

## Smart Education & Legal Governance

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**Abstract:** Smart education refers to intelligence of educational environment, educational resources, education management and education services, which is used to achieve positive interaction among education bodies. Smart education regards information processing as the carrier, and intelligent operation as the measure. Legal governance should be the pre-issue to deal with the development of education which integrates into smart education system so that fundamental rights to education bodies would be promised. As a consequence, the healthy development of education would be expected in the future.

### I. Introduction

Yuan Guiren, the Minister of Education, made a speech in 2014 National Education Conference in January 15th, who believed that in order to crack central and difficult issues; we must accelerate the modernization of education governance systems and capacities. Smart education is an important mean to achieve the modernization of education governance systems, which will be the significant measure to crack these central and difficult issues.<sup>[1]</sup> However, the academia predominantly focus on technical aspects when it comes to the exploration of smart education, such as smart campus, smart virtual lab, smart library system, smart learning platform etc.<sup>[2]</sup> Regretfully, there are only some scholars concerned about the core of smart education,<sup>[3]</sup> the subject of smart education<sup>[4]</sup> etc. In addition, no articles pay attention to the relationship between smart education and legal governance up till now, which would be the issue of this paper.

### II. Does smart education need legal governance or not?

As for smart education, it is not enough to rely solely on information technology, some other difficulties. Both the risk prevention of smart educational system and the liability verification call for legal governance. In order to prove comprehensively the proposition of "smart city needs legal governance", we select three subsystems of smart education as research objects.

Firstly, the intelligence of educational environment needs legal governance. Educational environment subsystems can be divided into three aspects including education natural environment, education social environment as well as education spiritual environment. All of the above are involved in the collection and processing of information. Education natural environment regards campus as core boundary and family as expanding space. When violations happened inside the campus, the law would get involved. The installation of cameras in public spaces, which can be achieved on similar issues of information collection and evidence preservation to some extent, is necessary in smart education's construction in details. On the contrary, improper layout of the cameras is easy to abuse the privacy of subjects related to the education system. Education social environment is a rather complicated system, which involves the relationship among main subjects of education, and these are relationships between parents and children, students and teachers and so on. Different subjects in the social exchange process will orally or in writing, to form a "trace" of education social environment. These are messages. Subject interaction determines the information that can be quickly spread among different groups. Therefore, legal intervention must be expected which ensures information utilization properly. Education spiritual environment belongs to a closed and private space, although this is not absolute. Thoughts and emotions constitute the content of

education spiritual environment and become tangible information when they are exhibited in the form of text. Log is a typical representative of the tangible object relating legal issues. All violations, whether peek, disclosure others' log or distorting facts, will involve legal governance.

Secondly, the intelligence of educational resources needs legal governance. With the development of educational practice, educational resources are constantly being rich and becoming core resources as intelligence of education. Specifically, they include the sum of the philosophy of education, educational knowledge, educational assets, educational skills, education experience, education system, education brand, educational character, educational facilities, and relationships inside and outside the field of education. <sup>[5]</sup>The welfare and mobility of educational resources determine those that are easy to obtain. Even so, not all of the educational resources are available free of charge otherwise these will not become competitive among today's university core resources. For example, education brand is unique, and improper use will infringe the reputation or goodwill of the brand owners. Moreover, teachers have intellectual property rights for their individualized teaching resources, which should not be infringed by improper use of others. Therefore, the intelligence of educational resources needs legal governance.

Thirdly, the intelligence of education management and services needs legal governance. Education management is the manager's activities to achieve goals of education management efficiently by organization and coordination of education team, during which managers need make utilization of human, material, financial and other information as well as a variety of favorable conditions within education. <sup>[6]</sup> Although education services are somewhat similar with education management, educational service system is no longer a kind of relationship between managers and counterparties, but an equitable relationship between service providers and the recipients. During the process of smart education management, managers, who are responsible for counterparties, play the roles of collectors and processors for information; Counterparties, who have close interest association with information, are providers and owners for information. In this process, if managers collect and sell non-essential information in the name of information collection, it would be regulated as administrative misconduct. In other cases, if managers are failed in fulfilling their obligations of information management, resulting in the manager's information is stolen; they would be responsible for administrative omission. Compared with the traditional education management, intelligence of education management needs more legal governance. Owing to intellectualized processes, it is inexpensive and convenient to achieve information. For education services, the information is treated and collected by valid contract and contract itself is a mean of governance.

### **III. How to realize legal governance of smart education?**

Smart education requires more effective legal governance, but the latter does not run automatically. Legal governance itself is a systematic project which should be realized throughout the system of smart education. Given considerations of the realization of legal governance of smart education, the following three aspects should be discussed.

The first aspect is the legal governance of information collection of smart education system. Every student might have an uncomfortable experience when his personal information is collected comprehensively during the high-education. It can even be said that all the information is traceable within the scope of collection except for fluctuations of the emotional moods. Therefore, we need to take the problem seriously. In terms of information collection of smart education system, this paper believes that legal governance should play a role in the following aspects: (1) the principle and standard of information collection. Information collection should abide by the principle of necessity, legitimacy, reasonability and convenience, also in addition with the standard of clarity, timing, and specificity. (2) The scope and content of information collection. Both should be stipulated in the form of norms to realize the legitimacy and rationality of information collection. (3) The way and time of information collection. The information collection should be open, negotiable and limited within a specific period. It should never be without limits of authority. (4) The handling of improper or illegal information collection. In this respect, the legal norm such as the criminal law, administrative law and civil law should impose the corresponding subjects with criminal

punishment, civil compensation, or administrative liability according to the specific circumstance. The second aspect is the legal governance of information management of smart education system. Information management is the intermediate of information collection and information usage, acting as a bridge in the legal governance of smart education. Information management often appears in the interface of management information system; however, it is supported by all kinds of information and data in the back of the interface.<sup>[7]</sup> The process of information management not only involves managers themselves, but also relationships among managers and between managers and the managed. If there exists any misbehavior like information leakage or information sale due to mismanagement, these legal disputes might be occurred. Therefore, Legal governance should intervene in the information management of smart education. The role of legal governance can be specified in the following three aspects: (1) Constraints of subjects in the information management. The operation of information management system requires the setting of procedures by managers with the standard of time and science. The managers are in the dominant position. Therefore, in order to regulate the behaviors of managers, it is necessary to introduce hierarchical management regulations and accountability system, which reflects activeness of legal governance. (2) The intrinsic requirement of information management. Information management is prone to "information dictatorship" or "information anarchy". The law can balance the two extremes, for example, by imposing obligations to disclose material facts. (3) The control of information management process. Management is an active and procedural behavior. The initiative of behavior will generate "centrifugal movement", which needs to be regulated by legal norms. The process-oriented behavior will lead to mutual shirk responsibility among managers. It needs to be controlled by legal norms that providing scientifically for the appropriate allocation of responsibilities.

The third aspect is the legal governance of information usage of smart education system. Information usage is the "key factor" for the effective operation of smart education system and often matched with high value. If the corresponding rules are absent, information abuse or even illegal use may occur. Therefore, in order to meet the requirements of both legitimacy and rationality while using information of smart education system, the law should be taken as the criterion. Specifically, during the use of information, legal governance plays a part in these three aspects: (1) the subjects of information usage. Information can be divided into public information, local information and private information. Public information has no attributes because it is open to everyone; Local information is only authorized to specific groups, that is to say, the use of these information needs to meet certain conditions; Private information completely belongs to the individual, who approves the use of information every time. (2) The way and time of information usage. The way and time of the use of different information according to the classification of information should be specified, especially for local information and private information. (3) The handling of improper or illegal use of information. Tort liability is imposed upon the behavior of improper use and administrative, civil or even criminal liability should be imposed upon illegal user of information when necessary.

#### **IV. Summary and Conclusion**

Legal governance plays an important role in the smart education, which is not only normative operation of modernization of educational governance capacity, but also the requirement of transformation conform to "education paradigm" <sup>[8]</sup> to achieve Science and Humanity of smart education. To this end, in the constituted process of "National Informatization Development Strategy", "Smart City Development Planning" and "Educational Development Program", we should take into full account the legality, rationality, scientificalness and feasibility of legal governance.

In addition, the legal governance does not run automatically in the smart education system, and different groups play a different role in this system. For example, the legislators are creators of legal rules, the subject of information are information providers or users, the judicators are last guardians, and the people involved in the news media are publicists of public opinion and propaganda, that they make the operation of this system more efficiently. Therefore, to be packages deal with these

issues, we should make different groups play their respective roles, and suggest that the legislation of "Development Program of Smart Education" as soon as possible.

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### **References**

- [1] Yang Xianmin, Liu Yongqian, et al: *The Development Strategy and Path Choice of Smart Education in China*, Modern Educational Technology, 2014, No. 1, P. 12.
- [2] He Xitao, et al: *Smart Education*, Tsinghua University Press, Beijing 2012, P. 20-118.
- [3] Liu Qingchang: *Thinking Education: the Core of Smart Education*, Jiangsu Education Research, 2010, No.18, P. 9-11.
- [4] Xu Yingping: *Wisdom Education Returns Back to Teacher Wisdom*, Theory and Practice of Education, 2011, No.13, P. 33-36.
- [5] Lorena Bătăgan, Cătălin Boja: *Smart Educational Systems and Education Clusters*, International Journal of Education and Information Technology, Vol. 5(2011), P452-460.
- [6] He Jia: *Reasonable Incentive: Innovation and Breakthrough of Education Management*, China Science and Technology Information, 2009, No.11, P. 261-263.
- [7] Choo C.W. et al: *Working with information: Information management and culture in a professional service organization*, Journal of Information Science, 2006, No.6, P. 491-510.
- [8] Zhao Chunlei: *On Logical Transformation and Contemporary Reflection of Educational paradigm*, Jiangsu Higher Education, 2013, No.3, P. 23-25.