



Policy Analysis of Youth Education in the ChatGPT Era

Yifen Yin¹, Zekai Zhang², Zhenpeng Wang^{1,a}, Ka Seng Fok^{1,b}, Haoqian Hu^{1,c,*}

¹Faculty of Humanities and Social Sciences, Macao Polytechnic University, Macao, China

²Guangdong Huaqian Accounting Firm, Shantou, China

^awangzp@hqiid.org, ^bp2109072@mpu.edu.mo,

^chghu356@gmail.com

Abstract. China's youth education policy mainly consists of three policy systems: youth policy, higher education policy, and talent policy. At present, the basic policy stance of the country towards artificial intelligence is to give equal importance to encouraging support and strict regulation. As an advanced language tool model, ChatGPT has the potential to revolutionize the quality of youth education, especially higher education. It is conducive to forming personalized learning for young people, promoting innovative thinking, enhancing the interactivity of youth learning, and stimulating the emergence and growth of blended learning models. At the same time, ChatGPT also poses technological and ethical challenges to youth education, including eliminating student autonomy in learning, triggering a crisis of educational integrity, weakening the emotional learning ecosystem, and triggering data security risks; In the era of ChatGPT, the government's public policies should strive to achieve situational integration between ChatGPT and youth education, regulate and restrict the application boundaries of ChatGPT, highlight the educational concept of student subjectivity, be alert to the negative impact of ChatGPT on young people's ideology, enhance the digital literacy and skills of teachers and students, and ensure their privacy and data security.

Keywords: Youth Education, ChatGPT, Artificial Intelligence, Youth Policy

1 Introduction

The classic public policy scholar Yehezkel Dror once pointed out that science is the creator of problems^[1]. In Dror's view, the development of technology creates new problems or exacerbates old ones. Especially: how can the potential benefits of new knowledge be utilized? Once new knowledge is misused, will it bring disaster? The most obvious example is about the utilization of nuclear technology: how to use nuclear technology to serve human progress while avoiding potential nuclear leaks and the risk of nuclear war? However, while modern science creates problems, it may also provide better ways to solve them. The rapid development of modern science has made the relationship between knowledge and social action tense, highlighting the urgency of high-quality policy-making. If science can be fully utilized, the quality of public policy formulation can be significantly improved.

© The Author(s) 2025

S. M. Chung et al. (eds.), *Proceedings of 2024 4th International Conference on Public Management and Big Data Analysis (PMBDA 2024)*, Advances in Economics, Business and Management Research 318,

https://doi.org/10.2991/978-94-6463-656-7_30

Artificial intelligence is an important driving force for the new round of technological revolution and industrial transformation, representing the latest developments in modern science. ChatGPT (Generative Pre-trained Transformer) technology is one of the widely used applications in artificial intelligence. As the latest achievement in the development of artificial intelligence, it possesses machine intelligence with general human intelligence and has become a typical generative artificial intelligence^[2]. ChatGPT is a new application form that integrates the characteristics of various aspects of existing big data applications. It is a search technology for text understanding and reorganizing language to point to answers. From a technical logic perspective, ChatGPT adopts the logic of "big data+big computing power+big algorithms=intelligent model" and applies the training method of "reinforcement learning based on human feedback". By scanning a large amount of network content, it generates responses that mimic human language patterns, which is an iteration of the language model^[3].

The impact of ChatGPT on the global knowledge community, especially in the field of youth education, is explosive because young people have a faster exposure and understanding of new things, and a higher degree of utilization. According to a survey conducted in January 2023, up to 89% of American college students are already using ChatGPT to complete assignments and papers. ChatGPT has also been widely spread on the Internet in China, and has aroused widespread concern and intense discussion in the society. As of the end of April 2024, Chinese citizens still cannot directly use ChatGPT, and OpenAI has not yet opened ChatGPT to mainland and Hong Kong users for registration. However, the emergence of AI similar to ChatGPT, as well as the existence of VPNs and mirror websites, still allows Chinese users to access such conversational AI.

At present, there are still misunderstandings about the role of artificial intelligence technology in education. Firstly, people expect the potential of artificial intelligence to be rapidly realized. Secondly, they believe that no matter how advanced artificial intelligence is, it is still just a tool, and its effectiveness can only depend on teachers and students themselves. This creates a cognitive bias of overestimating the immediate effects of artificial intelligence and underestimating its long-term effects. We believe that it is necessary to start from the current youth education policies and basic regulations on artificial intelligence in China, accurately grasp the opportunities and challenges of ChatGPT for youth education, and form high-quality youth education policies in the ChatGPT era.

2 The Basic Components of China's Youth Education Policy

Youth is the future of the country and the hope of the nation. Youth is a strategic resource of the country. The growth and healthy development of youth in a country cannot be separated from youth education, let alone the country's actions in youth education policies^[4]. Since the reform and opening up, China's youth education has developed rapidly, continuously expanding the scope of youth education and improving the level of education for young people. The youth education policies have achieved good results. Scholars have summarized the effectiveness and achievements of China's youth

education policies: firstly, the guarantee conditions for young people's right to education have significantly improved; secondly, the opportunities for young people to receive education have significantly increased^[5]. Overall, China's youth education policy consists of three main policy systems: youth policy, higher education policy, and talent policy.

Firstly, there is the youth policy. Since the new era, the system of youth policies in China has become more perfect, forming a three in one, organic and unified youth development policy system based on laws related to youth, with the "Medium - and Long Term Youth Development Plan (2016-2025)" as the backbone, and policies targeted at youth as support, providing strong support for the high-quality development of youth in the new era^[6]. Among them, the "Medium - and Long Term Youth Development Plan (2016-2025)" issued in 2017 is China's first comprehensive and cross departmental youth development policy, and the first medium - and long-term plan for youth development in China's history^[7]. It is worth noting that the 'Plan' proposes for the first time the strategic choice and policy concept of prioritizing youth development. Prioritizing the development of youth is not only the fundamental value orientation of youth development work in China in the new era^[8], but also a practice of internalizing specific public policies. It should move towards concretization, policy-making, and project-based approaches, and be transformed into actionable and perceivable specific policy measures and work projects^[9]. Youth education policy is an important component of youth development policy. The content on youth education in the "Medium - and Long Term Youth Development Plan (2016-2025)" is the main part of China's existing youth education policies. The 'Plan' requires that each region should use this plan as a guide and formulate local youth development plans based on actual conditions. At present, various provinces in China have basically formulated and issued provincial-level youth development plans, forming a youth development planning system of "national planning+local planning"^[10]. Among them, several provinces including Zhejiang, Shandong, Guangdong, Hainan, etc. have successively proposed the concept of youth development oriented provinces, presenting practical explorations of different provincial government role models such as information transmission subcontractors, policy translation designers, policy pressure transmitters, political support providers, and service provider collaborators.

Next is higher education policy. The Higher Education Law and a series of related policies and regulations in China are also the main policy norms for youth education policies. The Higher Education Law of the People's Republic of China stipulates that the task of higher education is to cultivate senior specialized talents with a sense of social responsibility, innovative spirit, and practical ability. In the process of formulating higher education policies, the interaction between the government and universities is the most important policy subject in China. The process of formulating higher education policies is a process in which the government, universities, and other policy entities interact and form rules under the conditions of their respective power scopes^[11]. During the COVID-19, in order to better respond to the COVID-19, China's higher education has issued a series of response policies, including food safety in schools during the epidemic, strengthening stable employment during the epidemic, and so on. Among them, how to provide online education and training, support online technology

platform of colleges and universities and other policies during the epidemic are the policy priorities of higher education in response to COVID-19. During the epidemic, the diversified characteristics of higher education policy entities were particularly reflected, including the direct involvement of multiple ministries such as the Ministry of Education, the Ministry of Human Resources and Social Security, and the Ministry of Industry and Information in the formulation and implementation of higher education policies, reflecting the collaborative governance of multiple departments in higher education policies.

Finally, there is the talent policy. Generally speaking, talent policies are divided into four categories: talent attraction and guarantee, talent cultivation and development, talent management and maintenance, and talent evaluation and assessment. The policy political institutions widely involve departments such as the Organization Department, the Ministry of Science and Technology, the Ministry of Human Resources and Social Security, and the Ministry of Education. Among them, the policy of talent cultivation and development is most closely related to the policy of youth education. Currently, increasing the introduction and training of artificial intelligence talents is the mainstream trend in the development of advanced countries around the world. In May 2023, the United States released the National Artificial Intelligence Research and Development Strategic Plan, proposing ten priority tasks for implementing the AI workforce development strategy, with a particular emphasis on training AI workforce and identifying and attracting the best international AI talents. In October 2023, the UK government announced that it will invest £ 118 million to build an AI talent pool, of which £ 117 million will be used to fund 12 AI PhD training centers located in multiple universities. In December 2023, relevant departments in Singapore stated that Singapore will accelerate the introduction and cultivation of artificial intelligence talents in the future^[12]. Comparatively speaking, China's AI talent supply cannot meet the development needs of the AI industry at present, compared with the latter in AI talent training. In recent years, the Chinese government has gradually realized the importance of cultivating artificial intelligence talents and has successively issued policy documents such as the "New Generation Artificial Intelligence Development Plan" and the "Action Plan for Artificial Intelligence Innovation in Higher Education Institutions", making every effort to promote the cultivation of artificial intelligence talents.

3 Regulations of the Chinese Government and Other Countries on Artificial Intelligence

In recent years, the Chinese government has paid close attention to the development trend of artificial intelligence. The "Development Plan for the New Generation of Artificial Intelligence" issued by the State Council in July 2017 is the first comprehensive document in the field of artificial intelligence in China, which focuses on the systematic deployment of the overall ideas, strategic goals, main tasks, and guarantee measures for the development of the new generation of artificial intelligence in China before 2030. For the rapidly emerging category of generative artificial intelligence in recent years, including conversational AI such as ChatGPT, the country is actively researching how

to make good use of these emerging technologies. On July 10, 2023, the Cyberspace Administration of China, together with the National Development and Reform Commission, the Ministry of Education, the Ministry of Science and Technology, the Ministry of Industry and Information Technology, the Ministry of Public Security, and the State Administration of Radio, Film and Television, announced the "Interim Measures for the Management of Generative Artificial Intelligence Services" (hereinafter referred to as the "Measures"), which will come into effect on August 15, 2023. This is currently the most authoritative document from the Chinese government regarding AI technologies such as ChatGPT.

The Measures pointed out that "the state adheres to the principle of attaching equal importance to development and safety, promoting innovation and combining governance according to law, takes effective measures to encourage the innovative development of generative AI, and implements inclusive, prudent, classified and hierarchical supervision of generative AI services."^[13] It can be seen that the state does not adopt a ban attitude towards imported products such as ChatGPT, updated Sora, and domestic ERNIE Bot, Spark and other generative AI, but does not fully liberalize them, and advocates the use of them under a strict regulatory system. The Measures provide strict requirements in the general provisions regarding the regulations that need to be followed when developing and using generative artificial intelligence. Firstly, the Measures require such AI technologies to comply with laws and regulations, not to generate content that undermines national unity, endangers national security, or promotes heretical doctrines, strictly prevent them from generating various forms of discrimination based on race, belief, gender, etc., and require "respect for intellectual property rights, business ethics, protection of trade secrets, and not to use advantages such as algorithms, data, platforms, etc. to implement monopolistic and unfair competition behaviors"^[14]; Secondly, the Measures emphasize the need to respect the legitimate rights and interests of others, such as the right to portrait, privacy, reputation, honor, etc., and not infringe upon the physical and mental health of others; In addition, the Measures also put forward requirements for service transparency, accuracy and reliability of generated content.

Globally, governments and academic organizations across various countries and regions have issued a series of policy documents and guidelines from different perspectives, aiming to regulate the use of generative artificial intelligence (AI) in education. UNESCO, in 2023, released the "ChatGPT and Artificial Intelligence in Higher Education: Quick Start Guide"^[15] and the "Guidance for Generative AI in Education and Research"^[16], which address ethical challenges brought by AI, such as academic integrity, privacy issues, and cognitive biases. These documents provide practical recommendations and policy frameworks for higher education institutions to promote AI applications within an ethical framework. In May 2023, the U.S. Department of Education's Office of Educational Technology (OET) published the report "Artificial Intelligence and the Future of Teaching and Learning: Insights and Recommendations"^[17], which summarizes opportunities and risks related to AI in teaching, assessment, and research, offering relevant policy suggestions. In October 2023, the UK Department for Education released the "Generative Artificial Intelligence (AI) in Education"^[18], which

clarified the direction for the legalization and development of generative AI and provided policy support for its use in education. The Australian Department of Education also released the "Australian Framework for Generative Artificial Intelligence (AI) in Schools"^[19] in 2023, offering comprehensive guidance on privacy protection, transparency, and accountability to ensure compliance in the educational use of AI tools. Finland, as early as 2019, issued the "Finland Leading the AI Era" strategy to promote lifelong learning and enhance AI education and training. In Asia, Japan's Education Ministry published the "Temporary Guidelines for the Use of Generative AI in Primary and Secondary Education"^[20] in July 2023, clarifying the direction for AI application in education and providing specific guidance for practical use. In the same month, Japan also released "New Government Guidelines on the Use of AI in Education"^[21], offering a detailed discussion on the use of generative AI and important considerations for universities and technical colleges. South Korea plans to introduce AI digital textbooks in primary and secondary schools starting in 2025, with full implementation expected by 2028, aiming to meet diverse learning needs and promote the widespread use of AI technology in basic education. In 2018, India published the "National Strategy for Artificial Intelligence: AI for All," which highlighted the need for tailored AI application strategies based on the country's educational development needs. These policy documents reflect a global commitment to the application of generative AI in education, while also revealing the challenge of balancing technological advancement with ethical standards. In their policymaking processes, these countries emphasize promoting the responsible use of AI technology from multiple dimensions, ensuring that its potential to enhance education quality is realized while mitigating the risks and negative impacts associated with technology.

4 ChatGPT: Opportunities and Challenges for Youth Education in China

(1) ChatGPT's Opportunities for Youth Education in China

As the latest manifestation of artificial intelligence technology, the development of ChatGPT brings historic opportunities to youth education in China, and has become a powerful driving force for the digital transformation of youth education, catalyzing the formation of new forms of higher education in the future.

Firstly, ChatGPT leads the digital era of data-driven education, helping to achieve personalized education and enhance students' autonomy in making choices. The use of ChatGPT in education can provide customized learning experiences that match individual learning abilities, thus having many potential advantages for personalized education and potentially changing the way students learn and teachers teach. In the past, education relied on traditional face-to-face courses and textbook learning, which often failed to meet the personalized needs of different students. The breakthrough progress in AI technology, especially in the field of natural language processing, provides innovative solutions to these challenges^[22].

Secondly, ChatGPT has a rich and massive information resource library, which can greatly expand students' knowledge horizons, promote the formation of innovative

thinking, and lay the foundation for digital innovation among college students. Facing the group of college students, ChatGPT can assist them in data processing and analysis, rely on databases to accurately capture information, and help them retrieve or modify papers. ChatGPT has a massive amount of text data and documents, coupled with constantly absorbing new knowledge and generating new content in conversations with users. With its massive storage of information and continuous information acquisition, ChatGPT can easily and quickly answer questions from different fields^[23].

Thirdly, human-computer interaction enhances students' initiative in understanding, and ChatGPT provides richer dialogue based answers to students' questions, further changing the learning style of learners and promoting the transition from search based learning to dialogue based learning. ChatGPT can provide students with opportunities to fully exert their subjectivity, become important learning partners and capable assistants for young people, promote the cultivation of divergent thinking, creative thinking, and critical thinking, and provide a broad future for the comprehensive development of young people's thinking. To a certain extent, it can greatly enhance students' self-learning ability and learning efficiency. In the process of working together with ChatGPT to solve problems, college students have also begun to develop a problem-solving mindset and methods, thereby training their own thinking abilities^[24].

Finally, the era of ChatGPT has spurred the emergence and growth of blended learning models, combining traditional classroom education with online learning to maintain the interactivity and socialization of traditional education while creating a more flexible learning environment. Under the impact of the ChatGPT technology wave, the course content in the field of higher education is no longer limited to traditional expert courses. Universities must adapt to the trend of blended courses, face the emergence and value of ChatGPT generative courses, and regard it as an essential content to promote students' academic growth and personal development^[25].

(2) ChatGPT's Challenge to Youth Education in China

The expansion of instrumental rationality brought about by ChatGPT will have a destructive impact on "human development" in education, thereby triggering a comprehensive challenge to youth education. Taking college students' learning as an example, ChatGPT's challenges to youth education are mainly reflected in the following aspects:

Firstly, in the era of ChatGPT, the learning role of college students may undergo a transformation, leading to changes in their learning concepts and methods. In the intervention and penetration of artificial intelligence technology, the autonomous learning of college students may become inefficient. ChatGPT, as a substitute for human intelligence, can partially replace students' intellectual labor. If students become overly dependent on the use of ChatGPT, learners become passive learners of knowledge, which can easily lead to a decline in their autonomy and initiative in learning^[26].

Secondly, ChatGPT may trigger a crisis of educational integrity. ChatGPT reduces the cost of cheating and academic misconduct, which may trigger a series of integrity crises. Taking the study of management courses as an example, ChatGPT is an integrated body of massive knowledge, and almost all theoretical knowledge related to management can be found through ChatGPT; Moreover, ChatGPT has strong summa-

rization ability, which enables ChatGPT users to easily find suitable management theory knowledge support frameworks based on their usage scenarios. ChatGPT completes course assignments better than most students^[27].

Thirdly, ChatGPT presents a significant challenge to the authority of university teachers, weakening the educational ecosystem for emotional learning. If college students become accustomed to the on-demand, anytime-anywhere answering capabilities of ChatGPT, and frequently receive one-dimensional knowledge delivery and content generation from the AI, this may lead to the marginalization of university teachers' roles^[28]. Social-Emotional Learning (SEL) refers to the process through which students develop key skills such as emotional recognition, emotion regulation, cooperation, and empathy through interactions with teachers, peers, and society. These skills are crucial for students' academic achievement and social adaptation. In May 2024, the renowned technology media outlet TechCrunch published an article highlighting how AI tutoring is transforming the learning experience of children in the United States. With the widespread use of AI tools, particularly tutoring platforms such as Answer AI, Question AI, and Gauth, the emotional learning ecosystem faces potential undermining. These AI tools, by providing instant feedback and answers, offer significant advantages in enhancing learning efficiency but reduce face-to-face interaction between students, teachers, and peers. One of the core elements of emotional learning is the development of empathy, emotional expression, and cooperation through interactions with others. The use of AI tools, to some extent, replaces these interpersonal interactions and weakens opportunities for emotional support. In particular, AI lacks emotional communication and empathy, unable to provide the emotional support and resonance students need when facing complex problems and emotional conflicts. Over time, students may become inclined to rely on technology to solve problems rather than address emotions and social interactions through human relationships. This trend could limit students' emotional growth and social adaptation.

Finally, ChatGPT poses certain data security risks that may trigger new privacy protection issues. It is currently unclear how ChatGPT stores and processes its interaction information with users, as this data "black box" may raise public concerns about personal privacy, data security, and ethical issues. ChatGPT technology is not yet mature, which will pose a risk of data privacy leakage for its application in higher education. A large amount of data from ChatGPT comes from the internet, and the authenticity of the data has not been effectively monitored. The boundaries and scope of data use are difficult to clearly define, which makes it difficult for educational subjects to evaluate whether the data violates privacy when using ChatGPT; Secondly, educational entities may face the risk of data leakage due to improper storage of ChatGPT data. For example, when educational entities use ChatGPT to upload question data to obtain answers, data privacy may be compromised due to the opaque storage security of data captured by ChatGPT; In addition, educational subjects may input user information data during the use of ChatGPT, which will be used to provide feedback and improve the model, which may lead to the leakage of relevant information data of educational subjects.

5 Develop High-Quality Youth Education Policies for the ChatGPT Era

With the advent of the ChatGPT era, countries and regions around the world have formulated and adapted development strategies for the digital age, promoting the digital transformation of higher education. For example, the United States' National Education Technology Plan, Germany's Federal Digital Strategy for Education and Research, Sweden's National Digital Strategy for the Education System 2017-2022, Singapore's Education Technology Plan 2020-2030, and so on. In China, the report of the 20th National Congress of the Communist Party of China proposed to "promote the digitization of education, build a learning society and a learning country with lifelong learning for all", which pointed out the direction for promoting the transformation of "ChatGPT+higher education" and accelerating the digital transformation of higher education. In recent years, China has successively issued a series of national policy documents on promoting education informatization, education digitization, and education intelligence, such as the "Notice of the State Council on Issuing the Development Plan for the New Generation of Artificial Intelligence" and the "Action Plan for Artificial Intelligence Innovation in Higher Education Institutions". On this basis, it is necessary to innovate and reform youth education policies towards a people-centered approach rather than a technology centered approach. Based on the basic system of China's youth education policy and the impact and challenges of ChatGPT on youth education, we believe that in the youth education policy of the ChatGPT era, the government should promote the legal, compliant, and ethical integration of artificial intelligence technologies such as ChatGPT into education and teaching, and help to comprehensively improve the effectiveness of youth education.

Firstly, in the face of the new technology of ChatGPT, it is not necessary or appropriate to blindly block it. Instead, ChatGPT should be seen as a favorable opportunity for transformation, driving governance changes in teaching content, teaching modes, and other aspects of higher education, thereby promoting the digitalization of youth education and promoting high-quality development of youth education. In recent years, digital transformation has become a universal trend in the development of higher education in the world under the basic motivation of digital economy driving the transformation of talent training mode, endogenous development of education needs technology empowerment, and the COVID-19 epidemic forces the transformation of education^[29]. Therefore, regarding the impact and challenges of ChatGPT's new technology in higher education, the government should maintain a basic stance of actively introducing it in order to conform to the basic trend of digital transformation in world education, and achieve situational integration between ChatGPT and China's higher education. Taking advantage of the opportunity of ChatGPT, we can transform the existing youth education mechanism and improve the existing youth education policies.

Secondly, in order to avoid excessive use and abuse of ChatGPT, certain regulations and restrictions should be imposed on the application boundaries of ChatGPT. From international experience, the University of Hong Kong has recently decided to temporarily ban the use of AI based chatbots for course assignments and assessments. The University of Washington and the University of Vermont in Burlington are also drafting

revisions to their academic integrity policies to avoid the misuse of artificial intelligence tools^[30]. To address the challenge of balancing the educational advantages of ChatGPT with its ethical risks, guidelines for responsible use are crucial. In this regard, Harvard University's Generative AI Use Guidelines provide an effective example. In July 2023, Harvard released preliminary guidelines for using generative AI tools such as ChatGPT and Google Bard, reflecting the university's cautious yet supportive stance on these technologies. While emphasizing the enormous potential of generative AI tools to enhance educational quality and efficiency, Harvard also acknowledged the significant ethical and legal risks associated with their use. Therefore, the university advocates for a responsible, experimental approach, stressing the importance of addressing multiple key concerns when adopting these tools, including information security, data privacy, compliance requirements, copyright issues, and academic integrity. Specifically, Harvard encourages all faculty to include clear policies on the use of generative AI in their course syllabi, ensuring that students have clear guidelines for using these tools. According to the university's policy, faculty members can set varying levels of use regulations based on the needs of their courses and educational goals. These policies include: the maximally restrictive policy, which strictly limits the use of AI tools and prohibits students from using generative AI when completing assignments; the fully encouraging policy, which encourages students to use generative AI tools broadly, while providing a clear framework to prevent misuse; and the mixed policy, which conditionally encourages the use of generative AI, adjusting according to the specific requirements of different assignments or tasks. Additionally, Harvard emphasizes that, regardless of the policy adopted, faculty must ensure that students clearly understand these usage norms and the underlying academic integrity requirements. Through this approach, Harvard not only addresses the ethical and compliance risks associated with generative AI tools but also offers valuable guidance for the educational community on how to effectively integrate AI technologies. This balanced approach ensures that students can benefit from generative AI while minimizing the potential for misuse, reflecting higher education's responsible attitude toward emerging technologies.

Thirdly, we should acknowledge the role of conversational AI technologies such as ChatGPT in education, highlight the student-centered educational philosophy, emphasize that artificial intelligence is a tool for assisting learning, and not trigger substantial changes in educational relationships with technological advancements. To establish the boundary between intelligent technology assisted learning and learner subjectivity, the key is that "college students can always regard intelligent learning products as learning tools, extensions or supplements of human intelligence, maintain a cautious attitude while applying them, and put forward higher requirements for their own learning. Regardless of whether artificial intelligence technology is used to assist learning or not, college students must continuously self monitor, evaluate and feedback, maintain their learning goals and directions, and form their own unique insights and ways of thinking in learning^[31]. This requires further enhancing the integration of real education and virtual education in the ChatGPT era, achieving seamless integration between traditional teaching and the digital world, ensuring that each student's educational experience meets personalized needs while avoiding excessive dependence on ChatGPT. For example, DebateAI, an AI tool designed to assist classroom debates, cleverly balances the

educational advantages of generative AI with its ethical risks. Unlike traditional AI writing tools, the core function of DebateAI is to facilitate interaction and intellectual exchange, rather than directly generating answers or content, significantly reducing the risk of academic dishonesty. By providing real-time access to relevant data, historical cases, and background information, DebateAI helps students rely on authentic, verifiable resources during debates, thus improving the quality and depth of discussions. Furthermore, DebateAI is designed to ensure that AI's role is limited to guidance and support, with students remaining the primary participants in the debate and in control of the classroom discussion process. The AI's involvement is precisely constrained to stimulating thought, offering reference materials, and posing questions, rather than substituting students' creative and analytical work. As a result, DebateAI not only prevents students from over-relying on AI-generated content but also upholds the fairness and academic integrity of the debate. In sum, DebateAI provides an excellent example of how generative AI can foster educational innovation while effectively addressing the ethical and legal risks it brings, ensuring both enhanced classroom interaction and academic standards. In practice, to maintain student autonomy in the educational process, educational institutions need to effectively combine AI technology with traditional teaching methods, particularly within the framework of Personalized Learning Plans (PLP). Institutions should design course content flexibly, integrating AI-driven personalized feedback with traditional pedagogical approaches, ensuring that students retain their autonomy and creativity while benefiting from AI assistance. Specifically, PLPs can help teachers track students' learning progress and provide customized learning recommendations based on their understanding. However, AI serves only as an auxiliary tool, and the ultimate integration of knowledge and the development of critical thinking still need to be guided by teachers. In this process, teachers not only offer guidance but also stimulate students' thinking through open-ended questions and class discussions, encouraging them to ask their own questions and engage in deep reflection. Furthermore, course design should emphasize human-AI collaboration, ensuring that teachers lead the classroom and encourage students to analyze AI feedback, incorporate personal experience, and consider social realities to form independent judgments. In this way, PLPs not only provide personalized learning support but also promote students' independent learning and critical thinking, ensuring that students can maintain their subjectivity in an AI-assisted environment, and fully develop their cognitive abilities and creativity.

Fourthly, be vigilant about the negative impact and potential risks of ChatGPT on the ideology of young people. As a new generation of artificial intelligence, ChatGPT technology claims to present "neutral, objective, and rational" content, but in practical use, it inevitably carries certain value tendencies. On the one hand, the training data sources for ChatGPT technology are very diverse and extensive. Diversified information is gathered in the data training of ChatGPT, intersecting, blending, and competing with each other, resulting in question and answer content with diverse value orientations, and even inappropriate comments that do not conform to the mainstream ideology of our country. On the other hand, the developers of ChatGPT are highly likely to independently manipulate the discourse power of artificial intelligence. Young students are still in the stage of immature thinking, and at the same time, they have the

characteristics of high acceptance of new things and active but unstable thinking. In the process of using ChatGPT, they are prone to the crisis of multicultural value orientation impact and discourse power manipulation. Under the covert attack of diversified information, young students inevitably question the authoritative expression of traditional mainstream ideology, which to some extent erodes their correct understanding of mainstream ideology and undermines their authority in identifying with it^[32].

Fifth, orderly enhance the digital literacy and skills of teachers and students. The overall digital literacy and ability level of personnel related to higher education is the key to determining the level and quality of digital development in China's higher education^[33]. On the one hand, although ChatGPT can provide quick access to a large amount of information, it cannot guarantee the accuracy of the content and requires users to repeatedly check the obtained information, which puts higher demands on users' ability to discern information. On the other hand, in the teaching environment of human-machine collaboration, both teachers and students need to enhance their information literacy such as information technology application ability and data thinking, and form a harmonious, efficient, and sustainable human-machine collaboration relationship with intelligent technologies such as ChatGPT. Therefore, it is necessary to establish a support service system for enhancing the digital literacy and skills of teachers and students, such as improving the training mechanism for teachers' digital literacy and skills, perfecting the relevant curriculum and practical activity system, and building an intelligent monitoring platform for digital literacy and skills. In practice, educational institutions can help students master basic AI tool usage skills and learn to identify and respond to the information challenges posed by AI through specialized digital literacy courses. For example, at the secondary school level, digital literacy courses can be offered to foster critical thinking about information sources, equipping students with the ability to make independent judgments and decisions in AI-assisted environments. Additionally, higher education institutions can offer more interdisciplinary AI courses that integrate AI with subjects such as ethics and sociology, cultivating students' interdisciplinary thinking skills. Moreover, in Singapore, Singapore Management University (SMU) launched a new learning center, CTE Scape, on September 12, 2023, through its Centre for Teaching Excellence. This initiative aims to enable educators to better leverage artificial intelligence (AI) and further enhance the quality of teaching provided to students. CTE Scape will benefit the university's faculty and staff, who intend to use the wave of technological advancements to build capabilities, foster community engagement, and showcase educational innovation.

Finally, ensure the privacy and data security of teachers and students. ChatGPT may generate different answers to the same question based on user attributes, which may also lead to fairness issues such as equal access to all information for individuals in the educational process. Therefore, with the leadership and support of relevant national departments, higher education institutions, research institutions, and technology enterprises should adjust and upgrade ChatGPT technology, develop secure and controllable generative artificial intelligence technology products suitable for teachers and students as soon as possible, and ensure privacy and data security. It should be emphasized that in order to ensure the high quality of youth education policies in the ChatGPT era, it is

necessary to widely solicit the opinions of stakeholders such as students, parents, teachers, and industry in the policy-making process, to ensure the steady development of higher education while promoting social equity.

6 Conclusion

In the face of new technologies, public policies should not hinder the development of technology, nor should they restrict the dissemination and application of new technologies. Instead, they should reform the existing social operating mechanisms based on new technologies. In the era of ChatGPT, empowering education development with artificial intelligence is an inevitable trend of the times. In the era of data governance in artificial intelligence, artificial intelligence technologies represented by ChatGPT have brought tremendous impact to youth education, fundamentally changing the requirements for young people's abilities, requiring them to have the ability to communicate with others, develop together with others, and develop together with digital technology. For this reason, we need to highlight the positive adaptation of people to technology rather than negative resistance and resistance. In the era of ChatGPT, higher education needs to adapt to the changes of the times, adapt to the characteristics and technologies of the artificial intelligence era, update professional abilities, and meet the needs of students; On the other hand, we must adhere to the intrinsic value of higher education, focus on the development of youth ethical spirit and creativity, make continuous changes in educational philosophy, content, mode, and system, ensure the legitimacy and reliability of AI driven education, and assist in the digital transformation of higher education.

References

1. Yehezkel Dror, *Public Policymaking Reexamined*, Leonard Hill Books, 1968, p.4.
2. Jiao Jianli, "ChatGPT: Friend or Foe of School Education?" *Modern Educational Technology*, 2023, Issue 4, pp. 5-15.
3. Feng Yuhuan, "The Application Value, Potential Ethical Risks, and Governance Paths of ChatGPT in Education," *Ideology and Theory Education*, 2023, Issue 4, pp. 26-32.
4. Xue Guofeng, "Analysis of the Development of Youth Education Policy in China Since the 1980s," *China Youth Studies*, 2018, Issue 10, pp. 5-11.
5. Wang Chenglong, Liu Songyue, "The Development of Youth Education in China Over the 40 Years of Reform and Opening-Up," *Youth Exploration*, 2018, Issue 1, pp. 5-19.
6. Zhang Liangxun, "Major Innovations in Youth Development Policies in the New Era," *China Youth Daily*, January 31, 2023.
7. Hu Wen, "From 'Gradual' to 'Breakthrough': The Evolution and Development Directions of China's Youth Policy in the New Era," *Beijing Youth Studies*, 2021, Issue 1, pp. 77-85.
8. Zhang Liangxun, "Youth Policy Formulation and Implementation under the Youth-First Development Framework," *China Youth Social Sciences*, 2022, Issue 3, pp. 36-45.
9. Zhang Liangxun, "The Logic and Practical Path of Youth-First Development," *China Youth Social Sciences*, 2021, Issue 3, pp. 23-32.

10. Xie Bixia, "Policy Transmission and Influencing Factors of Youth Development Plans: A Study Based on Provincial Youth Development Planning Texts," *China Youth Social Sciences*, 2020, Issue 3, pp. 1-11.
11. Lv Wu, Chang Jing, "Decision-Making Levels and Power Limits in the Formulation of Higher Education Policy: An Analysis Based on Institutional Analysis and Development Framework," *Higher Education Exploration*, 2021, Issue 6, pp. 18-24.
12. Chen Min, Dong Xing, "Talent Policy Development Trends in Some Countries and Implications," *China Talent*, 2024, Issue 3, pp. 40-42.
13. *Notice of the State Council on Issuing the New Generation Artificial Intelligence Development Plan*, State Council of China, July 8, 2017.
14. *Interim Measures for the Administration of Generative AI Services*, State Council of China, July 10, 2023.
15. UNESCO, *ChatGPT and Artificial Intelligence in Higher Education: Quick Start Guide*, UNESCO, 2023. Retrieved from <https://unesdoc.unesco.org/ark:/48223/pf0000385146>
16. UNESCO, *ChatGPT and Artificial Intelligence in Higher Education: Quick Start Guide*, UNESCO, 2023. Retrieved from <https://www.unesco.org/en/articles/guidance-generative-ai-education-and-research>
17. U.S. Department of Education, *Artificial Intelligence and the Future of Teaching and Learning: Insights and Recommendations*, U.S. Department of Education, 2023. Retrieved from <https://www.ed.gov/sites/ed/files/documents/ai-report/ai-report.pdf>
18. UK Department for Education, *Generative Artificial Intelligence (AI) in Education*, UK Department for Education, 2023. Retrieved from <https://www.gov.uk/government/publications/generative-artificial-intelligence-in-education/generative-artificial-intelligence-ai-in-education>
19. Australian Government Department of Education, *Australian Framework for Generative Artificial Intelligence (AI) in Schools*, Australian Government Department of Education, 2023. Retrieved from <https://www.education.gov.au/schooling/resources/australian-framework-generative-artificial-intelligence-ai-schools>
20. Kyodo News, *Temporary Guidelines for the Use of Generative AI in Primary and Secondary Education*, Kyodo News, 2023. Retrieved from https://english.kyodonews.net/news/2023/07/ac1ce46ce503-japan-publishes-guidelines-allowing-limited-use-of-ai-in-schools.html#google_vignette
21. University World News, *New Government Guidelines on the Use of AI in Education*, University World News, 2023. Retrieved from <https://www.universityworld-news.com/post.php?story=2023071114553690>
22. Ye Yihua, Chen Jiale, Huang Baijun, "Reshaping the Educational Ecosystem: The Potential, Risks, and Governance of ChatGPT," *Continuing Education Research*, 2024, Issue 5, pp. 56-61.
23. Cao Hui, Zhao Zi, "Analysis of ChatGPT's Features, Educational Reflections, and Risk Responses: A 'Knowledge—Subject—Position' Perspective," *Modern Educational Management*, 2023, Issue 7, pp. 75-84.
24. Yue Wei, Yu Runze, "Crisis or Opportunity: The Value and Path of ChatGPT in Enhancing College Students' Digital Literacy," *Neijiang Normal University Journal*, 2024, Issue 1, pp. 61-67.
25. Li Huichun, "The Intelligent Generation Features of ChatGPT and Its Challenges to Higher Education," *Jiangsu Higher Education*, 2023, Issue 8, pp. 1-12.
26. Dai Xiang, Guo Lijun, "Ways, Risks, and Coping Strategies of ChatGPT's Intervention in Higher Education," *Higher Education Exploration*, 2023, Issue 5, pp. 12-17.

27. Zhong Shenggen, "Challenges and Responses to ChatGPT in University Management Courses," *Science and Education Wenhui*, 2024, Issue 8, pp. 129-132.
28. Jia Bo, Wang Guozhen, Zheng Hongying, "Risk Assessment and Coping Strategies for the Application of ChatGPT in Higher Education," *Journal of Kunming University of Science and Technology (Social Sciences Edition)*, 2023, Issue 5, pp. 43-38.
29. Liu Baochun, Cen Yu, "The Drivers, Trends, and Lessons of Global Education Digital Transformation," *Modern Distance Education Research*, 2022, Issue 6, pp. 12-23.
30. Wang Juan, "Multidimensional Review of Adult Higher Education Reform in the ChatGPT Era," *Adult Education*, 2024, Issue 4, pp. 12-19.
31. Zhang Feng, Chen Wei, "ChatGPT and Higher Education: How Artificial Intelligence Drives Learning Transformation," *Journal of Chongqing University of Technology (Social Sciences)*, 2023, Issue 5, pp. 26-33.
32. Zhang Gehua, Zhou Yuru, "The Ideological Risks Youth Face in the ChatGPT Era and Coping Strategies," *Journal of the Socialist Academy*, 2023, Issue 4, pp. 90-96.
33. Xu Xiaofei, Zhang Ce, "Key Elements and Pathways for Digital Reform in Chinese Higher Education," *China Higher Education Research*, 2022, Issue 7, pp. 31-35.

Open Access This chapter is licensed under the terms of the Creative Commons Attribution-NonCommercial 4.0 International License (<http://creativecommons.org/licenses/by-nc/4.0/>), which permits any noncommercial use, sharing, adaptation, distribution and reproduction in any medium or format, as long as you give appropriate credit to the original author(s) and the source, provide a link to the Creative Commons license and indicate if changes were made.

The images or other third party material in this chapter are included in the chapter's Creative Commons license, unless indicated otherwise in a credit line to the material. If material is not included in the chapter's Creative Commons license and your intended use is not permitted by statutory regulation or exceeds the permitted use, you will need to obtain permission directly from the copyright holder.

