

Study on Class Management Change and Teacher Orientation under the Vision of Artificial Intelligence

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Abstract: With the rise of artificial intelligence (AI), class management is experiencing unprecedented changes, but it is also facing certain risks and tests. It is of great practical significance to clarify the class management changes and teacher orientation under the vision of AI. Since the application of AI in the field of education, class management has realized the burden reduction and efficiency increase under the ability of technology, and has changed from the traditional mode of standardization, one-sided and unitization to a personalized, systematic and diversified intelligent mode, which provides great convenience for the management of class teachers. However, at the same time, the rise of AI has also caused a series of dilemmas such as the disclosure of students' privacy and the challenge of the main value, which has put forward higher requirements for teachers' literacy, positioning and management. Based on this, this paper puts forward the orientation of teachers in class management under the vision of AI. Teachers should improve their intelligent application literacy and boost the level of class management. Teachers should reasonably reflect on intelligent technology and grasp the applicable management situation. Teachers should fill the gaps in intelligent management and pay attention to humanistic emotional assistance to promote the positive integration of AI and class management.

Keywords: Artificial intelligence, class management change, class teacher, teacher orientation.

1. Introduction

With the rapid development of society, artificial intelligence (AI), based on the needs of economic development and innovation-driven concepts, has gradually emerged and penetrated into all aspects of human social life, triggering technological changes in various industries, and the field of education is no exception. It is necessary to develop convenient and efficient intelligent services, use intelligent technology to carry out intelligent campus construction, promote the application of AI in teaching, management, resource construction and other whole processes, and develop online learning education platforms and intelligent education assistants. The application of AI in education has undoubtedly brought huge dividends to class management. How does class management turn under the horizon of AI and how to use intelligent technology to explore a path to promote class management have become an important issue in the current era.

2. Empowerment and Innovation: The Positive Change of Class Management in the Era of AI

With the rise and development of AI, the construction of smart campus has become the key to school management and education. Smart campus not only means the innovation of technology, but also reflects the deep change of teacher education concept and management mode. In the tide of intelligent education, teachers' roles, management ideas and functions are undergoing profound changes under the influence of AI. As a driving force to stimulate the inherent potential of the education system, AI can improve the efficiency of education operation and realize empowering class management. At the same time, AI technology has broken the traditional education model, overcome the

problems existing in the original education, opened up a new realm for the development of education, and realized innovating class management. Under the empowerment and innovation of AI, the positive change of class management can be detailed as follows: from standardization to individuation, from one-sided to systematization, from unitization to diversification.

2.1. From Standardization to Individuation

In the traditional class management model, teachers often act as the helmsman and possess absolute authority, which greatly affects the overall style of class management. Such a management strategy has obvious limitations: Students' learning content and learning progress are under the standardized management of teachers, and they must follow the pace of the class as a whole, just like a product to be processed on an industrial assembly line, and personalized development and diagnosis are seriously missing. Although the assembly line training of students in class teaching system can ensure the quality of teaching and management to a certain extent, it is difficult to meet the needs of diversified talents in today's society. What modern society needs is comprehensive talents with innovative thinking, critical perspective and practical ability, rather than standardized products that only develop according to established models and lack of personality. Therefore, how to successfully transform the traditional class management mode, break the shackles of standardized teacher management, and realize personalized education has become an urgent problem in the field of education.

In the era of AI, the emergence of intelligent systems offers the possibility of personalized education. The intelligent system can quickly record students' personal information and situation, and make a comprehensive analysis of the data, and then output personalized assessment results for each student's actual situation, and give teachers countermeasures and

suggestions to adjust the management mode, so as to make up for the gap of students' personalized development module caused by the traditional class management mode, and promote the development of class management in the direction of individuation. Take the Intelligent Tutoring System (ITS) as an example. ITS is an instant intelligent diagnosis and grading system centered on knowledge, which sets relevant parameters such as various types of questions, difficulty of questions, and test requirements during primary and secondary education. Through the three-level classification of all knowledge points of major disciplines in primary and secondary schools and the intelligent matching of computers, intelligent courses are formed for students to choose independently, helping students to digest and diagnose knowledge points learned daily in a timely manner. It is not only independent of grade and subject restrictions, but also helps students to grasp knowledge points faster and more efficiently, and helps supervisors to quickly grasp the learning progress of the whole class and make appropriate medicine. Promote teachers and students to reduce the burden and increase efficiency, and realize the intelligent education scene.

2.2. From One-sided to Systematization

In class management, the teacher's judgment is often affected by personal subjective factors. For students' learning, daily behavior, psychological status and other fragmented information, most teachers will rely on their previous management experience and personal understanding mode to make judgments, sometimes even affected by personal bias or emotional tendencies, there is a certain degree of one-sidedness. At the same time, there are often 30 or 40 students in a class, so it is difficult for the head teacher to ensure that every student in the class can be well managed. For teachers who undertake teaching tasks in multiple classes, the doubling of the number of students puts forward high requirements for their teaching management. Faced with the overload of information processing, teachers will inevitably have the phenomenon that thinking and solving problems are one-sided. The rise of AI provides a prescription for this problem, which can effectively crack the problem of class management and lead the class management from a one-sided to a systematic change.

The emergence of AIe has greatly simplified teachers' work contents such as teaching preparation, resource sorting, summary and evaluation, and eliminated many complicated and repetitive work processes, which provides a necessary foundation for teachers to understand students more comprehensively and intervene in class management more efficiently. Moreover, compared with teachers with limited time, energy and information processing ability, AI can collect and analyze a large amount of student data in a short period of time through intelligent data analysis and mining technology, including student scores, behavior records, psychological assessment, etc., which can provide teachers with more comprehensive and objective student information and help teachers judge students' problems more systematically. Generate corresponding management recommendations and decision plans. In addition, AI can also systematize the collected data, introduce it into students' individual growth files, and construct it in the form of data streams, so as to comprehensively and systematically analyze the learning and development status of individual students and reduce the influence of personal subjective factors. At the same time, the files of individual students will also be

included in the class management database, which will be combined with other class management conditions and data to realize the systematization of class management and effectively break the bottleneck of the original one-sided management.

2.3. From Unitization to Diversification

The rise of AI has promoted the transformation of class management from single to diversified, which is first reflected in the management body. Traditionally, the main responsibility of class management is borne by the class teacher, but with the empowerment of AI, teachers, school administrators, parents and students have more opportunities to intervene in class management, and the main body of class management tends to be diversified, and a multi-party cooperative management system has emerged. AI can carry out real-time monitoring of the class through the intelligent monitoring system, and timely feedback to parents through the automated information notification system of students' performance at school, promote home-school cooperation, home-school co-education, and jointly pay attention to the growth of students, but also for class management to bring a broader space for development. At the same time, the different perspectives and concepts of different management subjects will also make class management more standardized, which is conducive to giving full play to the advantages of all parties, enriching class management suggestions, and optimizing effective management strategies.

Secondly, it is reflected in the evaluation method. Under the influence of pragmatism, modern education attaches too much importance to the imparts of knowledge, is too exam-oriented, and is limited to practical utilitarian purposes such as exam results, college entrance and employment, but neglects the enlightenment and training of rationality and morality, deviating from the essence and original intention of education. The application of AI in class management provides a new way of thinking and direction for the reform of this evaluation method. The Program for International Student Assessment (PISA) has included social-emotional learning in its assessment, and many overseas universities have announced that they will no longer use test scores as the sole criterion for admission. In the era of AI, students' creative ability, communication ability, cooperation ability, emotional expression ability and other intrinsic values are important goals of education. Big data technology can establish contact with students, record the behavior of students in the classroom in detail, carry out evaluation for real tasks, analyze students' learning situation and emotional state through intelligent models, generate diagnostic evaluation for students' intrinsic value, provide basis for class management in the next stage, and promote the multidimensional development of students' ability.

3. Risk and Worry: The Challenge of AI to Class Management

It is undeniable that the rise of AI and its application in the field of education have brought significant intelligent innovation to class management, which has greatly promoted the optimization of talent training, management environment and evaluation methods. However, we should also be alert to the fact that in the process of integrating this intelligent assistant into the field of education, it is bound to cause the

collision of instrumental thinking and educational concepts, thus giving rise to the risks and challenges caused by technological alienation, which is precisely what we are most likely to ignore in the fog of technological prosperity. At present, due to the power of technological alienation, the risk of student privacy, the hidden concern of subject value, and the professional challenge of teachers have become important issues that need urgent attention in class management. Therefore, in the process of promoting AI-enabled class management, we must carefully assess its potential risks, strengthen prevention and response, to ensure that intelligent technology and education can coexist harmoniously and achieve positive development.

3.1. Student Privacy Risks

Indeed, as a product of the era of big data, an important prerequisite for the application of AI is data, and only when analyzed on the basis of sufficient data, AI can reflect its value in practice. In real life, after registering in the APP, we often choose some labels for ourselves according to our preferences, and AI will analyze us according to our labels, recommend relevant content, and even replace this information to other platforms. It can be said that in such a nearly monitored network environment, users have no privacy at all. In the process of class management, in order to analyze students' daily behavior, learning progress, and recommend personalized teaching content, AI will collect a large amount of data information about students, such as family background, school records, personal preferences, grades, etc., and make real-time monitoring and analysis of students' learning status and emotional changes. However, in the process of transmission, storage and processing, these information may be leaked or abused by illegal people at any time, especially when some sensitive information with strong privacy is involved, the security of students' personal information is particularly important.

At the same time, although the initial application of AI in the field of education is aimed at improving the teaching effect and management quality, due to the complexity and unpredictability of AI, its algorithms and models may also have potential privacy risks, which will inadvertently violate the privacy of students. For example, some algorithms may make predictions about a student's future performance based on past behavior, which are often inaccurate and may even be biased, which may lead to improper disclosure of the student's privacy. In addition, the opacity of AI algorithms will also make it difficult for laypeople, teachers, students and parents to understand the logic behind it, further increasing the privacy risk. Thirdly, when AI monitors students' behavior and performance, it may overinterpret or misjudge students' behavior in some cases, resulting in teachers receiving wrong information, which in turn makes students suffer unfair treatment, and even be labeled as problem students. Such excessive use of intelligent monitoring may not only violate students' privacy rights, but also violate students' privacy rights. It may also have a negative impact on their mental health, making students less trusting of AI, triggering resistance and negative emotions.

3.2. Hidden Worries about the Main Body Value

There is no doubt that AI can quickly and accurately complete many complex and tedious tasks through big data analysis and self-learning technology in class management,

which greatly reduces the burden for teachers. Teachers only need to give instructions, and AI will efficiently output results. But such convenience also increasingly exposes a question: in the current era of AI, as the subject of education, how much value there is? Has the value of intelligent technology in class management exceeded the value of people?

In the traditional class management mode, there is no intervention of AI, and the interaction between teachers and students is a pivotal link in management, which is not only related to the transfer of knowledge, but also the key link of teacher-student emotional communication and human nature cultivation. However, when AI intervenes in the field of education and becomes a part of class management, this interaction will be replaced by emotionless machines to some extent, the role of teachers may change from guide to monitor, and the initiative of students may be limited to a certain extent, and the main value seems to be annihilated by technology. At the same time, although the application of AI in the field of education is in full swing, a large number of teachers have doubts about their own value and may even feel marginalized because of their older age and poor operation, or because of their resistance to education information technology. This psychology will not only reduce their enthusiasm for work, but also reduce their enthusiasm for work. It will also have a negative impact on the quality of class management and the growth of students. In addition, many teachers and students have gradually become dependent on intelligent technology because of its convenience, inertia inflation, and thinking activity is much less than before. Just imagine, since AI can help us solve most of the problems, will there be more and more teachers and students tired of exploring, lose the ability to solve problems? Under the background of educational intelligence, it is not uncommon for students to use search software and ChatGPT to cope with coursework. If this goes on, people's thinking will degenerate and become dusty under the alienating force of technology, not to mention the subject value.

3.3. Professional Challenges for Teachers

The impact of AI on the field of education is not the adjustment of a specific link or specific discipline, but a comprehensive and innovative challenge, and as educators who are directly impacted, the profession of teachers is also facing unprecedented challenges. Detailed to the level of class management, whether teachers' literacy, positioning and management methods can keep up with the pace of educational intelligence, to a large extent, affects the level of class management in the era of AI.

First of all, under the traditional education model, teachers mainly rely on their own intuition and existing experience to carry out class management; However, with the intervention of intelligent technology, teachers need to have many skills such as data processing, algorithm understanding and human-computer interaction, which means that teachers need to constantly update their knowledge system and master relevant operational skills in order to effectively make good use of AI for class management. Secondly, as man-machine co-teaching becomes a new normal, the positioning of teachers will also undergo a great change, and the work of knowledge teaching will be mostly undertaken by AI, while teachers are more responsible for the supervision, incentive, companionship and emotional communication with students, focusing on educating people. Therefore, teachers need to gradually adapt to the AI-assisted class management mode and reposition

their role in class management. Thirdly, it has been proved that AI can achieve good results in the college entrance examination papers, which reflects from one side that the passive teaching mode represented by rote memorization is facing a major crisis. How should teachers change their thinking, make good use of AI data analysis and learning algorithms, and let the active teaching mode take root and germinate? This is what every teacher needs to think about. Moreover, in view of the fact that AI can formulate targeted learning plans according to the changes in students' personal learning habits and grades, teachers need to have higher professional qualities and more flexible management capabilities to adapt to the needs of different students, and explore a class management method that takes into account the characteristics and commonness of students in practice.

4. Teachers' Orientation towards Class Management in the Field of AI

In the era of vigorous development of AI, the entire human economy and production system will undergo extensive changes under the wave of automation, and it is a general trend that robotics and AI will gradually replace some jobs. Is it possible for teachers to be replaced by AI? In fact, the rise of AI will indeed replace some of the repetitive work of teachers, but when it comes to the field of class management, which is difficult to fully penetrate the intelligent technology, the class teacher or other teachers with the mission of educating people are still irreplaceable in class management. In view of the above discussion and analysis, today's teachers should pay attention to the following points in the orientation of class management.

4.1. Improve Intelligent Application Literacy and Boost Class Management Level

As a teacher, improving intelligent application literacy is the key factor to boost the level of class management. At present, although many schools have introduced AI into class management, because the application of AI in teaching and management is not fully mature, teachers' acceptance of intelligent management and adaptability are low, and application literacy is not high, the actual effect may not be satisfactory. As the executor, planner and organizer of class management in the field of AI, teachers' management concept, management mode, technology application ability and information integration ability will all have an impact on the final class management effect. Therefore, it is necessary for teachers to deepen their knowledge and understanding of AI, improve their awareness and literacy of AI application, and promote the efficient application of AI.

First of all, teachers should understand and be familiar with the basic functions and use methods of AI and related platforms. As an intelligent auxiliary tool for teachers, AI can help teachers manage classes more efficiently and provide more personalized and accurate management suggestions through data analysis and decision support. Teachers can learn relevant training courses, understand relevant application cases, and learn how to use intelligent assistants for homework assignment, home-school communication, student evaluation, grade management and other work tasks. By mastering basic operation skills, teachers can manage classes more efficiently and conveniently, saving time and energy. Secondly, teachers can also actively participate in the construction and practice of intelligent education platform.

With the development of intelligent education platform, teachers can use various teaching resources and tools provided by the platform to improve their own intelligent application literacy. For example, teachers can use the online teaching platform for remote teaching and homework correction, and give feedback. In addition, teachers can also participate in expert symposia, educational technology seminars, AI training courses and other activities, exchange and share experience with peers, discuss the application of AI in class management, and improve the AI operation ability in actual work.

Modern technology and equipment under the environment of AI have built a broad platform for teachers' class management, but this does not mean that class management workers have achieved comprehensive relief. In the context of today's home-school co-education era, teachers cannot conceive the idea of being passive and lazy because of the rise of AI, but should strive to improve various educational concepts. Always keep innovative thinking, familiar with the practical application of AI in class management and related business operations, promote the application of new class management models, make good use of AI, and fully practice the education concept of people-oriented and advance with the times.

4.2. Reasonably Reflect on Intelligent Technology and Grasp the Applicable Management Situation

Although AI has unique advantages in the rapid acquisition and comprehensive analysis of information, which provides great convenience for teachers' class management work, it does not mean that AI can be applied in any situation of class management. Class management situations can be divided into conventional and unconventional categories according to the contents of the affairs involved. The latter includes the maintenance of class order, the construction of class culture, and the protection of student privacy, etc., which is often based on the reconciliation of interpersonal relations, and has strong complexity, and has specific differences from the conventional class management content, which is a gray area that is difficult to be effectively handled by AI. In such non-routine class management, teachers should timely adjust their concepts, reasonably reflect on the applicable management situation of AI, take the initiative to assume the role of coordinator and guarantor, do not over-rely on intelligent technology, always adhere to the basic order and ethical bottom line of class management, and fill the gaps in management situation with human intelligence advantages.

On the one hand, in the face of the application of AI in class management, teachers should maintain the most basic rational thinking ability, improve the enthusiasm and sense of responsibility of class management, overcome the inertia formed after repeated consumption of AI results, and prevent the habit of information feeding. Even if AI provides great convenience and support, the subjective initiative of people is still irreplaceable, and teachers are still the core decision-makers of class management. They are obliged to always pay attention to all aspects of class management, understand the needs and problems of students, and take corresponding management measures in time to formulate management strategies that meet the actual situation of the class. On the other hand, teachers should attach importance to the ethical rules for the application of AI. On the premise of adapting to the influence of AI on class management, teachers should

actively seek solutions to the ethical anomie problem of AI, grasp the management situation applicable to AI, and optimize the operation of AI through training, monitoring and optimizing. Ensure that the personal privacy of students is not violated in the process of daily handling affairs, achieve the standardization of human-machine relationship in the education management environment, and promote the benign and sustainable development of intelligent technology.

Swept by the wave of education informatization, it is necessary for teachers to keep a clear head in the transformation process, prudently look at intelligent technology, re-examine its limitations and potential risks, clarify the essential difference between artificial intelligence and human intelligence, uphold the attitude of neither negative exclusion nor excessive dependence, and do not blindly worship intelligent technology for their own interests, ignoring the nature of education. In today's era, the fundamental purpose of our reflection on intelligent technology is to find a balance between the promotion and manifestation of intelligent technology, find a reasonable solution in the hidden worries of education, and do not let intelligent technology exceed the scale of tools. Only by adhering to the correct value orientation and grasping the class management situation applicable to AI, can teachers achieve the sublimation of the main value.

4.3. Make up for the Shortcomings of Intelligent Management and Pay Attention to Humanistic Emotional Assistance

Yu Dan, a professor from Beijing Normal University, deeply expounded the importance of humanistic education in the era of AI in a keynote speech. She believed that humanistic education means the establishment of inner order, the sense of propriety of behavior and the expansion of thinking boundaries. The core of humanistic education is to let students explore and seek knowledge to break the boundaries of thought and knowledge. The application of technology in the intelligent era can not only abandon human factors, but should pay more attention to the replacement of human emotions. Artificial intelligence and human intelligence should not be mutually resistant and conflicting antagonistic relations, we should jump out of the monism, regard the two as a pair of balanced existence, return to the essence of education. Specifically, class teachers and teachers need to correctly view the confrontation between intelligent technology and humanistic wisdom, supplemented by intelligent technology and humanistic wisdom as the basis, and brik the shortcomings and omissions of AI in class management, pay attention to humanistic emotional assistance, and achieve a balance between the two intelligence.

Although AI can help teachers in class management and improve the efficiency of daily class management, class management is not a repetitive skill that can be mastered and quantified after repeated data training. Soft skills such as empathy, creativity and communication skills still need human wisdom to play. Interpersonal communication, emotional interaction and moral education are still the advantages of human teachers. AI is difficult to be fully competent at the current level of technological development, so AI cannot quickly replace human beings in class management, and there are certain shortcomings and omissions. Class management is not only a job of teachers, but also an art of teachers. If you want to really manage the

class and manage the students well, the teachers' sincere dedication and sincere companionship are indispensable. As a product of the scientific and automated era, AI cannot cope with and solve the content belonging to the art department of class management. In other words, AI cannot solve the deep problems in class management well, and lacks the warmth and sincerity that belong only to human beings.

In view of the shortcomings of AI in management, teachers should make full use of human intelligence to make up for the application limitations of AI. First of all, teachers should have a more comprehensive understanding of each student in the class, through observation, communication and other ways to understand the students' personality, strengths and other basic information, concerned about the learning situation of students at various stages, especially the difficulties they face, adhere to the educational principle of teaching students according to their ability, the right medicine, to maximize the help to students to meet the personalized development needs of students. Secondly, teachers should build a sound psychological counseling system, be good at observing, judging and dealing with students' emotions and psychological states, pay attention to students' emotional needs, care for students' psychological development, timely psychological counseling for students with negative emotions such as anxiety and depression, accompany and guide them out of the haze with sincerity, and pay attention to cultivating students' empathy and interpersonal communication skills. Through humanistic education, students are guided to learn to respect and care for others, and modern talents with humanistic feelings are cultivated.

5. Conclusion

With the rise of AI, class management is undergoing a new transformation under the influence of intelligent technology with the characteristics of precision and generation. Personalized, systematic and diversified intelligent management mode is gradually replacing the traditional mode of standardization, one-sided and unitization, which indicates that teaching management will be more efficient and convenient. Students will have more time to achieve mastery learning and multi-dimensional development. However, it can not be ignored that the application of AI in the field of education is not beneficial without harm, and its function also has corresponding limitations. The application of AI in class management has caused problems such as the risk of student privacy, the hidden concern of the main body value, and the professional challenge of teachers, so that the human touch of education has been lost, and to some extent, it has intensified people's worries about intelligent technology. In the era of AI, teachers should gradually change their own positioning and concept, clarify the orientation of class management under the new model, improve their own literacy in applying intelligent technology, grasp the applicable management situation, fill the gap in the application of artificial intelligence in class management with humanistic feelings, and take the essence of education as the basis, so that AI and class management can be positively integrated. In short, when teachers accept AI into class management, they must remember that intelligent technology is only an auxiliary means and can never replace the core mission of educating people and promoting morality.

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