(REVIEW ARTICLE)

A theoretical approach to user education in public licensing: Defending against copyright trolling

Onoriode Reginald Aziza [1, *], Portia Oduro [2], Ngodoo Joy Sam-Bulya [3] and Ngozi Samuel Uzougbo [4]

[1] Independent Researcher, Lagos Nigeria.
[2] Energy Law Center, Paul M. Hebert Law Center, Louisiana State University, USA.
[3] Independent Researcher, Abuja, Nigeria.
[4] Independent Researcher; Columbus Ohio, USA.

Abstract

This paper develops a theoretical model to prevent copyright trolling through user education and policy advocacy, particularly in the context of Creative Commons (CC) and public licensing. Copyright trolling, which exploits users' lack of legal literacy and understanding of licensing terms, poses significant challenges to the free and open sharing of knowledge. The paper explores the relationship between legal literacy, public knowledge, and digital education, proposing that targeted educational interventions can empower users to avoid exploitation. It also advocates for the implementation of structured, government-backed, and institutional programs to promote licensing literacy. Policy-driven educational frameworks, integrated into broader digital literacy initiatives, are essential for reducing the risks posed by copyright trolling. The paper concludes with recommendations for future educational programs and policy changes to mitigate copyright trolling and foster a more informed and resilient digital ecosystem.

Keywords: Copyright trolling; Creative commons; Public licensing; Legal literacy; Digital education; Policy advocacy

1 Introduction

Copyright trolling, the practice of exploiting ambiguities in licensing agreements to extract settlements or initiate lawsuits, has become a growing concern in the digital age (Depoorter, 2019). The risk of misuse and manipulation has escalated with the increasing use of Creative Commons (CC) licenses, particularly for creative and academic works. CC licenses are designed to allow creators to retain certain rights while sharing their work freely with the public. However, the complexity of these licenses can lead to misunderstandings and inadvertent violations, making users vulnerable to copyright trolling (Sahagian, 2022).

Public licensing, particularly Creative Commons, aims to promote open access and the sharing of knowledge. Unfortunately, many users lack the legal literacy needed to navigate these licenses effectively (Ekpe, 2022). Copyright trolls exploit this gap in understanding, preying on individuals and organizations that inadvertently misuse licensed content. This phenomenon poses a threat to the foundational principles of public licensing—namely, fostering collaboration and innovation through open access (Sansone et al., 2019).

Given the rise of copyright trolling, this paper argues for the development of educational interventions that can empower users to understand and apply licensing terms more effectively. Such educational programs can prevent users from becoming targets of copyright trolling by increasing their legal literacy. This paper aims to propose a theoretical

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* Corresponding author: Onoriode Reginald Aziza

model that integrates legal literacy, digital education, and policy advocacy, aimed at equipping users with the knowledge and tools to defend themselves against exploitation in public licensing.

2   Legal Literacy and Public Knowledge in Licensing

Legal literacy, particularly in the context of Creative Commons and public licenses, plays a critical role in preventing the exploitation of users through copyright trolling. Legal literacy refers to an individual's ability to understand legal concepts, rights, and obligations (Li, 2020). This understanding is crucial in the digital realm, where creators and users engage with various forms of public licenses. Without adequate knowledge of how licensing terms work, users are vulnerable to inadvertently violating the conditions set by these licenses, opening the door to copyright trolls who seek to exploit these mistakes (Radsch, 2023).

Creative Commons licenses are designed to offer creators flexible ways to share their work while retaining specific rights. These licenses range from allowing nearly unrestricted use to more restrictive terms that limit how content can be used, adapted, or shared (Crews, 2020). However, the nuances embedded in these licenses can be difficult for users to grasp, particularly those lacking a law or intellectual property background. For example, terms like "Non-Commercial" or "No Derivatives" might seem straightforward but can confuse users when attempting to apply them in real-world scenarios. This confusion is where copyright trolls often strike, accusing users of infringing on license terms and demanding financial settlements (De Rosnay & Stalder, 2020).

The relationship between user understanding of licensing terms and the risk of exploitation is clear. Users who are unfamiliar with the specific language and legal implications of public licenses are more likely to make errors in how they utilize licensed content (Contractor et al., 2022). Whether it's using a work in a commercial setting when only non-commercial use was permitted or modifying a work that was licensed under "No Derivatives," these mistakes can have serious consequences. In such instances, copyright trolls capitalize on the user's lack of understanding, initiating legal action or demanding settlements that can be financially and emotionally draining. These trolls exploit the fear of litigation, knowing that most users prefer settling rather than facing prolonged legal battles (Suzor, 2019).

Public knowledge of licensing, or the lack thereof, significantly influences how users approach their decisions regarding the use of Creative Commons works. While Creative Commons has made efforts to simplify the licensing process by providing user-friendly explanations and icons, the reality is that most users do not take the time to thoroughly understand the terms (Dratler, 2024). This gap in knowledge can be attributed to various factors, including the legal jargon involved, the assumption that public licenses are "safe" to use, and the general lack of formal education on licensing matters. Many users, particularly in non-legal fields, view licenses as a formality, not fully recognizing the legal weight they carry (Sahagian, 2022).

Moreover, general misconceptions often shape public knowledge about copyright and licensing. For instance, there is a prevailing belief that anything available on the internet is free to use, a notion that is far from the truth. This misunderstanding exacerbates the problem, as users may assume that a CC-licensed work can be used in any context without consequence (Aufderheide & Jaszi, 2018). Without a solid understanding of the limitations imposed by different types of CC licenses, users are left vulnerable to accusations of infringement, even when their intentions are aligned with the principles of open access and sharing (Depoorter, 2019).

Enhancing public knowledge of licensing is imperative to reduce the susceptibility to copyright trolling. This involves educating individuals on the specific terms of public licenses and fostering a broader awareness of the legal environment surrounding copyright and intellectual property. Users must be made aware that while public licenses offer more flexibility than traditional copyright, they still impose legal obligations that must be respected. This awareness will help mitigate the risks associated with copyright trolling and empower users to make informed decisions when interacting with licensed content (Radsch, 2023).

One of the ways to address this issue is through targeted legal literacy programs that focus on public licensing. These programs can be integrated into broader digital literacy initiatives, ensuring that individuals understand how to navigate digital spaces and the legal frameworks governing their content use (Kluttz & Mulligan, 2019). For example, educational institutions, creative communities, and platforms like YouTube or Wikimedia Commons can be key in disseminating accurate information about public licensing. By providing clear and accessible explanations of the terms and conditions associated with CC licenses, these platforms can help users avoid unintentional infringements (Brown & Marsden, 2023).

Another approach to improving legal literacy in public licensing is the development of interactive tools that allow users to test their understanding of licensing terms before they engage with licensed content. Such tools could prompt users with hypothetical scenarios to determine whether they are applying the correct licensing terms. For instance, a tool could ask whether a user can legally modify and sell a photograph licensed under a CC BY-NC-ND (Attribution-NonCommercial-NoDerivs) license, providing immediate feedback and explanations based on their response. This type of practical engagement can reinforce legal literacy and reduce the likelihood of users falling victim to copyright trolling (Kimmons, 2020).

In conclusion, legal literacy is essential for protecting users from copyright trolling in the context of public licensing. As more individuals and organizations rely on Creative Commons licenses to share and use content, the need for a comprehensive understanding of these licenses becomes even more pressing. The relationship between user understanding and the risk of exploitation is undeniable; those who lack legal literacy are far more vulnerable to copyright trolls who seek to profit from mistakes.

3 The Role of Digital Education in User Empowerment

Digital education is fundamental in empowering users to navigate the complexities of public licensing, particularly CC licenses. With the rise of digital platforms and the increasing reliance on open-access materials, users are frequently exposed to content governed by various public licenses (Passey et al., 2018). However, the lack of a clear understanding of these licenses can result in inadvertent violations, leaving users vulnerable to copyright trolls. Digital education effectively addresses this issue by enhancing user comprehension of license terms and empowering individuals to make informed decisions about how they interact with licensed content.

3.1 Theories of Digital Education and Public Licensing

Digital education, as an evolving field, is based on various theories of learning that emphasize interactivity, accessibility, and learner-centered approaches. One key theory is constructivism, which posits that learners actively construct knowledge through experiences and interactions. In public licensing, this theory supports the idea that users can better understand licensing terms by engaging with real-world examples and practical applications. For example, users could engage with case studies or scenarios where they are asked to apply licensing terms to actual content rather than merely reading about the different types of Creative Commons licenses. This interactive approach fosters deeper comprehension, helping users internalize the legal obligations associated with public licenses.

Cognitive load theory is another relevant framework in digital education. This theory suggests that learners are more likely to grasp complex concepts when the information is presented in a manner that minimizes cognitive overload (Skulmowski & Xu, 2022). Given public licenses' legal and technical nature, digital education programs should be designed to present information in manageable chunks, allowing users to process and understand licensing terms gradually. For instance, rather than overwhelming users with the entire spectrum of Creative Commons licenses in one sitting, an educational module could introduce one license at a time, focusing on its key features and applications.

Connectivism, a theory rooted in the digital age, emphasizes the importance of networks and collaboration in learning. In the context of public licensing, this approach can be harnessed to create online communities where users can share knowledge, ask questions, and collaborate on licensing-related challenges (Dziubaniuk, Ivanova-Gongne, & Nyholm, 2023). Through digital platforms, users can interact with peers who have faced similar licensing issues, providing a space for shared learning and problem-solving. This collaborative environment helps reinforce understanding and empowers users to make informed decisions when engaging with CC-licensed content.

3.2 Designing Educational Interventions for Licensing

To enhance user comprehension of public licenses, educational interventions must be carefully designed to address users' specific challenges. One of the primary challenges is the legal complexity of licensing terms. Many users may find the language used in CC licenses confusing, particularly if they lack a law or intellectual property background. Therefore, educational interventions should prioritize clarity and simplicity, breaking down legal jargon into more accessible language.

Interactive learning modules can be highly effective in this regard. For example, a digital course on Creative Commons licensing could include interactive quizzes that test users' understanding of specific license terms. Scenarios could be presented where users are asked to determine the correct application of a license, such as whether a particular use of a CC-licensed image is permissible under a NonCommercial license. By engaging users in this way, the educational

intervention goes beyond passive learning and encourages active participation, which has been shown to improve retention and comprehension (Chen et al., 2019).

Another crucial element of designing educational interventions is ensuring that they are widely accessible. Digital education tools should be designed with accessibility in mind, allowing users from diverse backgrounds to benefit from the material. This includes offering content in multiple languages, using clear and simple visuals to illustrate complex points, and ensuring that the educational platform is compatible with assistive technologies. Public licensing is a global issue, so educational interventions must be inclusive to reach a broad audience (Poncette et al., 2020).

Moreover, educational interventions can benefit from gamification, a technique that applies game-like elements to learning. For instance, users could earn points or badges for successfully completing licensing challenges, motivating them to engage more deeply with the material. This approach can make learning about public licensing more enjoyable and less intimidating, particularly for users who may initially feel overwhelmed by the legal aspects of Creative Commons licenses.

4 Policy Advocacy for Educational Interventions

4.1 Policy-Driven Educational Frameworks

Developing educational frameworks supported by robust policy interventions is a critical aspect of reducing copyright trolling. Such frameworks can help ensure that users are aware of the legal ramifications of their actions when engaging with CC-licensed content. Governments and institutions play a vital role in establishing these frameworks, as they can provide the necessary resources and infrastructure to promote widespread understanding of public licensing (Secker & Morrison, 2022). One example of a policy-driven educational framework is the incorporation of licensing education into the national curricula. Governments could mandate that digital literacy programs include a section dedicated to public licensing and copyright laws. This would ensure that individuals are exposed to the principles of Creative Commons and other licensing systems from a young age, fostering a culture of legal literacy. By integrating licensing education into formal education systems, policy-driven frameworks can provide consistent, standardized knowledge that helps individuals make informed decisions when interacting with licensed content (Crews, 2020).

Similarly, institutions like universities and public libraries can be leveraged to promote licensing literacy. These organizations already disseminate information and educational resources, making them ideal platforms for launching licensing education initiatives. Government-backed grants or funding can be allocated to institutions to develop programs that teach users how to navigate Creative Commons licenses and avoid falling victim to copyright trolls (Leorke, Wyatt, & McQuire, 2018).

4.2 Advocacy for Structured Educational Programs

Advocacy efforts for structured educational programs must focus on the importance of creating a standardized approach to licensing education. Without structured, formal programs, many individuals remain unaware of the potential legal risks they face when using or sharing Creative Commons-licensed content. As a result, copyright trolling continues to thrive, exploiting gaps in user knowledge. Advocates can push for government-backed initiatives that offer clear guidelines on licensing education and promote collaboration between public institutions, non-governmental organizations, and private entities (Latilo, Uzougbo, Ugwu, & Oduro, 2024b).

One of the core elements of this advocacy is the call for governments to implement nationwide educational programs that focus on public licensing. These programs could be delivered through public institutions such as schools, universities, libraries, and community centers. Governments have the capacity to set national standards for licensing education, ensuring that all citizens receive the same foundational knowledge about copyright laws and licensing agreements. By making licensing education a priority, governments can foster a more informed populace that is better equipped to engage with open-access content in a legally compliant manner (Ekpe, 2022).

In addition to national programs, structured educational efforts should also be implemented at the institutional level. For example, organizations like Wikimedia, which rely heavily on public licensing, can develop internal educational frameworks that teach users about Creative Commons licenses. Such programs could involve training sessions, workshops, and online modules that educate employees, volunteers, and contributors about licensing protocols. Organizations can create a more transparent and responsible approach to content creation and sharing by embedding licensing education into institutional practices (Davis, Sigalov, Maljković, & Peschanski, 2023).

4.3 Proposals for Broader Digital Literacy Initiatives

Licensing education should not exist in isolation but rather as a key component of broader digital literacy initiatives. Many users who fall prey to copyright trolls do so not only because they lack specific knowledge about licensing terms but also because they are unfamiliar with the broader legal landscape of digital content usage. To address this issue, licensing education must be integrated into comprehensive digital literacy programs that teach users about their rights and responsibilities in the online world.

One proposal for achieving this integration is to develop multi-tiered digital literacy programs that address user knowledge and engagement levels. For example, introductory courses could be designed for individuals who are just beginning to engage with public licensing, offering a basic understanding of CC licenses and how to use them. Intermediate and advanced courses could then delve into more complex aspects of licensing, including the potential legal risks of non-compliance and strategies for avoiding copyright trolling. By structuring digital literacy programs in this way, users at all levels can gain the knowledge they need to navigate the online content landscape effectively.

Another approach is to collaborate with digital platforms to embed licensing education into user interfaces. For instance, platforms that host CC-licensed content, such as YouTube or Flickr, could provide pop-up tutorials or informational tooltips that explain the implications of using certain licenses. These just-in-time educational interventions can reinforce learning at the point of need, ensuring that users are well-informed before they engage with licensed content. Platforms can also provide links to external resources, such as Creative Commons' licensing guides or government-sponsored digital literacy websites, further enhancing user understanding.

Furthermore, licensing education can be incorporated into the continuing professional development (CPD) programs of industries that rely heavily on digital content, such as media, education, and technology. Offering licensing education as part of professional training ensures that employees in these sectors remain up to date on best practices regarding content use and distribution. This approach can help reduce the incidence of copyright trolling in professional contexts, where inadvertent violations of licensing terms can lead to costly legal disputes (Latilo, Uzougbo, Ugwu, & Oduro, 2024a).

5 Conclusion and Recommendations

5.1 Conclusion

The theoretical model outlined in this paper focuses on empowering users through a combination of legal literacy, public knowledge, and digital education. Legal literacy, in particular, plays a critical role in reducing the risk of exploitation by copyright trolls. Users who are familiar with the terms of public licenses, such as Creative Commons, are better equipped to navigate the legal landscape of content creation and sharing. Public knowledge also shapes licensing decisions; individuals who clearly understand how CC licenses operate are less likely to fall victim to copyright traps.

Moreover, digital education is a key component of user empowerment. Interactive learning tools, accessible language, and real-world examples can help users grasp the complex legal terminology associated with public licenses. Digital education programs can also be structured to progressively introduce more complex concepts, ensuring that users understand licensing issues comprehensively over time. These educational efforts must be integrated into broader digital literacy programs to have a wide-reaching impact, making licensing education a fundamental part of users' engagement with digital content.

Policy advocacy complements these educational interventions by calling for government-backed or institutional programs that support public licensing education. Governments and institutions are in a unique position to standardize and promote licensing education through formal curricula and institutional policies. By prioritizing educational interventions at the national and institutional levels, policymakers can reduce the occurrence of copyright trolling and foster a more informed public.

5.2 Recommendations for Future Programs and Policy Changes

Based on the theoretical model and key findings, several recommendations can be made to strengthen the fight against copyright trolling. First, governments should prioritize the integration of licensing education into national curricula. Licensing knowledge should be considered a fundamental component of digital literacy programs, ensuring that users are educated about Creative Commons and other public licenses from an early age. Schools, universities, and other educational institutions can play a significant role in fostering legal literacy among students, preparing them to navigate the digital landscape responsibly.

Second, policy changes should encourage collaboration between governments, educational institutions, and digital platforms. Governments can provide funding or incentives for institutions to develop structured educational programs focused on public licensing. At the same time, digital platforms can embed licensing education into their interfaces, offering users just-in-time information about the licenses governing the content they engage with.

Lastly, it is essential to continue advocating for broader public awareness campaigns on the dangers of copyright trolling. Such campaigns could include public service announcements, social media outreach, and community workshops, all aimed at educating users on the risks of licensing misuse and strategies for protecting themselves.

Compliance with ethical standards

Disclosure of conflict of interest

No conflict of interest to be disclosed.

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