

Criminal Law Education: Preventing Online Fraud and Cybercrime in Ngalang Village, Gedangsari Sub-district, Gunungkidul, Yogyakarta

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Abstract

The rapid development of digital technology has significantly expanded public access to internet-based services; however, it has simultaneously increased exposure to cybercrime risks, particularly online fraud, which is increasingly affecting rural communities. This community service program aims to enhance legal and digital literacy among residents in preventing cybercrime in Ngalang Village, Gedangsari Sub-district, Gunungkidul Regency. The program employs a participatory-educational approach, incorporating legal awareness sessions, interactive discussions based on real case studies, simulations for identifying cybercrime patterns, and practical training on preventive measures and reporting mechanisms. Evaluation was conducted using pre-test and post-test instruments to assess participants' level of understanding. The results indicate a significant improvement in legal literacy and participants' ability to recognize and anticipate various forms of online fraud and cybercrime. These findings demonstrate that community-based legal education is an effective preventive strategy in addressing digital crime. Accordingly, this program contributes to strengthening legal awareness and enhancing the resilience of rural communities against cyber threats in the digital era.

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1. INTRODUCTION

The development of information and communication technology in Indonesia has brought significant transformation to various aspects of society, including rural areas [1]. Digitalization enables rural communities to access financial services, electronic commerce, and social media more broadly [2]. However, this progress also introduces new vulnerabilities in the form of cybercrime, particularly online fraud targeting individuals with limited digital literacy. This condition indicates a gap between the acceleration of technology and the readiness of the community to cope with it [3].

The increase in cybercrime cases in Indonesia demonstrates a significant trend, especially in the forms of online fraud, phishing, and personal data theft. These crimes are no longer concentrated in urban areas but have extended to rural regions [4]. This is marked by the rising number of public reports related to fraud via social media and instant messaging applications, which frequently involve psychological manipulation of victims through social engineering techniques [5].

In concrete terms, online fraud cases have also occurred in the Gunungkidul region, Special Region of Yogyakarta. In 2025, a resident of Kapanewon Gedangsari became a victim of gold trading fraud through social media. The perpetrator offered gold bars at below-market prices and

convinced the victim using photographs, videos, and counterfeit barcodes. The victim subsequently transferred IDR 37,750,000; however, the promised goods were never delivered [6]. This case was not isolated, as there were other victims with additional losses, indicating a systematic and recurring crime pattern in the area.

Furthermore, there have been other fraud schemes in Gunungkidul disguised as public services, such as the activation of Digital Population Identification (IKD). Perpetrators sent fraudulent links or contacted residents via WhatsApp to request personal data, which could subsequently be used to compromise victims' financial accounts. Notably, there were dozens of public reports related to this scheme, demonstrating that cybercrime is becoming increasingly varied and targeting public trust in official institutions [7].

From a normative standpoint, Indonesia possesses legal instruments to address cybercrime, including Law No. 11 of 2008 concerning Electronic Information and Transactions (ITE Law), as amended by Law No. 19 of 2016, and the second amendment through Law No. 1 of 2024, which regulates digital activities, electronic transactions, and criminal sanctions for the misuse of information technology, as well as the provisions in Law No. 1 of 2023 concerning the Criminal Code [8]. Nevertheless, the effectiveness of law enforcement still faces various obstacles, such as limited technical capacity of law enforcement officers, low reporting rates, and the rapid evolution of criminal methods [9]. This creates a gap between the available legal norms and the reality of legal protection experienced by the community [10].

At the local level, particularly in rural areas such as Ngalang Village, the issues become more complex. Low digital and legal literacy renders the community more vulnerable to online fraud [11]. Community members tend to trust digital information readily without adequate verification and have yet to understand preventive measures or cybercrime reporting mechanisms [12]. This condition is reinforced by actual cases in Gunungkidul demonstrating that rural communities have become easy targets of cybercrime [13].

From a criminal law perspective, a preventive approach through legal education constitutes a more effective strategy compared to a purely repressive approach [14]. Criminal law education regarding cybercrime can enhance awareness, vigilance, and the community's ability to recognize and avoid criminal schemes [15]. Therefore, Community Service activities focusing on online fraud prevention education in Ngalang Village are highly relevant to implement, in order to strengthen legal literacy and community resilience against cybercrime threats in the digital era.

2. METHODOLOGY

Type of Research

This study employs a Community Service approach using a participatory-educational method, aiming to improve the legal and digital literacy of rural communities in preventing cybercrime and online fraud in Ngalang Village, Gedangsari Subdistrict, Gunungkidul Regency, Special Region of Yogyakarta.

The program was implemented in Ngalang Village, Gedangsari, Gunungkidul, Yogyakarta. Participants consisted of 30 villagers, selected through purposive sampling based on their level of involvement in digital activities and their need for legal education regarding cybercrime. Implementation Steps: These steps were taken to identify participants' levels of digital and legal literacy, as well as cases of online fraud occurring in the local area. The material was delivered through interactive lectures and discussions based on real-life cases of online fraud in Gunungkidul. Participants conducted simulations to identify patterns of cybercrime such as phishing, social engineering, and cybercrime prevention practices and reporting mechanisms are demonstrated in person so that participants can apply them in their daily lives.

Assessment Instruments

The program's effectiveness is measured using pre-tests and post-tests to assess improvements in participants' understanding of legal literacy and their ability to recognize various forms of online fraud. Pre-test and post-test scores were analyzed quantitatively to determine shifts in understanding categories from moderate (45–65) to good (70–95).

Data Analysis

Evaluation results were compared descriptively to demonstrate improvements in legal and digital literacy. Additional narratives were used to support a qualitative understanding of changes in participants' attitudes and awareness regarding cybercrime risks.

3. RESULTS AND DISCUSSION

The results of the Community Service program conducted on May 9, 2026, from 08:00 to 15:00 WIB in Ngalang Village, Gedangsari Sub-district, Gunungkidul Regency, demonstrate a significant improvement in public understanding of criminal law and cybercrime prevention. The program involved 30 village residents and featured Aryono, S.H., M.H. and Dr. Ramlin Ahmad, S.H., M.H. as resource persons, who delivered the material in an interactive and contextual manner. The implementation stages included initial observation, delivery of material through interactive lectures, discussions based on real case studies of online fraud in Gunungkidul, simulations to identify cybercrime patterns such as phishing and social engineering, and training on preventive measures and reporting mechanisms. Participants' enthusiasm was evident through their active engagement in discussions and simulations, where most participants were able to identify patterns of digital fraud that they had not previously understood.



Image 1. Group photo of the resource person and the community service participants

To measure the effectiveness of the program, an evaluation was conducted using pre-test and post-test instruments administered to all participants. The evaluation results indicate a significant increase in participants' level of understanding, which initially fell within a moderate category (approximately 45–65) and improved to a good category (approximately 70–95) after the implementation of the program. This finding suggests that the participatory-educational approach employed is effective in enhancing both legal and digital literacy among rural communities.

The following diagram presents the evaluation results:

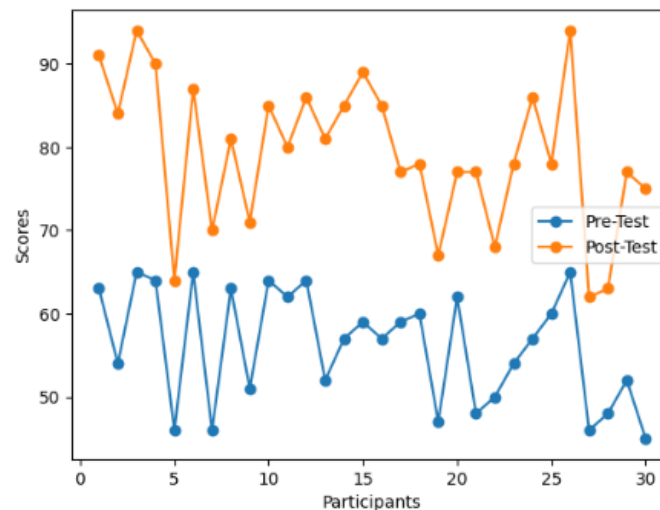


Image 2. Pre-Test and Post Test results

The diagram above (presented in English to meet academic standards) illustrates a comparison between the pre-test and post-test scores of the 30 participants, consistently demonstrating an improvement in scores following the educational intervention. Accordingly, this program not only succeeded in enhancing public understanding of cybercrime but also strengthened legal awareness as a preventive measure against the threat of online fraud in the digital era.

Based on the results of this Community Service program, the improvement in legal literacy among the residents of Ngalang Village is not merely quantitative but also reflects a deeper and more substantive transformation in understanding. From a narrative perspective, the educational process delivered through interactive lectures, real-case discussions, and simulations provided contextual learning experiences for participants. This is evidenced by the increased ability of participants to identify online fraud schemes, which were previously understood only partially but have now become more comprehensive and critical. Thus, the program not only facilitated knowledge transfer but also fostered reflective awareness of the realities of cybercrime encountered in everyday life.

The findings also indicate a strengthened understanding among participants regarding legal provisions governing cybercrime, particularly those related to online fraud within the framework of criminal law and the Electronic Information and Transactions Law. Prior to the program, most participants were unaware that actions such as phishing, misuse of personal data, and manipulation of digital transactions could be classified as criminal offenses. However, following the intervention, participants demonstrated a clearer understanding of legal boundaries, juridical consequences, and available reporting mechanisms. This highlights the crucial role of legal education in bridging the gap between abstract legal norms and practical public understanding.

From a theoretical perspective, this activity reflects a paradigm shift from a repressive to a preventive approach in criminal law. Law is no longer perceived solely as an instrument of punishment but also as a means of fostering awareness and protecting society. The legal education provided positions the community as an active subject in maintaining digital security, aligning with the principles of substantive justice that emphasize the protection of vulnerable groups. Therefore, the program is oriented not only toward legal compliance but also toward the internalization of values such as vigilance, responsibility, and collective awareness in the digital sphere.

The improvement in post-test results compared to pre-test scores serves as empirical evidence of the effectiveness of the participatory-educational method employed. The approach, which integrates theoretical knowledge with practical application and incorporates local case studies from Gunungkidul, has proven effective in enhancing participants' comprehension. This

supports the argument that contextual, needs-based legal education is more effective than one-directional, purely theoretical approaches. Moreover, the active involvement of participants in simulations demonstrates that experiential learning plays a significant role in fostering sustainable understanding.

This activity further demonstrates that rural communities possess a high adaptive capacity toward technological developments when supported by appropriate educational interventions. The rapid transition from limited awareness to improved understanding indicates that digital and legal literacy are not structural barriers but rather issues of access to knowledge. Consequently, this program serves as evidence that educational interventions can function as catalysts for social change, strengthening community resilience against the evolving threats of cybercrime.

Finally, the results underscore the importance of integrating education, regulation, and community participation in efforts to prevent cybercrime. Legal education cannot operate in isolation but must be supported by a responsive legal system, competent law enforcement, and an informed and participatory society. Therefore, this Community Service initiative can be viewed as part of a systemic effort to build a robust legal culture at the local level. Through sustained educational programs and continuous assistance, it is expected that communities will not only understand the law but also be able to implement it effectively in their daily lives in a sustainable manner.

4. CONCLUSIONS

Based on the implementation of the Community Service program in Ngalang Village, Gedangsari Sub-district, Gunungkidul Regency, it can be concluded that criminal law education focusing on the prevention of online fraud and cybercrime has a significant impact on improving both legal and digital literacy among the community. This is evidenced by the improvement in pre-test and post-test evaluation results, as well as the transformation of participants' understanding into a more critical and practical capacity in identifying and anticipating various forms of cybercrime. The program also demonstrates that a participatory-educational approach, grounded in real case studies and practical simulations, is effective in strengthening public legal awareness, thereby contributing to preventive efforts in reducing cybercrime risks at the local level.

As a recommendation, it is essential to ensure the sustainability of similar legal education programs through regular implementation involving multiple stakeholders, including village authorities, law enforcement agencies, and educational institutions, in order to broaden outreach and deepen public understanding of the evolving nature of cybercrime. In addition, there is a need to develop more diverse and adaptive educational media, such as digital modules, community-based campaigns, and more specialized follow-up training, so that communities not only gain theoretical knowledge but are also in independently applying preventive measures. Ultimately, these efforts are expected to foster a legally aware, technologically responsive society with strong resilience against the threats of online fraud.

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