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The Legal Regulation of the Processing of Minors' Personal Information in China: From the Perspective of Consent Terms for Education Platforms*

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Abstract

In the context of digital education, the legal regulation of the Processing of minors' personal information implemented by education platforms is crucial in order to protect the rights and interests of minors' personal information and to promote the development of digital education. From the perspective of consent terms, we analyze the practical needs, values, and paths of legal regulation of the Processing of personal information by education platforms. Specifically, at the level of practical needs, the failure of consent terms poses a challenge to the rights and interests of personal information, and the fragmentation of legislation increases the difficulty of regulation; at the level of values, legal regulation should adhere to the principle of risk prevention, the principle of information accessibility, and the principle of the best interests of the minor; at the level of paths, the government, the self, and the third party should follow the above principles to propose corresponding paths of regulation. The research results are conducive to better proposing feasible legal normative measures to regulate the processing behavior of educational platforms so as to protect the personal information rights of minors.

Keywords: Educational platform, Rights and interests of minors' personal information, Consent terms, Regulation

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^{**} In this article, education platforms refer to platforms other than schools relying on the Internet to engage in for-profit education activities, excluding education platforms developed by various government departments and schools with public welfare nature. Meanwhile, in order to provide a more convenient user experience, education platforms usually design a mobile version, i.e., education APP. education APP is not fundamentally different from its corresponding education platform, so the two can be substituted for each other in the expression.

^{***} The rule of informed consent, or Consent terms, means that the subject of personal information must be fully informed and his or her explicit consent obtained before the Processing of personal information. Some scholars refer to it as 'informed consent principle/model/mechanism', 'informed consent rule/principle', etc., but this article does not make any distinction for the time being.

Introduction

In recent years, education platforms have become an important vehicle for the development of digital education. While realizing the contribution of platforms to education, etc., it is important to face up to the problems that exist, particularly with regard to the protection of the rights and interests of minors' personal information. Whereas the rule of consent terms¹ is a core rule for the protection of personal information (Chang, 2022). This paper uses it as a premise for a discussion on the behaviour of education platforms in processing minors' personal information. The failure of consent terms is the inability to respond to the crisis of data misuse in the digital age (Cui, 2024), where automated records are the primary means of collection, and the challenge of achieving 'effective information' and 'genuine consent' (Yang, 2024). However, the malfunction is not a total failure, but rather a gradual weakening.

Focusing on the legal regulation of the processing of minors' information by education platforms, this paper analyses the real needs from the failure of the rules of consent terms and the fragmentation of the legislation, and elaborates the value of legal regulation from the principles of risk prevention, information accessibility and the best interests of the minor. On this basis, regulatory paths are constructed from the perspectives of the government, self, and third parties in an effort to provide more effective legal protection for minors' personal information. As seen in Table 1, education platforms in this paper refer to platforms other than schools that rely on the Internet to engage in for-profit educational activities, excluding education platforms developed by various government departments and schools with public welfare nature.

Table 1 *Types of Education Platforms Mentioned in This Article*

Language	Arcasol, Step by Step ABC, Duolingo, VIPKID, Fluent Speaking
Comprehensive	Xueersi, Tencent Classroom, Gaotou Education, Hujiang Online School, New Oriental Online
Early Learning	Kiribati, Zebra, Hunn Literacy, Number Sense Planet, Dudu Thinking
Steam	Programming Cat, Walnut Programming, Watermelon Creator, Pea Thinking, Martian Club
K-12	Homework Help, Ape Tutoring, Palm 1 to 1, Avanti, Onion Maths

Note: Education platforms have multiple attributes and are not uniquely categorized. For example, New Oriental Online is both a general education platform and a language education platform.

Literature review

In recent years, domestic research in the field of minors' personal information has received more and more attention. Taking 'personal information of minors' as the theme, combing through the academic views of the core journals on China Knowledge Network, we found that the academic research mainly focuses on the following aspects.

The first is a study on the connotation of minors' personal information, their rights and interests and related rights. In terms of connotation, broadly speaking, it refers to all information associated with minors, and narrowly speaking, it refers to information generated only by minors (Meng, 2023), The definition of minors' personal information should be done in the context of rights guarantees (An, 2023). In terms of personal information rights and interests and related rights, since personal information rights and interests were first raised in the Law of the People's Republic of China on the Protection of Personal Information (hereinafter referred to as the Personal Information Protection Law), some scholars have argued that it is a personality interest rather than a collection of interests, but some scholars understand it as a collection of interests, consisting of a series of powers (Wang, 2022). It can be found that most of the existing studies mainly focus on the rights and interests of minors' personal information, the positioning of their rights and the construction of the relevant legal system, and seldom discuss in depth the risks and challenges that minors may encounter in the process of accepting basic services on the Internet.

The second is a study on the construction of a path to protect the rights and interests of minors' personal information. The current protection rules are too general (Cai, & Wu, 2021). The need to build a protection path centered on the interests of minors (Wang, 2022). Both to insist on the coordination of natural and national parental authority and to promote multi-party governance with the focus on online platforms (He, 2024). It is also necessary to strengthen the governance function of network industry organizations (Wang, & Song, 2021). Existing relevant studies mostly focus on personal information or children's personal information, failing to pay sufficient attention to the safety needs of the minors' group. Moreover, minors' personal information is often discussed as a separate area, ignoring the close connection with the areas of network literacy and network information content regulation, which leads to a certain degree of one-sidedness in the proposed measures.

Third, research on new issues of protection in the digital age. In the face of powerful platforms and black box algorithms, ordinary users usually feel powerless against them (Huang, & Cao, 2023), Not to mention minors. With the popularity of face recognition technology, while it brings many conveniences, the potential risks and pitfalls are equally worrying (Shi, & Liu, 2021). And, the information security risk of self-disclosure by minors should not be underestimated (Lu, 2022). In the digital age, fewer studies have been conducted from the perspective of consent terms, and there is even a lack of discussion on the challenges to minors' personal information rights and interests after the failure of consent terms, which leaves room for research and is the main focus of this paper.

Method

This paper adopts the textual analysis method in qualitative research, by examining and comparing the privacy policies of 30 education platforms commonly used in China, aiming to gain a deeper understanding of the actual situation of these platforms handling of minors' personal information, to measure their compliance with relevant laws, regulations and ethical standards, and to conduct a textual analysis of the relevant legal textual clauses, so as to explore the real needs of legal regulation, and thus to better propose the In this way, we can better propose the values and paths to be followed. At the same time, in order to show the handling behaviour of the education platform more clearly, this paper analyses and compares the difference between New Oriental Online's general privacy policy and the children's privacy policy from six aspects, such as the target audience, the scope of personal information, and the use of information.

The Practical Need for Legal Regulation of the Processing of Minors' Personal Information on Education Platforms

The effectiveness of the current consent terms to constrain the processing behaviour of platforms is gradually weakening, resulting in the growing power of education platforms and the increasing risk of abuse of private power. This makes the challenges to the rights and interests of minors' personal information increasingly prominent, especially in terms of the right to know and the right to make decisions. At the same time, the fragmentation of the legislative protection of minors' personal information exacerbates the complexity of regulation.

The Challenge of Consent Terms Failure to Minors' Personal Information Rights and Interests

Formal Notification Disregards the Minor's Right to Information

Firstly, the poor friendliness of the privacy policy text is characterized by poor readability, lack of visibility, and low usability. In terms of readability, most of the privacy policies are lengthy, confusingly typeset, and complexly structured. Taking the New Oriental Personal Information and Privacy Protection Policy as an example, the entire text totals 15,586 words, and at a reading speed of 200-500 words per minute for an adult, it would take at least 31-77 minutes of consumption to barely make it through, let alone a minor. Moreover, the expressions of the privacy policy are often ambiguous and jargon-laden, posing obstacles to minors' reading and comprehension. The reading difficulty of most privacy policies is equivalent to the first year of college. It is difficult for minors to grasp its connotation. With respect to visibility, not a few education platforms accept the privacy policy by default upon registration, and usually, the relevant reminder color blends in with the

background color, as is the case with Duolingo. In addition, privacy policies are often presented as secondary or multiple links, making them difficult to detect. In terms of usability, education platforms hide key information in lengthy text to avoid legal risks (Wan, 2019), making it difficult for minors to quickly sift through the effective information when reading, and greatly increases the difficulty of understanding the content.

Second, the lack of the privacy policies for minors. Education platforms generally do not have exclusive privacy policies for minors, relying instead on generic privacy policies to fulfill their notification obligations. As of 10 April 2023, among the 30 high-frequency education platforms counted, none had a dedicated privacy policy for minors, and only 17 platforms had a privacy policy for children, some of which were incorporated into the general privacy policy, as is seen in Table 2.

 Table 2

 Summary of Privacy Policy Development on Education Platforms (Partial)

Name of	Whether a Minors' Privacy Policy	Whether a Children's Privacy Policy
education platform	is in place	is in place
Ape Tutoring	×	$\sqrt{}$
Palm One-on-One	×	$\sqrt{}$
Ape Math	×	$\sqrt{}$
Homework Help	×	$\sqrt{}$
Ape Search	×	$\sqrt{}$
Hujiang Online School	×	\checkmark
New Oriental Online	×	$\sqrt{}$
Tencent Classroom	×	$\sqrt{\text{(But it is included in the General Privacy Policy)}}$
Arcasol	×	$\sqrt{\text{(But it is included in the General Privacy Policy)}}$
Numeracy Planet	×	$\sqrt{\text{(But it is included in the General Privacy Policy)}}$
DuduSense	×	$\sqrt{\text{(But it is included in the General Privacy Policy)}}$
Homework Wizard	×	×
Step by Step ABC	×	×
Duolingo	×	×
VIPkid FM	×	×
Fluent Speak	×	×
Avanti	×	×
Programming Cat	×	×
Martian Club	×	×

However, even if education platforms are aware of the importance of having a privacy policy for minors, it is doubtful that it can be reasonably designed. The current children's privacy policy is similar to the general policy, without reflecting special protection. In the case of New Oriental Online, for example, the children's policy closely aligns with the general policy in numerous aspects, specifying that a guardian must accompany the reading process and express consent, as is seen in Table 3. However, this requirement is often not adhered to in practice.

Table 3Comparison of The New Oriental Personal Information and Privacy Protection Policy and The New Oriental Children's Privacy Protection Policy

	Personal Information and Privacy Protection Policy	Children's Privacy Protection Policy
Object	People over 14 years old	Can platforms are recognized as being under 14 years of age
Personal Information	Basic information, network identifier information, personal property information, information about devices commonly used by individuals, personal location information	May additionally collect the guardian's name, cell phone number, relationship to the minor, and information about the minor's school or class.
Purpose of Information	For the purpose of providing products or services, sending marketing information (refusal may not be effective), sharing with the public or third parties, etc.	Addition of "Provide appropriate teaching services for children" to the Personal Information and Privacy Policy

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Protection Management, technology, and auditing safeguards		Addition of "personal responsibility and emergency plan" to "Personal Information and Privacy Policy"	
Guardianship	Assisting minors to register and use	Reading, deciding whether or not to consent to, and assisting minors in registering to use the site	
Duty to Identify	No obligation to recognize the age of users	No obligation to recognize the age of the user	

Third, according to the current consent terms, once consent is given, the education platform will process their personal information for a long period of time (Yu, 2023). However, platforms often violate privacy policies and infringe on users' rights and interests. Educational apps have problems such as irregular collection of personal information and illegal pushing of pop-up information. From this, it can be glimpsed that the education platforms did not comply with the provisions of the privacy policy, and it is difficult for minors to grasp the actual situation of the platforms' compliance with the privacy policy with the actual protection given. This is clearly inconsistent with the connotation of the right to information.

Forced Consent Impairs the Minor's Right to Decide

In personal information rights and interests, the right to decide (the right to consent) is the core, Restriction and refusal are the extensions of its effectiveness. That is, the law should guarantee minors' freedom of voluntary consent and the right to restrict and refuse information processing, but this is often not the case in practice. On the one hand, minors are faced with the difficult choice of accepting the privacy policy or abandoning the service under the coercion of 'no service if you do not agree' by education platforms. With the popularity of online education, platform services are important to minors, and if they are unable to use them, they are easily marginalized as a 'digitally vulnerable group'. At the same time, the vast amount of information and frequent consent requests make it more difficult for minors to assess risks and control information (Lv, 2021). Increased difficulty in managing personal information leads to privacy leaks, user fatigue, and greater vulnerability of minors. As a result, minors may resist the privacy policy, affecting the exercise of decision-making power and falling into the 'take it or leave it' dilemma. On the other hand, the external availability of personal information allows education platforms to infer personal information, depriving it of the right to make informational decisions. 1997 experiments showed that identities could be identified with high probability from a small amount of information. Algorithms are now far more capable than they were going to be, and they operate with results that are beyond the platform's original intent and expectations, and far beyond the perception of minors and even adults. Therefore, in the case of platforms using algorithms, algorithms always provide unexpected ways to observe and infer minors, making it impossible for minors to effectively supervise and control information, much less consent to authorization.

Fragmentation of the Legislative Protection of Minors' Personal Information

As can be seen in Table 4, the current legal framework for the protection of minors' personal information consists of three main levels, but shows a pattern of fragmentation, which exacerbates the difficulty of legal regulation, mainly in the following two aspects.

Legal Normative System for The Protection of Minors' Personal Information

Level	File name		
First level(Law)	The Civil Code, The Minors' Protection Law, The Personal Information Protection Law,The Cybersecurity Law, The Data Security Law, The Prevention of Juvenile Delinquency Law, etc.		
Second level (Administrative regulations)	Regulations on the Internet Protection of Minors, etc.		
Third level (Departmental regulations, etc.)	Provisions on the Administration of Programs for Minors, Provisions on the Network Protection of Children's Personal Information, Provisions on the Administration of Algorithmic Recommendation of Internet Information Services, etc.		

The lack of coordination of different provisions in the legal system is mainly reflected in the following: firstly, the unsoundness of the legal connection and institutional provisions; although, the superior law is basically finalized, there are unsoundness in the implementation and refinement of the

subordinate law in some areas. For example, the Personal Information Protection Law provides for the processing of children's personal information. But, there are no clear rules and standards for 'specific purposes' and 'sufficient necessity'. Secondly, there are inconsistencies between cross-cutting laws. The protection of minors' personal information requires cross-cutting legal protection, which inevitably creates nuances or potential conflicts. For example, there are differences between the Personal Information Protection Law, the Minors' Protection Law, and the Civil Code, in the standard of minors' capacity to consent, as is seen in Table 5.

Table 5Comparison of The Relevant Provisions of The Personal Information Protection Law, The Minors' Protection Law and The Civil Code.

	the Personal Information Protection Law	the Minors' Protection Law	the Civil Code (without special provisions)	
<8 years old	Inability to give independent consent	Inability to give independent consent	lacking civil capacity	
8-13 years old	Inability to give independent consent	Inability to give independent consent	restricted capacity for civil behavior	
14-17 years old	Ability to give independent consent	Ability to give independent consent	restricted capacity for civil behavior	
≥18 years old	Ability to give independent consent	Ability to give independent consent	full capacity for civil behavior	

There is insufficient interaction between the different areas of the legal system. The legal system of minors' network protection mainly includes the fields of network literacy promotion, network information content regulation, personal information network protection system and network addiction prevention and control. These areas should interact with each other, but in practice, the lack of interaction between these areas can lead to a more one-sided treatment of issues. In the case of the processing of personal information by education platforms, for example, although this is mainly under the domain of personal information network protection, it also requires interaction and cooperation with other domains. Even if there are advances in compliance processing in the future, there is still a risk of information leakage due to a lack of self-protection awareness if regulation is not closely aligned with cyber literacy.

The Value of Legal Regulation of the Processing of Minors' Personal Information on Education Platforms is Followed

Personal information is useful, but it should be used in a proper way (Liu, 2021). On the basis of practical needs, this article explains the value of legal regulation of the processing behaviour of education platforms, and promotes the education platforms to 'use it in a proper way'.

The Principle of Risk Prevention

The principle of risk prevention refers to the adoption of measures to exclude or reduce potential risks as far as possible. It is an inherent requirement for the state to guarantee the security of personal information. The principle is understood in two ways: 'strong' and 'weak'. Strong risk prevention emphasizes 'ought to take'; weak risk prevention is 'entitled to take', and its measures are generally relatively mild. The principle not only responds to the shortcomings of traditional protection methods (Zhao, 2023) but is also in line with the purpose of the law to resolve cybersecurity risks.

The principle of risk prevention is more effective in protecting the personal information rights and interests of minors. Cyberspace vulnerability and amplification effect make the risk spread rapidly and widely (Huang, 2013). Traditional remedies have limited effects. Furthermore, on the level of economic efficiency, minors are weak and difficult to challenge when fighting against large-scale information collection platforms (Cheng, 2019). On the contrary, the principle of risk prevention brings benefits far beyond what can be achieved by carrying out remediation after the fact as mentioned above, and is more in line with the principle of cost-benefit. In the age of big data, prevention is much better than cure. Risks can no longer be avoided, so it is particularly crucial to place risk prevention at the forefront of personal information protection. At the same time, from the perspective of economic efficiency, a society under the rule of law should pursue the efficient and

low-cost flow and use of resources (Gao, 2019). Through scientific risk prevention and control, not only can personal information be effectively protected, but also the optimal allocation of resources can be achieved.

The principle of risk prevention is seen as an important value standard in the Processing of personal information. First, domestic legislation has shown the beginnings of the precautionary principle. The Personal Information Protection Law is even more explicit about preventing and punishing infringements. Second, foreign applications are mature. As early as 2003, APEC recognized the principle of prevention of harm. In 2018, GDPR proposed a risk-based protection strategy. In 2024, The American Privacy Rights Act strengthens algorithmic scrutiny against risk and respects the protection of young people's rights in the United States.

The Principle of Accessibility of Information

The principle of information accessibility focuses on the ability of all people to access information equally, conveniently, and safely. The principle applies to the entire population and is not limited to disabled and elderly groups (Guo et al., 2023). Education should pay attention to the needs of all students, especially special students, in order to promote educational equity and digital inclusion. On the institutional front, the State also encourages education platforms to gradually comply with accessibility design standards.

The principle of information accessibility emphasizes improving the comprehensibility, operability, and accessibility of information, which is conducive to ensuring that minors can easily understand the content of the privacy policy, and thus enhance their awareness of the protection of personal information and effectively exercise their right to know. Moreover, the principle of information accessibility helps to enhance the transparency of information, so that minors can more clearly understand the collection, use and protection of personal information, so that they can independently decide whether or not to share the information, and choose the objects and scope of sharing, and effectively exercise the right to make decisions. Moreover, the diversity of interaction methods emphasized in this principle is particularly important for minors with special needs or physical disabilities.

The Principle of the Best Interests of the Minor

The principle of the best interests of the minor is, in fact, a domestic interpretation and expression of the principle of maximization the interests of children (Guo, 2021). More in line with China's national conditions, it requires that when dealing with matters involving minors, priority must always be given to their interests (Tong, 2023).

First, the principle of the best interests of the minor helps to strengthen the protection responsibilities of education platforms and guardians. Although the law provides guidelines for the Processing of minors' information, platforms often curtail their responsibilities for profit considerations. Consent mechanisms for guardians are often formal, making it difficult for guardians to be fully informed and give genuine consent. Therefore, taking this principle as one of the values to follow is not only to highlight the responsibility of the platform but also to emphasize that the platform should provide a way for guardians to understand and exercise their rights. In reality, there is a lack of understanding and support for guardians, Data shows that less than 60% of guardians would actively check privacy policies (Chu, et al., 2023), Their ability to understand and make consent choices is even more difficult to ensure.

Secondly, the principle of the best interests of the minor is useful in providing special and priority protection for minors. When formulating privacy policies, education platforms need to fully consider the special nature and vulnerability of minors and maximize the protection of their interests. Moreover, education is a field of interests (Chu, 2013). In the face of conflicts of interest in education, the platform should uphold the principle of 'choosing the more important of the two benefits and the lesser of the two disadvantages (Zhu, 2020). Weighing the interests of all parties to ensure that minors have access to quality educational resources on the basis of information security (Liu, 2022).

Thirdly, the principle of the best interests of the minor is useful in guaranteeing that minors are fully informed and express their opinions truthfully. This principle requires education platforms to ensure that minors have a full and true understanding of the way in which personal information is handled so that their opinions are genuine and valid. Platforms should explain information in an easy-to-understand manner, take minors' opinions seriously, optimize privacy policies, improve readability, usability, and visibility, and genuinely listen to minors' opinions.

Proposed Path for Legal Regulation of the Processing of Minors' Personal Information on Education Platforms

Based on the concept of multi-stakeholder governance, the Government, the self, and the third party are proposed to follow the principles of risk prevention, accessibility of information, and the best interests of the minor, respectively.

Government Regulation: Building A Legal Framework for Risk Prevention

The Government should set a minimum legal normative framework for education platforms as a benchmark and boundary for the Processing of personal information by the platforms. Formally, the principle of risk prevention can be clarified by adding clauses to legal texts such as the Personal Information Protection Law, the Minors' Protection Law, and the Data Security Law, such as 'The collection, use, and processing of minors' personal information (data) shall adhere to the principle of risk prevention, and appropriate technical and organizational measures shall be taken to reduce the damage caused by the risk. And other similar expressions. Of course, this can also be done through the introduction of a specialized education service law or cyber education law. Clarify the principle of risk prevention in its general provisions.

In terms of content, weak risk prevention should be the main focus, supplemented by strong risk prevention, to ensure the comprehensiveness and effectiveness of risk management and avoid excessive intervention. Specifically, firstly, a system of hierarchical risk treatment should be established and a reverse risk-proofing mechanism should be introduced; secondly, the Government should be given specific regulatory powers to prevent irreversible risks and to appropriately relax its responsibilities; and thirdly, in sensitive areas, such as children's personal information, the government could directly prohibit risky activities unless the organizer of the activity can prove that it is harmless.

At the same time, in the face of the fragmented status quo of the legislative protection of minors' personal information, the principle of risk prevention can also be used as a guiding principle for the relevant legislative work, so as to examine and integrate existing legal provisions with a unified standard and perspective, to make up for the legal gaps to the greatest extent possible, to eliminate conflicts of law, and to ensure the completeness and coordination of the legal system.

Self-regulation: Development of Web Pages that Comply with Information Accessibility Standards

It is difficult for the government to formulate rules for every kind of harm that may come to mind, and self-regulation is not an ineffective approach when the regulatory problem is too complex or the object of regulation is in dynamic evolution. Challenges faced by education platforms in protecting the security of minors' information stem mainly from weaknesses in the design of privacy policy web pages. It is particularly crucial to optimize web design and follow the principle of information accessibility.

In terms of form. The design of web pages should be in line with the Standard for Testing Methods for Accessibility Ratings for Information Accessibility Website Design (GB/Z 41284-2022), and the interactivity of web pages should be strengthened, in addition to the most basic requirements of easy-to-understand, clear structure, and highlighting of key points. By optimizing the interface design, a variety of interaction methods are provided to meet the needs of different minors and ensure that they can manage and protect their personal information in a barrier-free manner. Meanwhile, for minors with disabilities, considering that each disability type has different requirements for accessibility due to differences in their individual functional deficits (Zhang, 2024). Therefore, personalized access programs and support services should be provided. For example, for minors with

visual impairments, advanced voice navigation and voice prompts can be used, and for minors with physical impairments, emphasis is placed on designing interfaces and buttons that are easy to operate.

In terms of content. Firstly, a tiered consent mechanism is introduced to manage the personal information of minors hierarchically so as to reduce the obstacles for minors to know about the Processing of personal information, increase the sensitivity to important personal information, and reduce the aversion caused by undifferentiated application. According to Information Security Technology Network Data Classification and Grading Requirements (Draft for Public Comments) and Information Security Technology Personal Information Security Impact Assessment Guidelines (GB/T 39335-2020), this paper tries to grade minors' personal information as follows. Level 1 information of minors focuses on learning aspects, such as course arrangements, etc., and does not require item-by-item notification of consent, but the privacy agreement needs to be set out, and minors can reject it after the fact; Level 2 information is between privacy and socialization, and platforms should be fully informed of the privacy terms and conditions, with key points marked in easy-to-understand language, and allow the use of the information based on a reasonable purpose, but safeguard the right of minors to reject it; and Level 3 information is highly private and requires special notification of the purpose, manner, and impact of processing. This should include a pop-up window displaying and linking to the privacy policy, accurate identification of age, regular review and authorization for long-term retention, as well as the right of minors to refuse at any time, as is seen in Table 6.

Table o

Table on The Hierarchy of Minors' Personal Information in Education Platforms

_ Table on The Hierarchy of Minors Personal Information in Education Flatforms				
Level of Personal	Degree of	Obligation of the	User's Right to	Sharing with third parties
Information	Harm	platform to inform	Consent	
Level 1	Small	Inform in general terms	Formulation of consent and possibility of refusal	Permission
Level 2	Medium	Full disclosure	Substantive consent and refusal at any time	Allowed with specific consent
Level 3	Large	Special information and regular reminders	Substantial consent, express consent of the guardian and refusal at any time	Prohibited

Secondly, on the basis of the grading of minors' personal information, personalized consent options and default options are set to give minors the right to decide. To meet diversified needs, enhance the flexibility in exercising the right to decide, and mitigate the risk of infringement of rights and interests, among the three options, the second option is eclectic, better reflecting the concept of accessibility to the platform compared to the existing one-size-fits-all approach, as is depicted in Figure 1.

Figure 1
Schematic of Personalized Consent Terms Rrules (Based on The VIPKID Registration Login Screen Scenario)



Third-party Regulation: Improvement of Personal Information Risk Level Certification Mechanism

Third-party regulation is crucial to protecting minors' personal information and promoting the development of education platforms. In the digital age, the risk level certification mechanism for personal information is a reflection of new thinking in keeping with the times. The Personal Information Protection Law stipulates that a detailed assessment of the impact on the protection of personal information must be carried out when Processing information with significant impact. The Information Security Technology Guidelines for Personal Information Security Impact Assessment (GB/T 39335-2020) further stipulate the basic principles and implementation process. However, based on profit orientation, most platforms usually choose to assess the risks by themselves (Zhang, 2023). It violates the principle that 'no one can be his own judge'. China has now established the Internet Integrity Alliance, which can provide personal information security certification, but its influence has yet to be enhanced. Based on this, it is necessary to both improve the personal information risk level certification model and strengthen the willingness of education platforms to participate in the personal information risk level certification to increase their influence.

On the one hand, in improving the personal information risk level certification model, attention should be paid to the qualification, standard, and process of the certification organization. First, the third-party certification body should be characterized by independence and professionalism. Independence means that the certification body should ensure that it has no interest. Practical experience shows that social organization-type institutions can carry out certification work more independently (Liu, 2022). In order to prevent collusion, the pool of assessment bodies should be adjusted in due course and randomly selected. Professionalism requires that the certification body have experience in relevant matters, as well as familiarity with digital technology and the law, and for this reason, it can work with testing organizations to make up for its own lack of professionalism. Second, certification standards should include national norms, national recommended standards, industry guidelines, and other levels, and should be made public and transparent so that minors and their guardians are aware of them. In terms of time criteria, both the past behaviour of the education platform should be traced, and the organizational structure at the point of certification and other elements should be carefully assessed. As for the statute of limitations of the certification mark, reference can be made to Article 42 of the GDPR, which provides for a maximum validity period of three years, which can be renewed under the same conditions provided that ongoing compliance is met. Thirdly, in the certification process, the concept of due process should be actively implemented, the basic requirements of natural justice should be satisfied, and the views and opinions of all parties should be actively listened to. The specific certification process includes acceptance, technical verification, on-site audit, certification decision, and issuance of certification. At the same time, education platforms are required to submit risk assessment reports to the personal information protection department for the record, so that they can be based on the assessment results and information security status.

On the other hand, in promoting the participation of education platforms in personal information risk level certification, various incentives should be adopted, including publicity and education, policy guidance and industry self-regulation. Policy guidance is crucial to incentivize platforms to take the initiative to certify and increase the influence of the mechanism. Certification will enhance the credibility of the platform and increase the trust of minors, helping them to assess the level of protection based on the certification level and feel more secure in their use. Increased trust will improve the user experience and become a core competency of the platform, which in turn will lead to growth in the number of users and economic benefits. This will motivate platforms to pay attention to information security, provide clear privacy policies, play a supervisory role in the certification mechanism, protect the rights and interests of minors, and promote the steady progress of digital education.

Conclusion

The digital transformation of education is an inevitable choice to realize the transition from basic balance to high balance, from a large country of education to a strong country of education, and is also

an inevitable trend of the development of the times (Cui, & Xiong, 2023). Education platforms are not only a product of the digital transformation process, but also a leader in the future development of education. Given this, safeguarding and promoting the healthy and sustainable development of education platforms becomes the starting point of this paper. The security of minors' personal information as a key issue in the development of platforms is a challenge that is difficult to avoid, and consent terms serve a as general lawful basis for processing information (Wang, 2024). Therefore, this article takes consent terms as an entrance to explore the legal regulation of the Processing of minors' personal information by education platforms.

Analyzed from the perspective of practical needs, the failure of consent terms poses serious challenges to the rights and interests of minors' personal information; and the fragmentation of legislative protection exacerbates the difficulty of legal regulation. From the perspective of value compliance, legal regulation of education platforms should abide by the principles of risk prevention, information accessibility, and the most interests of minors. On this basis, through the government's construction of a legal framework for risk prevention, the platform's development of web pages that comply with information accessibility standards, and the third-party organization's improvement of the risk level authentication mechanism, the three parties can jointly regulate and build up a solid security line of defense, so as to bring personal information control back to the users (Hu, 2024), to safeguard the rights and interests of the personal information of minors, and to promote the sustainable and prosperous development of education platforms.

References

- An, Q. (2023). Protection of Minors' Personal Information: Theoretical clarification and rule Reconstruction. *The China youth social science*, 42(2), 132-140. https://doi.org/10.16034/j.cnki.10-1318/c.2023.02.010.
- Cai, Y. & Wu, T. (2021). Dilemma and Institutional Response of Minors' Personal Information Protection: From the perspective of improving the guardian consent mechanism of "alternative decision". *The China youth social science*, 40(2) 126-133. https://doi.org/10.16034/j.cnki.10-1318/c.2021.02.034.
- Chang, Y. (2022). On Consent terms of Information Subject and its realization. *Law of finance and economics*, 8(3), 80-95. https://doi.org/10.16823/j.cnki.10-1281/d.2022.03.007.
- Cheng, X. (2019). Protection of Personal Information from the perspective of Civil Code Compilation. *Chinese law*, *36*(4), 26-43. https://doi.org/10.14111/j.cnki.zgfx.2019.04.002.
- Chu, H. (2013). Identification of educational benefits and legal adjustment-Solving the "old difficulties" in education by legal means. *Journal of education*, 26(4), 23-30, https://doi.org/10.14082/j.cnki.1673-1298.2013.04.005.
- Chu, X., Song, Q. & Ye, D. (2023). Minors data protection blue book in China. *People Data*. https://www.peopledata.com.cn/html/NEWS/Dynamics/3217.html.
- Cui, C. (2024). Endogenous Security Mechanism of Personal Information and its implementation. *Oriental law, 17*(1), 96-107. https://doi.org/10.19404/j.cnki.dffx.2024.01.005.
- Cui, M. & Xiong, Z. (2023). The impact and Countermeasures of Wisdom Education on the right to receive Education. *Journal of Educational Science of Hunan normal University*, 22(6), 64-75. https://doi.org/10.19503/j.cnki.1671-6124.2023.06.007.
- Gao, F. (2019). On the Purpose of Personal Information Protection: Focusing on the distinction of benefits in the Personal Information Protection Law. *Local research*, *63*(1), 93-104. https://doi.org/10.16390/j.cnki.issn1672-0393.2019.01.010.
- Guo, K. (2021). On the Civil Code and the Principle of Most Favorable to Minors. *The China youth social science*, 40(1), 118-125. https://doi.org/10.16034/j.cnki.10-1318/c.2021.01.019.
- Guo, Y., Li, S. & Zhang, X. (2023). Information Accessibility: Evolution, research focus, and future development. *Books intelligence knowledge*, *41*(3), 83-92. https://doi.org/10.13366/j.dik.2023.03.083.
- He, B. (2024). On the improvement of the legal system of Minors' Internet Protection in China. *Legal science (north west university of political science and law)*, 42(2) 94-109. https://doi.org/10.16290/j.cnki.1674-5205.2024.02.015.

- Hu, L. (2024). Digital Architecture and Law: Control and Production Mechanisms of the Internet. Peking University Press.
- Huang, S. (2013). Network social Problems from the perspective of risk society. *Science and society*, 33(4), 14-22, https://doi.org/10.19524/j.cnki.10-1009/g3.2013.04.002.
- Huang, Y. & Cao, X. (2023). Calling on the Third-party Privacy Control into Algorithmic Governance Framework: Linking Users' Presumed Influence with Control Agency Theory. *International Journal of Public Opinion Research*, *35*(4), edad036. https://doi.org/10.1093/ijpor/edad036.
- Liu, Q. (2022). Data Security Certification: Third Party regulations for Personal Information Protection. *Law review*, 43(1), 118-130. https://doi.org/10.13415/j.cnki.fxpl.2022.01.010.
- Liu, Q. (2021). On the Principles of Legality, Legitimacy and Necessity of Personal Information Processing. *Jurists*, 33(5), 15 + 1-191. https://doi.org/10.16094/j.cnki.1005-0221.2021.05.001.
- Liu, Y. (2022). Analysis on the construction of juvenile protection system in China. *Youth to explore*, 40(1), 60-70. https://doi.org/10.13583/j.cnki.issn1004-3780.2022.01.006.
- Lu, J. (2022). Challenges, responses and logic of Minors' network protection in the Digital Age. *Young reporter*, 82(15), 84-87. https://doi.org/10.15997/j.cnki.qnjz.2022.15.037.
- Lv, B. (2021). The dilemma of "consent" in Personal information protection and its solution. *Local research*, 65(2) 87-101. https://doi.org/10.16390/j.cnki.issn1672-0393.2021.02.007.
- Meng, X. (2023). On the legal protection of parents' Information rights and interests of Minor Children in the digital Age. *Guangxi great learning journal (philosophy and social science edition)*, 75(5), 184-192. https://doi.org/10.13624/j.cnki.jgupss.20221209.002.
- Shi, J. & Liu, S. (2021). Personal Information Protection in Face Recognition Technology: On the Construction of Dynamic consent model. *Law of finance and economics*, 6(2), 60-78. https://doi.org/10.16823/j.cnki.10-1281/d.2021.02.005.
- Tong, J. (2023). The prosecutorial path most conducive to the application of the Principle of minors. *Chinese journal of criminal law*, 33(1), 3-15. https://doi.org/10.19430/j.cnki.3891.2023.01.007.
- Wan, F. (2019). The Principle of consent terms in Privacy Policy and its alienation. *Legal science* (northwest big learning journal of political science and law), 36(2), 61-68. https://doi.org/10.16290/j.cnki.1674-5205.2019.02.010.
- Wang, L. (2022). On the Right to Delete Personal Information. Oriental law, 15(1), 38-52. https://doi.org/10.19404/j.cnki.dffx.20211231.006.
- Wang, L. (2024). Construction of a Model for Personal Information Data Property and its Rights Enforcement and Authorisation. *Journal of Shanghai Normal University (Philosophy and Social Science Edition)*, 53(3), 108-121. https://doi.org/10.13852/j.cnki.jshnu.2024.03.012.
- Wang, Q. & Song, L. (2021). Perfection of Cyber security risks and preventive Measures for Minors in China. *Journal of law*, 42(4), 91-100. https://doi.org/10.16092/j.cnki.1001-618x.2021.04.009.
- Wang, Y. (2022). Realistic dilemma and path optimization of minors' personal information protection. *Era of law*, 24(6), 79-86. https://doi.org/10.19510/j.cnki.43-1431/d.2022.06.007.
- Yang, W. (2024). Institutional logic, normative interpretation and reinforcement of consent rules for Sensitive Personal Information disclosure. *Law of finance and economics*, 10(1), 100-115. https://doi.org/10.16823/j.cnki.10-1281/d.2024.01.007.
- Yu, C. (2023). Social Theory Reconstruction of Privacy in the Digital Age. *Chinese law*, 40(2), 169-188. https://doi.org/10.14111/j.cnki.zgfx.2023.02.009.
- Zhang, L. (2024). Development and challenges of accessible MOOCs: A systematic literature review based on international research. *Electrochemical education research*, 45(5), 113-120. https://doi.org/10.13811/j.cnki.eer.2024.05.015.
- Zhang, Y. (2023). Government's governance responsibility in the field of personal information protection from the perspective of risk prevention. *Journal of Yunnan Administration College*, 25(2), 136-148. https://doi.org/10.16273/j.cnki.53-1134/d.2023.02.012.
- Zhao, P. (2023). "Risk-Based" Protection of Personal Information? *Law review*, 44(4), 123-136. https://doi.org/10.13415/j.cnki.fxpl.2023.04.010.
- Zhu, X. (2020). Evaluation criteria of the principle of maximum interests of Minors in custody disputes. *Legal science (Journal of Northwestern University of Politics and Law)*, 38(6), 86-99. https://doi.org/10.16290/j.cnki.1674-5205.2020.06.014.

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Ethical Declaration and Committee Approval

In this research, the principles of scientific research and publication ethics were followed. Ethics committee permission is not required.

Proportion of the Authors' Contribution

The first author Jiang lies in the selection of the topic and the overall structure of the article, accounting for 40% of the contribution.

The second author's Tu contribution involves the collection of literature and the drafting of the manuscript, accounting for 30% of the contribution.

The third author (corresponding author) Zhu contributed to data collection, processing, and the polishing and revision of the entire manuscript, also accounting for 30% of the contribution.