

Analysis and Enlightenment of User Agreements Based on the Three Smart Teaching Tools of Rain Classroom, DingTalk Live Broadcast and Tencent Classroom in the Post-Epidemic Era

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Abstract

A sudden epidemic disrupted the established teaching plan. With the gradual in-depth development and normalization of online teaching, the transformation of online teaching in the post-epidemic era is the first to be affected. This article selects three types of smart teaching tools: Rain Classroom, DingTalk Live Broadcast and Tencent Classroom, analyzes and summarizes the technical characteristics of the three, and then uses the user agreements of the three as samples to find the similarities and differences and existing problems, and finally puts forward optimization suggestions.

Key words: Post-epidemic era; Rain classroom; DingTalk live broadcast; Tencent classroom user agreements; Text analysis

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1. INTRODUCTION

A sudden epidemic has forced the traditional classroom teaching to be temporarily ceased. However, supported by modern technology, the three smart teaching tools which include Rain Classroom, DingTalk Live Broadcast and Tencent Classroom, have allowed the continuation of subject teaching to some extent, enabling teachers and students to experience an informatization teaching

reform. The reform has promoted teachers' awareness and ability of information technology application, enhanced the informatization literacy of teachers and enriched the teaching resource system. The model of Tencent Classroom plus Rain Classroom or DingTalk Live Broadcast plus Rain Classroom, which combines interactive live broadcast platform and online teaching platform, allows teachers and students to maintain good communication and interaction. After continuous exploration and practice, better teaching effect has been achieved. However, it is worth noting that what are the deep thinking behind all the three smart teaching tools after the epidemic? Based on the technical characteristics of the three, this article analyzes and summarizes the user agreements of Rain Classroom, DingTalk Live Broadcast and Tencent Classroom, in doing so, providing references for the subsequent formulation of user agreements for similar smart teaching tools is expected.

2. DEFINITION AND CONTENT OF USER AGREEMENTS

User agreement refers to the agreement that the programmer or equipment provider requires the user to abide by when using the program or equipment; simply put, it can be regarded as a form of contract. The user agreement mainly appears during the installation process or use of the program. Only when the user agrees to the user agreement, can the program and equipment be used properly. A formal user agreement can regulate user behavior, protect user privacy, protect users from potential harm and ensure the orderly operation of the smart teaching tools. In short, it also protects the rights of users while safeguarding the benefits of the smart teaching tools itself.

Generally speaking, a complete user agreement should include at least the following terms: the beginning of the agreement (key reminders), service introduction, service

specifications/code of conduct, service fees, intellectual property terms/complaint guidelines, copyright: published content (text/ picture/audio/video); software/program license usage, trademark rights, patent rights, personal information protection clauses/privacy policies, service modification and termination, exemption clauses, breach clauses, applicable laws and dispute resolution and communication clauses and etc. Of course, each clause can be expanded according to the product content and the actual needs of the operator.

Furthermore, service introduction, service specifications and personal information/privacy clauses are the key terms that need to be improved. As for the different functions and service methods of each product, these terms need to be carefully considered and accurately described by the operator. For example, for a knowledge sharing platform, how to manage and regulate the content of the platform requires careful consideration and balance of the rights and interests between users and platform operators.

3. THE TECHNICAL CHARACTERISTICS AND TEXT ANALYSIS OF THE USER AGREEMENTS OF THE THREE SMART TEACHING TOOLS OF RAIN CLASSROOM, DINGTALK LIVE BROADCAST AND TENCENT CLASSROOM

3.1 Analysis of the Technical Characteristics of the Three Smart Teaching Tools

3.1.1 Technical Characteristics of Rain Classroom

Rain Classroom is a smart teaching tool software that integrates WeChat, MOOC and courseware. It is brand new in terms of comprehensively enhancing the classroom teaching experience and more convenient and frequent interaction between teachers and students. That is to say: teachers can upload pre-class preview courseware with videos, exercises and voices onto students' mobile phones, and assign practice tasks such as pre-class preview and after-class review onto students' mobile phones to remind them. Moreover, they can also observe each student's performance of conducting preview and review and corresponding statistical data, thus, teachers and students can communicate and give feedback in time. During the class, teachers can actively and effectively carry out teaching based on the feedback results, and use the real-time answering and interactive function of barrage to realize the purpose of teaching listening, speaking, reading and writing simultaneously, and one-to-one, one-to-many teacher-student interaction can also be realized.

Rain Classroom overturns the traditional teaching model of teaching-listening-practice that has been dominant in China for many years. It integrates

information technology into learning activities before, during and after class, and emphasizes three key phases that incorporate pre-class video preview on mobile phones, in-class exercise discussion and after-class consolidation of feedback, which maximizes the realization of teachers' ubiquitous smart teaching, and at the same time, maximizes the autonomy and coordination of students, and brings teachers and students even closer. Rain Classroom covers every teaching link before, during and after class, providing teachers and students with complete three-dimensional data support, personalized reports and automatic task reminders, making teaching and learning clear.

3.1.2. Technical Features of DingTalk Live Broadcast

DingTalk live broadcast is more in line with the full online teaching model, and can solve the problem that students cannot participate in face-to-face lectures in the classroom in the post-epidemic era. Teachers in charge choose to share the desktop mode live broadcast, and they can share courseware, pictures, audios and videos with students as they like; its simulcast function enables multiple groups to be broadcast at the same time, up to 45 groups; the interactive panel and the mike-linking function can enhance the interaction between teachers and students; the home-school-based function can upload and collect assignments. Furthermore, the DingTalk video conference function can meet various meeting requirements and individual student guidance.

In addition, DingTalk live broadcast also has a punch-in function, which urges students to punch in and study on time every day. It can also collect various data related to course teaching, such as statistics of students' attendance and participation time. In addition, DingTalk also has a live broadcast playback function, which is conducive to students who fail to attend class on time due to various reasons. They can watch the replayed course, systematically study the knowledge points to consolidate.

3.1.3 Technical Characteristics of Tencent Classroom

Tencent Classroom is an online education platform developed and operated by Tencent. Tencent Classroom has many advantages: it is not restricted by location or time, applicable to large classes and group interaction; it allows students in ordinary schools to have opportunities to listen to lectures by famous teachers, teachers and students in the outlying suburbs have the opportunity to access high-quality educational resources, which helps equalize education; and it also helps cultivate students' initiative in learning.

Tencent Classroom is connected with QQ and QQ groups. Relying on the characteristics of real-time online communication, students can enjoy after-school tutoring after the live broadcast, such as English, politics, advanced mathematics and other subjects. It is more important to discuss together with many other test takers to memorize the learning materials rather than just one person. In

addition, postgraduate entrance examination courses offered by Tencent's classroom also have professional courses such as art, fashion design, and accounting, which are divided into two modes: live broadcast and recorded broadcast. Candidates can flexibly arrange time for online learning.

3.2 Text Analysis and Existing Problems of the User Agreement of the Three Smart Teaching Tools

Through repeated deliberation and comparison on the user agreement contents of the three smart teaching tools of Rain Classroom, DingTalk Live Broadcast and Tencent Classroom, there are mainly five existing problems in the user agreement to be discussed: poor reading experience, excessive collection or use of user personal information, and insufficient user choices when seeking user authorization and consent, use and disclosure of the information by the third parties, and lack of reasonable reminders for important terms.

The user agreement is based on the licensing policy and mutual respect and negotiation, but the responsibility is more based on maintaining the interests of the three smart teaching tools. There are five problems as follows:

3.2.1 Poor Reading Experience

The user agreements of the three smart teaching tool APPs cover seven or even eight pages, and at least four or five pages. It is difficult for most users to read all the terms patiently and carefully. Take Rain Classroom as an example, its user agreement has at least thousands of words, and there is no obvious space between each point and the next point. The various terms are densely packed up on a single mobile page. It is extremely laborious to read and difficult for users to be interested in reading the text completely. When a user registers an account, the agreement is already taking effect when "I agree" is checked in the box. Most users don't read the lengthy terms carefully, and rarely do they question the content of the terms.

3.2.2 Excessive Collection or Use of User Personal Information

The three smart teaching tools have the problem of excessive collection or use of user personal information, such as address book information, identity information, mobile phone number and location information. The first two categories involve the user's personal privacy and indeed they are very sensitive information. For example, Rain Classroom not only requires users to provide their name, contact information, gender, date of birth, school, class, student ID, occupation when registering for an account course to study. And personal information such as camera pictures collected at the request of educational institutions or invigilators when studying for an exam is also required. What's more, information concerning user's learning performance and learning mode, as well as the content, sequence and time of the web pages that the

user has visited, and related super Links and other user interface controls, etc are also requested.

Tencent Classroom requires users to actively provide regular information such as name, mobile phone number, QQ, WeChat ID, province and city, education, personal delivery address, courses of interest, etc., and it also requires users to provide permissions in terms of microphone, storage and camera. It is worth mentioning that in the privacy policy of Rain Classroom, the personal information it collects is not clearly linked to the product functions it realizes. Many of the personal information is not obviously related, even beyond the reasonable range, and some of the reasons are unclear, far-fetched, some terms are too professional, leaving users confused, such as in one of the privacy clauses stated: in order to protect your normal use of our services, maintain the normal operation of our services, improve and optimize your service experience, we may collect information such as your device model, system version, network type, unique device identifier (such as identification code of IMEI, MAC, IMSI), APP crash records, traffic statistics, operation logs and etc.

There's another similar example as stated in the privacy clauses: when users use mobile phones to learn in Tencent classrooms, the unique identification information of brands such as Xiaomi, Huawei, VIVO, OPPO is required to be collected, and parameters such as mobile phone model, system type, system version, device screen size, etc. will also be needed. The only purpose listed in the clause is for the future publicity of Tencent Classroom product information. It also lists ten situations in which Tencent Classroom may collect and use user-related personal information without requiring the user's authorization.

As for DingTalk Live Broadcast, there are also too many cases involving in excessive collection of user information. Once DingTalk is successfully registered, DingTalk will identify the user's identity and authorize login based on the user's identity elements. Identity elements include but are not limited to the user's account name, password, SMS verification code, mobile phone number, ID number, face information and eye print information. The user is supposed to properly keep the above information and bear full responsibility. The above-mentioned clauses are general and unclear, and fail to explain the purpose of collecting and using all the sensitive personal information. Moreover, the collection of such a large amount of personal information that is not related to the provided services seriously violates the privacy of users.

3.2.3 When Seeking User Authorization and Consent, Insufficient Choices Are Given to the User

The privacy policy is a document of basic rights and obligations between enterprises and users on how to handle and protect users' personal information. Tencent

Classroom formulates Tencent Classroom Privacy Policy to help users understand the collection, use, storage, and sharing of personal information, as well as the relevant rights that users are entitled to.

Rain Classroom helps users understand the user agreement by formulating Rain Classroom Privacy Policy, which clearly states at the beginning of the policy: If the user does not agree to the terms of this privacy policy, the user will not have the right to visit, browse or register in Rain Classroom. If the user chooses not to provide the necessary information Rain Classroom requires, he or she may not be able to create the user's account, this results in that the user does not have any room to choose. Only by accepting the terms in the privacy policy can the user have the right to use Rain Classroom.

3.2.4 Use and Disclosure of Information by the Third Parties

Tencent Classroom makes a clear promise in the user agreement that it will not publicly disclose the collected user's personal information. If public disclosure is necessary, it will inform the user of the purpose of the public disclosure, the type of information disclosed, and the sensitive information that may be involved, and ask for the user's express consent. In addition, Tencent Classroom emphasizes that, except for product functions, Tencent Classroom promises that it will not actively share or transfer users' personal information to a third party. If sharing with a third party is required, the third party will obtain the user's consent first, however, it also clarifies that personal information can be shared, transferred, and publicly disclosed under six circumstances without prior authorization and express consent of users.

Slightly differing from Tencent Classroom in terms of wording in the user agreement, Rain Classroom may share collected user information with third parties under seven circumstances, such as for scientific research purposes, integration with third-party services, and representatives of Rain Classroom or related universities, sharing information with service providers and contractors that perform certain functions or some affiliated institutions, etc. Rain Classroom uses the term that information that MAY be shared with third parties instead of seeking explicit consent from users in advance.

In order to operate and realize its functions, DingTalk needs to obtain a large number of sensitive permissions on personal privacy and collect personal information in the device. However, DingTalk is obliged to protect the privacy of users while obtaining these permissions and information by itself or by authorizing a third party. However, whether DingTalk can effectively fulfill its obligations is a long-term concern.

3.2.5 Lack of Reasonable Reminders for Important Terms

As an electronic format contract, the user agreement shall prompt users to pay attention to relevant important

clauses in a reasonable manner. For example, important clauses are drawn to users' attention in prominent ways such as bolding, highlighting, and pop-up display. The three smart teaching tools, Rain Classroom, DingTalk Live Broadcast and Tencent Classroom, fail to provide reasonable prompts to users about the important terms in the user agreement, making users easily ignore important information when accepting the terms and make wrong judgments.

In addition to the above-mentioned problems, the three smart teaching tools also provide some featured services: for example, Tencent Classroom clearly lists the user's rights in the user agreement: such as query, access, deletion, correction of the user's own information, and withdrawal of consent and account cancellation, and it also provides very specific operation settings for users' reference when accessing, correcting, deleting, withdrawing consent, logging out, canceling, and changing personal information.

As for Rain Classroom, it has formulated a code of integrity convention with the focus on cooperation. For example, users who use Rain Classroom are required to make promises as follows: complete mid-term and final exams with their own efforts, and will not submit any other users' homework or achievements; own only one user account and will not let other users use their accounts and passwords; will not engage in any dishonest behavior to improve performance or damage other users' performance. In addition, Rain Classroom clearly advocates that users should cooperate with other users to complete the course learning. Quite different from Tencent Classroom and DingTalk Live Broadcast, it also clearly introduces the policies, reasons and scope of two types of cookies, namely session cookies or persistent cookies.

4. OPTIMIZATION SUGGESTIONS

The study found that the user agreements of the three smart teaching tools of Rain Classroom, DingTalk and Tencent Class are unequal. The agreements take care of the interests of the three, probes the users' personal privacy to a certain extent, and places the users in a weaker position to accept the clauses. Therefore, suggestions are offered from the following aspects:

Firstly, in terms of personal information rights, users should have the right to decide whether or not personal information is collected and how to be used. The related laws and regulations need to be promulgated and refined. Users need to actively improve their media literacy and legal awareness, and protect their own legal rights and interests; secondly, in terms of the right to choose independently, users should have the right to choose whether or not to accept certain terms in the agreement. User rights and important terms must

be listed and highlighted, so that users have the right to choose freely; thirdly, in the use and disclosure of information by third parties, users should have the right to be informed in advance, and it must be clearly marked in the user agreement, without any ambiguity or shirking responsibility.

5. CONCLUSION

Although the three smart teaching tools of Rain Classroom, DingTalk Live Broadcast and Tencent Classroom had to be activated because of the epidemic, they are not only solving the problem of forced cease of offline education. The three are no longer just emergency measures, instead they are gradually becoming new education formats, and the new online and offline blended education model that has been opened up will have a multi-faceted impact on future classrooms, campus and future education. Through the text analysis of the three user agreements, the existing problems are discussed and optimization suggestions are put forward. A user agreement with clear rights and responsibilities and reasonable wording is related to the vital interests of users and clarifies the responsibilities and rights of users for using the three teaching tools; it can guarantee users' equal use and protect user privacy, instead of being forced to accept the clause in the agreement.

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