <https://www.facultyfocus.com/free-reports/teaching-mistakes-from-the-college-classroom/>
- Bray, W. S. (2013). How to leverage the potential of mathematical errors. *Teaching Children Mathematics*, 19(7), 424-431.
- Broadfoot, P. (1992). Assessment developments in French education. *Educational Review*, 44(3), 309-326.
- Comenius, J. A. (1896). *The great didactic of John Amos Comenius*. (M. W. Keatinge, Trans.). London: Adam and Charles Black.
- Corder, S. P. (1967). The significance of learner's errors. *International Review of Applied Linguistics in Language Teaching*, 5(4), 161-170.
- Corder, S. P. (1975). Error analysis, inter-language and second language acquisition. *Language Teaching & Linguistics: Abstracts*, 8(4), 201-218.
- Deng, P. (2011). *On the function of teachers' curriculum resources* (Dissertation, Central China Normal University). (in Chinese)
- Dewey, J. (1937). *Democracy and education: An introduction to the philosophy of education* (28th Ed.). New York: The Macmillan Company.
- Einstein, A., & Infeld, L. (1938). *The evolution of physics*. London: Cambridge University Press.
- Fu, B. X. (1997). Intentional errors in Chinese teaching. *Journal of Yindu Academics*, 4, 100-111. (in Chinese)

- Gardner, H. (1983). *Frames of mind: The theory of multiple intelligences*. New York: Basic Books.
- Han, Y. (2019, September 9). On the teacher. (J. G. Luo, Trans.). *Translation teaching and research*. Retrieved from https://mp.weixin.qq.com/s?src=11×tamp=1603009298&ver=2651&signature=MhIPUyNTwnfq1hGZJqnkbqtHtirK5SIfkQs6rQK*kDc2HqlhHi9JSPD5r82DZ*J2X3iVErQ7D7SZ8HLLPx1I4szbdaj1emMjoPQy4bmWYqdtlrBflMoPd6Qx7hIk5ea*&new=1
- Herbart, J. F. (1893). *The science of education its general principles deduced from its aim and the aesthetic revelation of the world*. (E. Felkin & M. Henry, Trans.). Boston: D.C. Heath & Co..
- Homsma, G. J., Dyck, C. Van., Gilder, D. De., Koppman, P. L., & Elfring, T. (2009). Learning from error: the influence of error incident characteristics. *Journal of Business Research*, 62(1), 115-122.
- Horn, H. (1993). Karl Jaspers (1883-1969). *Paris, UNESCO: International Bureau of Education*, 23(3/4), 721-739.
- Jin, X. G., & Chen, J. Y. (2003). Discussion on the application of teaching method of exposing students' errors in chemistry teaching. *Chemistry Teaching*, 3, 16-18. (in Chinese)
- Lai, J. H. (2006). Students' English errors are also curriculum resources (Dissertation, East China Normal University). (in Chinese)
- Lau, D. C. (Trans.). (1979). *Confucius: The analects*. London: Penguin Classics.
- Liu, Z. H., & Hu, Z. P. (2005). On the opposition of "quality education" and "exam-oriented education". *Curriculum Teaching Material and Method*, 25(10), 3-8. (in Chinese)
- Mott, M. (2016, August 17). *How sharing your surgical errors can make you a better ophthalmologist*. Retrieved from <https://www.aaao.org/young-ophthalmologists/yo-info/article/how-sharing-your-surgical-mistakes-can-make-you-be>
- Osborn, M., & Broadfoot, P. (1992). A lesson in progress? Primary classrooms observed in England and France. *Oxford Review of Education*, 18(1), 3-15.
- Osborn, M., & Planel, C. (1999). Comparing children's learning, attitude and performance in French and English primary schools. In R. Alexander, P. Broadfoot and D. Phillips (Eds.), *Learning from comparing: New directions in comparative educational research* (Vol. 1). Wallingford: The United Kingdom: Symposium Books.
- Oseid, J. A., & Easton, S. D. (2013). And bad mistakes? I've made a few: Sharing mistakes to mentor new lawyers. *Albany Law Review*, 77(2), 499-538.
- Peters, S., & Shephard, E. (2018). Learning through mistakes: An important part of the learning and research process. In *Shaping higher education with students: Ways to connect research and teaching* (pp. 115-123). London: UCL Press.
- Piaget, J. (1971). *Psychology and epistemology: Towards a theory of knowledge*. (A. Rosin, Trans.). New York: Grossman.
- Quintilian, M. F. (1985). *The Instituto oratoria of Quintilian*. (H. E. Butler, Trans.). Cambridge, Mass: Harvard University Press.
- Research Group. (2006). Concept, connotation and related theory of quality education. *Educational Research*, 2, 3-10. (in Chinese)
- Rogers, C. R. (1980). *A way of being*. Boston: Houghton Mifflin.
- Rousseau, J. J. (1953). *The confessions*. (J. M. Cohen, Trans.). London: Penguin Books.
- Rousseau, J. J. (1979). *Emile or on education*. (A. Bloom, Trans.). New York: Basic Books.
- Russell, B. (1926). *On education, especially in early childhood*. London: George Allen & Unwin limited.
- Santagata, R. (2005). Practices and beliefs in error-handling activities: A video study of Italian and US mathematics lessons. *Teaching and Teacher education*, 21(5), 491-508.
- Schleppenbach, M., Flevares, L. M., Sims, L., & Perry, M. (2007). Teacher responses to student mistakes in Chinese and U.S. mathematics classrooms. *The Elementary School Journal*, 108(2), 131-147.
- Schwietert, D. (2010). Neglecting to cultivate a research-based teaching practice. In *Faculty Focus*. Retrieved from <https://www.facultyfocus.com/free-reports/teaching-mistakes-from-the-college-classroom/>
- Shallenberger, D. (2015). Learning from our errors: International educators reflect. *Frontiers: The Interdisciplinary Journal of Study Abroad*, 26(1), 248-263.
- Shi, Y. (2005). Research on the resource of classroom learning errors—Take primary school mathematics as an example (Dissertation, Nanjing Normal University). (in Chinese)
- Spalding, D. (2014). *How to teach adults: Plan your class, teach your students, change the world* (Expanded Ed.). San Francisco, CA: Jossey-Bass.
- Stalder, D. R. (2001). Counting teachers' mistakes: A mistake game. *PRIMUS*, 11(3), 281-285.
- Starbuck, W. H. (2009). Unlearning what we knew and rediscovering what we could have known. *Scandinavian Journal of Management*, 25(2), 240-242.

- Stephens, S. (2016). The value of sharing errors: What goes right after things go wrong. *Biomedical Instrumentation & Technology*, 50(3), 194-196.
- Tseng, F. C., & Kuo, F. Y. (2010). The way we share and learn: An exploratory study of the self-regulatory mechanisms in the professional online learning community. *Computers in Human Behaviour*, 26(5), 1043-1053.
- Tulis, M. (2013). Error management behavior in classrooms: Teachers' responses to student mistakes. *Teaching and Teacher Education*, 33, 56-68.
- Xu, R. (2006). Research on the democratic quality of high school students (Doctoral dissertation, Beijing Normal University). (in Chinese)
- Zhong, Q. Q. (2005). Curriculum reform in China: Challenges and reflection. *Comparative Education Review*, 187(12), 18-23. (in Chinese)
- Zhou, Z. F. (2017). *The error-tolerant pedagogy*. Beijing: the People's Publishing House. (In Chinese)
- Zhou, Z. F. (2018). The construction of mistake-tolerant democracy based on the practical right "right to trial and error". *International Relations and Diplomacy*, 6(1), 40-53.
- Zhou, Z. F. (2019). Solving the century problem "modern transformation of China's traditional Confucianism"—A mistake-tolerant democracy perspective. *Philosophy Study*, 9(5), 271-286.
- Zhou, Z. F., Tan, X. H., & Liu, Y. H. (2020). The crisis of global COVID-19 governance and the challenge of liberalism from error-Tolerantism. *Philosophy Study*, 10(9), 544-557.