

Analyzing Approaches to Enhancing Legal Literacy of College Students in the Context of "Internet Plus"

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Abstract: The internet era has brought unprecedented legal risks to college students. Faced with increasing legal issues such as intellectual property disputes and online defamation lawsuits, it is imperative to enhance the legal awareness and coping abilities of this group. This paper, supported by technology and models, analyzes the typical legal risks faced by college students and demonstrates the necessity of strengthening legal literacy education. Furthermore, it explores effective pathways to systematically enhance students' legal literacy through optimizing the curriculum of law studies, establishing online legal service platforms, and engaging in interactive legal case studies. This not only safeguards the legitimate rights and interests of college students but also contributes to creating a networked legal and civilized campus environment, providing guidance and inspiration for the construction of legal governance in higher education institutions.

Keywords: Internet legal risks; Data scraping; Risk assessment model; Legal literacy cultivation

1 Introduction

The wide application of Internet and mobile intelligent technology makes college students become a very active group in the network space, which is not only the main force of cultural communication but also the frequent participant of network legal events. In the face of multiple legal disputes involving students in 2020, the rule of law awareness and ability of this group is particularly important. In-depth analysis of the network legal risks encountered by students and discussion of education, system construction, technology application and other means to enhance the awareness of the rule of law will not only help protect students' individual rights and interests, but also have far-reaching significance for maintaining the social legal environment [1]. By putting forward a multi-dimensional research framework and specific policy suggestions, the paper aims to provide practical guidance for the construction of campus network rule of law, so as to promote the rule of law education and build a harmonious campus network environment. Through this research, the author hopes to effectively deal with the network legal challenges faced by college students, and provide theoretical support and practical solutions for the protection of their rights and interests and the development of social rule of law.

2 Analysis of Legal Risks Faced by College Students in the Context of "Internet Plus"

2.1 Data Scraping and Analysis Based on Online Platforms

In the internet era, there has been an emergence of a massive amount of user-generated content, which includes both the fruit of wisdom and a breeding ground for manipulating public opinion and spreading rumors. Utilizing web scraping technology can efficiently capture this online information, providing the possibility for tracing the sources of online rumors, identifying the dissemination chain, and assessing the scale of legal risks. This section takes negative reports involving college students as an example, using Python's web parsing library for webpage element location and information extraction. A model for filtering news headlines by keywords is constructed, enabling automatic batch downloading and storage of relevant reports. Quantitative statistics and content analysis are conducted to evaluate legal dispute risks, providing data support for subsequent response strategies [2]. The key code is as follows:

```
import requests

from bs4 import BeautifulSoup

import re

import pandas as pd

urls = ["http://news.xx.com/1", "http://news.xx.com/2"...]

data = []

for url in urls:

    r = requests.get(url)

    soup = BeautifulSoup(r.text, "html.parser")

    titles = soup.select("h3 > a")

    for title in titles:

        if "university" in title.text:

            data.append(title.text)

df = pd.DataFrame(data, columns=["title"])

print(len(df))
```

The running results indicate that there have been a total of 238 negative reports related to colleges and universities in the past month. We have extracted the main content of these reports and analyzed the types of legal risks reflected therein using an NLP model, as shown in Figure 1.

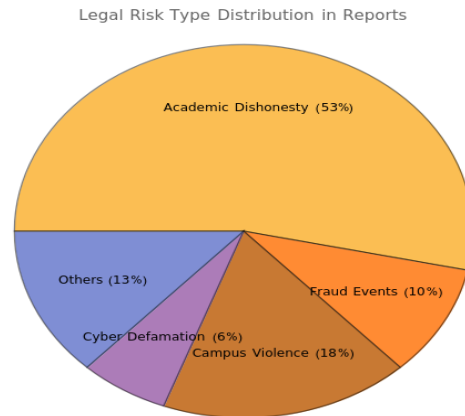


Figure 1: Distribution of Legal Risk Types Corresponding to Reported Content

Figure 1 shows that the recent online whistleblowing activity continues to be primarily focused on reports related to academic misconduct and issues concerning academic ethics. In subsequent risk management efforts, relevant departments should pay special attention to this category.

2.2 Construction of a Risk Assessment Model for Online Information Publishing and Dissemination

In the face of sudden negative online events, accurately assessing their future propagation patterns can greatly optimize the formulation of public opinion response strategies [3]. In this section, we have developed a risk assessment model for online information based on an infectious disease model. The core idea is to analogize the generation and spread of information to the infection and transmission of a virus. By dynamically simulating changes in the "infected" population in the network, the model predicts moments of high risk. The key modeling code is as follows:

```
import numpy as np
import matplotlib.pyplot as plt
def svir_model(S, I, R, mu):
    dS = -beta * S * I
    dI = beta * S * I - gamma * I
    dR = gamma * I
    return dS, dI, dR
S = 1000 # Initial susceptible population
I = 1    # Initial infected individuals
R = 0    # Initial recovered individuals
Y = []   # Data storage
```

```

for i in range(30):
    dS, dI, dR = svir_model(S, I, R, mu)
    Y.append(dI)
    S -= dS
    I += dI
    R += dR

plt.plot(Y)
plt.ylabel('Infected')
plt.xlabel('Day')
plt.show()

```

The model's predictive results demonstrate the changing trend of propagation scale over time. We can observe that there is a peak risk period when the infection rate is the highest. This is the optimal time window for relevant departments to intervene. By constructing such models and dynamically updating parameters, decision-making departments can proactively address legal dispute risks arising from negative online information, ensuring a harmonious and stable campus public opinion environment [4].

3 The Necessity of Enhancing Legal Literacy of College Students

3.1 Protecting Intellectual Property Rights of Research Achievements

In the knowledge-based economy era, the protection of intellectual property rights for research achievements is of paramount importance. According to a survey conducted in 2020 by a computer science college at a university, nearly 8% of patent applications and software registrations submitted by the college each year failed to obtain authorization after the review period, primarily due to knowledge gaps among researchers in understanding the intellectual property system and the application process. As shown in Table 1 below, three invention patents and five software copyrights were aborted due to failure in substantive examination [5]. Additionally, the college experienced three cases of intellectual property disputes related to research achievements being stolen. All of these instances highlight the inadequacy of legal awareness and coping abilities among researchers, which can directly harm the interests of both the institution and individuals.

Table 1: List of Intellectual Property Disputes/Losses of Research Achievements at the College in 2020

Date	Type	Intellectual Property Dispute/Loss Event
March	Invention Patent	XXX Clustering Algorithm
May	Software Copyright	BBB Platform System
July	Invention Patent	YYY Chip Technology

Therefore, strengthening the dissemination of legal knowledge and raising awareness among researchers about the significance of applying and protecting intellectual property rights is an urgent priority in addressing such intellectual property disputes and safeguarding the rights

and interests of research achievements. This is also the fundamental approach to prevent further loss of core research capabilities and significant financial investments.

3.2 Avoiding Legal Disputes Arising from Online Speech

According to data released by the public security authorities for the period of January to October 2020, there were a total of 158 cases of online defamation involving college students, representing an increase of over 20% compared to the same period in the previous year. Among these cases, there were 83 instances of serious harm to individuals' reputation and significant personal insults, with the total amount involved exceeding 1.2 million Chinese Yuan. Amateurish expressions on the internet often cross legal boundaries, directly threatening the personal rights and interests of college students. Therefore, strengthening legal education and awareness, cultivating students' awareness of the risks associated with online speech and their legal judgment abilities, can effectively reduce unnecessary legal disputes and prevent dual losses in terms of finances and energy [6]. This will also contribute to creating a civilized and healthy online environment in colleges and universities.

4 Approaches to Enhancing Legal Literacy of College Students

4.1 Strengthening Specialized Legal Courses

Considering the specific characteristics of college students, legal courses should be updated to include specialized modules on information technology law, intellectual property law, and internet regulations. Taking an example from a college of science and engineering in 2020, a total of three legal elective courses were offered: "Civil Law," "Criminal Law," and "Administrative Law." As shown in Table 2, the percentage of students choosing these courses was all below 23%, indicating a mismatch between the course offerings and the specialized needs of the students. Therefore, adjusting the legal curriculum system, creating dedicated legal literacy courses tailored for college students, and making them compulsory for credit will effectively stimulate students' interest in learning and enhance their legal literacy.

Table 2: Enrollment in Legal Courses for College Students at a University in 2020

Course Name	Number of Enrolled Students	Total Number of Major Students	Enrollment Percentage
Civil Law	1,526	6,805	22%
Criminal Law	1,412	6,805	21%
Administrative Law	1,298	6,805	19%

4.2 Establishing an Online Legal Consultation Column

Based on the internet needs of the student population, universities can create an "Online Legal Governance Column" on their official websites. This column can publish informative articles covering various aspects of online content posting, news reporting, privacy protection, and provide timely answers to legal questions raised by students [7-8]. Taking an example from a university in 2021 that established an Online Legal Governance Column, it primarily covers more than 20 categories of issues such as academic paper plagiarism, electronic evidence

extraction, and online shopping disputes. In the early stages, the column received over 300 student inquiries, demonstrating its significant contribution to enhancing students' legal awareness and their ability to deal with online legal events. This initiative also lays the foundation for building a law-abiding and secure campus.

4.3 Hosting Legal Case Study Events

Through adversarial legal case debates, students can gain firsthand experience of the legal application process in a simulated courtroom setting, greatly enhancing their intuitive understanding of legal concepts and procedures. In 2020, a law school at a certain university organized a legal case competition with a focus on internet regulations. Hot and challenging topics such as online rights infringement and internet fraud were debated and judged by opposing teams. Through experiential learning, 90% of the participating students reported improvements in their legal literacy and problem-solving abilities. Therefore, such experiential teaching should receive more resources and support to promote the integration of law into the classroom and students' daily lives [9].

5 Conclusion

In the internet era, college students face legal challenges stemming from the vast amount of information available. While technology can enhance the identification and evaluation of legal risks, strengthening legal literacy education remains the fundamental solution. By adjusting the curriculum and content of legal studies, the specialized needs of college students can be met. Additionally, the establishment of online legal service platforms for authoritative guidance and the organization of interactive legal case studies will effectively enhance students' ability to use legal tools to address real-world issues [10]. Ultimately, this is not only beneficial for the protection of students' individual rights but also contributes to creating a law-abiding and civilized online environment within universities, making the construction of a law-abiding and secure campus a possibility.

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