



## Digital Anti-Cyberbullying Campaign through a Student Collaboration Project

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### Abstract

The rapid growth of social media has intensified adolescents' digital interactions while increasing the risk of cyberbullying, which negatively affects students' psychological well-being. Low digital literacy and limited understanding of online ethics are key factors contributing to adolescents' vulnerability to online harassment. This community service program aimed to enhance students' awareness and understanding of ethical and responsible social media use through a collaborative digital campaign project. The program employed a Participatory Action Research (PAR) approach consisting of observation, problem formulation, intervention, and evaluation. The participants were students of SMA Negeri 28 Batam from various grade levels. The intervention was conducted through poster design and digital content creation competitions focusing on cyberbullying prevention. The results indicate increased student engagement, improved understanding of online ethics, and greater awareness of the dangers of hoaxes and cyberbullying. In addition, the program contributed to the development of students' soft skills, including teamwork, creativity, and communication. This collaborative project demonstrates its potential as a participatory and sustainable digital literacy education model for cyberbullying prevention among students.

**Keywords:** digital literacy, cyberbullying, collaborative project, social media, students

### Abstrak

Perkembangan teknologi digital dan media sosial telah meningkatkan intensitas interaksi remaja di ruang daring, namun juga memunculkan berbagai permasalahan serius, salah satunya cyberbullying yang berdampak pada kesehatan psikologis pelajar. Rendahnya literasi digital dan pemahaman etika bermedia sosial menjadi faktor utama meningkatnya risiko perundungan daring di kalangan remaja. Kegiatan pengabdian kepada masyarakat ini bertujuan untuk meningkatkan kesadaran dan pemahaman siswa mengenai penggunaan media sosial secara etis dan bertanggung jawab melalui pendekatan proyek kolaborasi kampanye bijak bermedia sosial. Metode yang digunakan adalah Participatory Action Research (PAR) dengan tahapan observasi, perumusan masalah, intervensi, serta evaluasi. Subjek kegiatan adalah siswa SMA Negeri 28 Batam dari berbagai tingkat dan kelas. Intervensi dilakukan melalui proyek kolaborasi berupa lomba desain poster dan cipta konten digital bertema pencegahan cyberbullying, yang hasilnya dipublikasikan melalui media sosial sekolah. Hasil kegiatan menunjukkan peningkatan keterlibatan aktif siswa dalam isu literasi digital, pemahaman etika bermedia sosial, serta kesadaran terhadap bahaya hoax dan cyberbullying. Selain itu, kegiatan ini turut mengembangkan soft skills siswa seperti kerja sama tim, kreativitas, komunikasi, dan kepedulian sosial. Proyek kolaborasi ini menjadikan siswa sebagai agen kampanye digital dan berfungsi sebagai model edukasi literasi digital yang partisipatif, aplikatif, dan berkelanjutan dalam upaya pencegahan cyberbullying di kalangan pelajar.

**Kata Kunci:** literasi digital, cyberbullying, proyek kolaborasi, media sosial, siswa

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## Introduction

The development of digital technology and social media has significantly transformed how adolescents interact, communicate, and express themselves (Ehrenreich et al., 2021). Platforms such as Instagram, TikTok, and WhatsApp have become primary spaces for peer interaction among teenagers (Magis-Weinberg et al., 2021). Despite these benefits, social media also presents serious risks, particularly cyberbullying, which occurs widely, is difficult to regulate, and has harmful psychological consequences. Previous studies indicate that cyberbullying is associated with increased levels of anxiety, depression, stress, and suicidal ideation among adolescents and university students (Lee et al., 2025; Li et al., 2022; Maurya et al., 2022).

In Indonesia, cyberbullying has shown an alarming upward trend, especially among students. UNICEF reports that approximately 41–50% of Indonesian children and adolescents have experienced cyberbullying (Nito et al., 2022). Low digital literacy—such as limited understanding of privacy and digital ethics—remains a major contributing factor to this risk (Alfazri & Syahputra, 2024; Ayhan et al., 2025). Although various educational efforts have been carried out through seminars and awareness sessions, these one-way approaches often fall short in fostering long-term behavioral change.

However, despite these efforts, most community service programs still rely on one-way instructional approaches, resulting in limited student participation and lack of experiential learning. This indicates a gap in implementing participatory and student-centered methods in digital literacy education.

Therefore, this study proposes a collaborative project-based approach that actively involves students in designing and producing digital campaign content (Almulla, 2020; Isnani, 2024). This collaborative campaign approach can be supported by several theoretical perspectives. Digital citizenship emphasizes responsible and ethical behavior in digital environments, which is essential in preventing cyberbullying (Habib et al., 2026). Social learning theory suggests that individuals learn through observation and interaction with peers, making peer-based campaigns effective in shaping behavior (Ladd, 1981). In addition, peer-led intervention highlights the role of students as active agents in influencing their peers, while participatory media literacy emphasizes active involvement in creating digital content to enhance critical awareness.

In this context, community service programs play an important role in promoting digital literacy and fostering ethical online behavior among students. Observations at SMA Negeri 28 Batam indicate that the school has not yet implemented programs that actively involve students in digital literacy campaigns or cyberbullying prevention, despite students possessing strong creative potential in using social media. Therefore, this community service initiative introduces a collaborative project-based approach that engages students directly in designing and producing social media content for a responsible-use campaign. The objective of this program is to enhance students' awareness and understanding of ethical and responsible social media use while encouraging their active participation in cyberbullying prevention efforts.

## Method

This community service activity employed a Participatory Action Research (PAR) approach (Khafsoh & Riani, 2024), a collaborative method that involves participants in identifying problems, implementing actions, and evaluating outcomes (Cornish et al., 2023). This method is widely used in social work and community engagement programs because it is effective for addressing concrete issues within communities (Masri et al., 2023). This community service activity was conducted from July to November 2024 at SMA Negeri 28 Batam.

The collaborative project involved an organizing team consisting of 4 university students from Universitas Putera Batam and 10 selected students from SMA Negeri 28 Batam. The participants of this activity consisted of senior high school (SMA) students who took part in the digital content creation competition, conducted in groups of up to six students per team. In addition, the poster design competition was open to both junior high school (SMP) and senior high school (SMA) students in the vicinity of SMA Negeri 28 Batam, and was conducted individually. A total of 39 students participated in the digital content competition and 6 students participated in the poster competition. The implementation stages consisted of the following:

### 1. Observation and Problem Identification

The initial stage was conducted through field observation and limited discussions (focus group discussions) with the school and selected student representatives. This stage aimed to obtain an initial understanding of students' patterns of social media use, their level of digital literacy, and the potential occurrence of cyberbullying (Milyane et al., 2025). Risky online behaviors were also identified, such as limited awareness of digital privacy (Vespoli et al., 2025), inappropriate commenting practices, and the tendency to share information without verification (Wang et al., 2025). The findings from this stage served as the foundation for determining the focus and type of intervention suited to students' needs.

### 2. Problem Formulation

Based on the observations and initial discussions, the community service team, together with the school, formulated the main issues faced by students, namely the low level of awareness and understanding of digital ethics and the dangers of cyberbullying. It was also found that many students had not fully understood their roles and responsibilities as active social media users (Althibyani & Al-Zahrani, 2023). The formulation process was carried out participatorily to ensure that students felt directly involved in addressing the problems they encountered.

### 3. Intervention (Treatment)

The intervention phase was implemented through a collaborative social media campaign project. Students were divided into cross-grade collaborative teams to promote interaction and teamwork (Gabrielli et al., 2021). Each team was assigned to design and produce campaign content such as posters and short videos with themes related to cyberbullying prevention. In this process, students developed message concepts, wrote narratives, allocated roles based on their interests and skills (scriptwriters, designers, editors, actors), and utilized social media creatively and responsibly. The community service team acted as facilitators and mentors throughout the content production process.

### 4. Output and Evaluation

The outputs of this activity consisted of digital posters and campaign videos published through the school's official social media platforms as a means of disseminating digital literacy messages. Evaluation was conducted using questionnaires to measure changes in students' understanding of digital ethics, awareness of cyberbullying, and responsible social media behavior (Chan & Sung, 2025). The quantitative data obtained from the questionnaires were analyzed using descriptive statistics, including percentage distribution and comparison of pre-test and post-test responses. Meanwhile, qualitative data from student reflections were analyzed using thematic analysis to identify patterns related to student engagement, learning experiences, and perceived benefits of the collaborative project. The questionnaire items were developed based on digital literacy and cyberbullying indicators adapted from previous studies.

## Results and Discussion

The implementation of the collaborative project demonstrated a positive impact on students' understanding of digital literacy and cyberbullying prevention. The evaluation was conducted using pre-test and post-test questionnaires distributed to participating students.

The quantitative results indicate a positive response from students toward the implementation of the collaborative project. Based on the questionnaire results, 75% of students (29 participants) stated that the competition activities were *very interesting*, while 21% (8 participants) considered them *interesting*. This finding indicates that the majority of students were highly engaged with the activity.

In terms of perceived benefits, 74% of students (29 participants) reported that the activity was *very beneficial*, while 15% (7 participants) considered it *beneficial*. These results suggest that the implemented program was not only engaging but also provided meaningful learning experiences for students, particularly in understanding digital ethics and cyberbullying prevention.

These findings suggest that the collaborative project-based approach was effective in enhancing students' knowledge and awareness. These findings align with social learning theory, which emphasizes that learning occurs through active participation and peer interaction. The collaborative nature of the project allowed students to internalize digital ethics concepts more effectively compared to passive learning approaches. The increase in scores indicates that involving students actively in creating campaign content allows them to better internalize the concepts of digital ethics and cyberbullying prevention.



Figure 1. Poster Design and Digital Content Competition Poster

In addition to quantitative findings, qualitative data from student reflections also support these results. Many students reported that they became more aware of the impact of their online behavior. For example, one participant stated, “I realized that simple comments can hurt others, so I need to be more careful when using social media.” This indicates that the activity not only improved cognitive understanding but also influenced students’ attitudes and behavior.

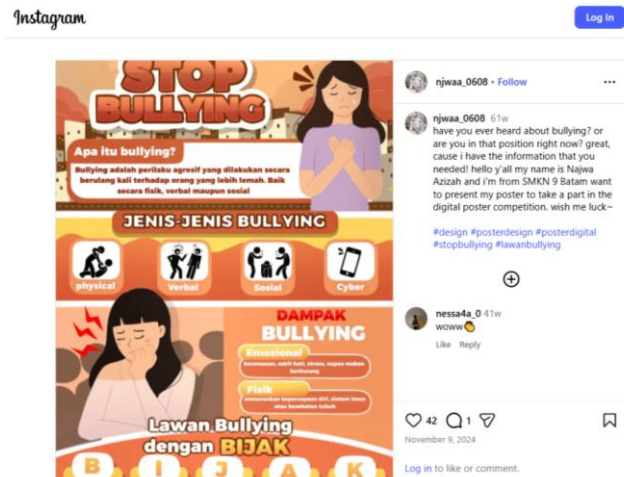


Figure 2. Poster from One of the Poster Design Competition Winners

The main event, held on November 20, 2024, included the announcement of winners, awarding of certificates, and a brief reflection session from selected participants. Documentation from the activity illustrates the active involvement of students, teachers, and university volunteers in a collaborative and educational environment. The event functioned not

only as a competition but also as a collective learning platform that encouraged students to express their understanding of digital literacy creatively.



*Figure 3. Documentation of Collaborative Project activities*

The success of this program can also be seen from the quality of the outputs produced by students. In the poster design competition, participants were able to convey persuasive messages related to cyberbullying prevention and digital ethics. Meanwhile, the digital content competition resulted in short videos that reflected real-life situations experienced by adolescents, making the campaign messages more relatable and impactful.

Compared to conventional seminar-based approaches, this collaborative project provides a more engaging and participatory learning experience. Students were not only passive recipients of information but also actively involved in the learning process. This finding is consistent with previous studies that highlight the effectiveness of project-based learning in increasing student engagement and critical thinking.

Although the findings are based on students' perceptions, the high level of engagement and perceived benefits indicate the potential effectiveness of the collaborative approach in supporting digital literacy learning.

Furthermore, the collaborative nature of the project contributed to the development of students' soft skills, including teamwork, communication, creativity, and responsibility. By working in groups and producing real digital content, students were encouraged to express their ideas, negotiate roles, and solve problems collectively.

Overall, the results indicate that the collaborative project-based approach is an effective and applicable model for community service activities aimed at improving digital literacy and preventing cyberbullying among students. This approach not only enhances knowledge but also fosters behavioral change and active participation.

## **Conclusion**

The community service activity implemented through a collaborative project on responsible social media use proved effective in increasing the awareness and understanding of students at SMA Negeri 28 Batam regarding the importance of digital literacy and

cyberbullying prevention. The Participatory Action Research (PAR) approach enabled students to be actively involved in all stages of the activity, from problem identification to the production and dissemination of digital campaign content.

The results show that student engagement in the collaborative project encouraged an improved understanding of social media ethics, the dangers of hoaxes and cyberbullying, and responsible digital interaction. This involvement also contributed to the development of students' soft skills, including teamwork, creativity, communication, and social awareness. Through this project, students were not merely recipients of educational materials but also served as active digital campaign agents who disseminated positive messages within the school environment and across social media. Consequently, the poster design and digital content creation competitions functioned not only as contest activities but also as a participatory, applicable, and sustainable model of digital literacy education aimed at preventing cyberbullying among students.

It is recommended that future community service programs integrate collaborative and project-based approaches to enhance student engagement. Schools are also encouraged to continuously utilize social media as an educational platform for digital literacy campaigns.

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