

Co-creating Safer Urban Spaces: Educational Impacts of Student Participation in the “Odasis” CPTED Project in Jakarta

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Abstract

Community safety in rapidly growing cities like Jakarta is closely tied to the design of public spaces, as rising urban crime rates continue to challenge local environments. This study examines how Crime Prevention Through Environmental Design (CPTED) principles can be integrated into student-led public art learning activities. Specifically, it reviews the first, site-survey phase of ODASIS—a Korean arts and culture ODA initiative implemented in Jakarta in May 2025—focusing on the educational impacts of students’ participation. Using a Participatory Action Research (PAR) approach, the study investigates how collaborative field activities—such as problem identification, safety mapping, and idea generation—enhance learning and community awareness. The project involved twenty Indonesian visual art education students from Universitas Negeri Jakarta (UNJ) and four architecture students from Gwangju University, mentored by a professional architect from Seoul. The findings reveal that the CPTED site survey (1) deepened students’ understanding of community safety and public space design; (2) encouraged them to generate locally relevant solutions through dialogue with residents; (3) fostered cross-cultural and interdisciplinary collaboration; and (4) strengthened their civic and social responsibility. Academically, this study contributes to the discourse on experiential learning in public art education; practically, it demonstrates how CPTED-based art projects can function as educational tools for community engagement. The project’s broader social impact will be further examined in the forthcoming second phase in August 2025, which focuses on implementing design interventions.

Keywords: CPTED; urban design, art education; cross-cultural collaboration; community engagement

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INTRODUCTION

Urban crime has been a major concern for the safety and well-being of people living in cities around the world. In Jakarta, the capital of Indonesia, the 2023 Crime Statistics of DKI Jakarta Province (Statistik Kriminalitas Provinsi DKI Jakarta 2023,

2024:24-25) show a wide variety of crimes, including violent acts, theft, drug offenses, and public disorder. Recognizing a significant increase of crime rate in Jakarta, researchers like Bimantyo G. Fadhil Ihsan et al. (2025) have studied how the layout of city streets might relate to crime, based on space syntax method to find patterns between

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street networks and crime cases. Similarly, experts in environmental criminology have long pointed out that crime does not happen randomly – it often clusters in certain places, influenced by both the physical surroundings and the social environment (Cozens et al., 2005:329).

Cities, by definition, are filled with strangers and must therefore be designed in ways that help individuals feel safe and secure among unfamiliar people (Jacobs, 1961:30). Ideally, urban environments should not only offer physical safety, but also foster inclusivity, emotional comfort, and sense of belonging. As Lamoreaux and Sulkowski (2019:2) argued, there is a need to balance physical security with psychological well-being. One key strategy is to ensure that public spaces are not solely safeguarded by police presence but are actively watched over and cared for by the people themselves (Jacobs, 1961:31-32). Jane Jacobs described this phenomenon as “eyes on the street” – the idea that busy, vibrant streets with diverse users and continuous activity can enhance neighborhood safety through natural surveillance (Jacobs, 1961:35).

In a similar vein, Oscar Newman (1996:9) argued that it is resident initiative, not government programs, that builds “defensible spaces,” where security is reinforced by collective ownership and territorial awareness. Complementing these perspectives, Wilson & Kelling (1982) introduced the “broken windows” theory, which suggests that if a window in a building is broken and is left unrepaired, all the rest of the windows will soon be broken. Keeping places clean and orderly helps show that the community is being looked after and that rules are being enforced.

These ideas are foundational for Crime Prevention Through Environmental Design (CPTED), a well-known approach that uses urban design to help prevent crime and improve public safety (Crowe, 2000:46; Cozens et al., 2005:328). CPTED has evolved through the first-generation principles – focusing on physical design elements such as visibility, access control,

and a clear sense of territory. Over time, it has expanded to the second-generation approaches that emphasize social bonds, community involvement, and cultural sensitivity (Cozens et al., 2005:329; Cozens & Love, 2015:4-5) and to the third-generation concepts that moves beyond immediate safety to focus on sustainability, resilience, and livability (Mihinjac & Saville, 2019; Ramadhoan et al., 2024).

As summarized by Malik et al. (2024:210–211), the early CPTED model developed by Newman (1972) included four key elements: (a) territoriality, (b) natural surveillance, (c) image, and (d) milieu. Moffat (1983) later expanded the model to six components: (a) territoriality, (b) natural surveillance, (c) access control, (d) image/maintenance, (e) activity support, and (f) target hardening. In contrast, Crowe (2013) proposed a more simplified framework with just three core principles: (a) territoriality, (b) surveillance, and (c) access control. More recent research, such as Kubalová et al. (2023), continues to apply and adapt these principles – particularly (a) natural surveillance, (b) territorial reinforcement, (c) access control, and (d) maintenance. Although these models differ, they all share the goal of creating a safer place through thoughtful environmental design.

Despite its worldwide adoption by police, urban planners, and designers (Seererat & Sirijintana, 2020:2), CPTED in Indonesia remains relatively underexplored (Ramadhoan et al., 2024; Tekayadi et al., 2025). Research has been mostly confined to architecture, civil engineering, or urban planning perspectives. For example, Dwira Nirfalini Aulia (2020) focused on lighting and fencing in urban housing, while Novrial and Affif (2021) evaluated high-rise buildings using CPTED checklists. Mulyani Rahayu (2023) applied CPTED in a prison environment, identifying limitations in surveillance systems. Studies by Mimi Arifin (2022), Andy Anton Mangopa Malik et al. (2024), and Ahmad Syauqi (2024) emphasized public perceptions of safety but lacked long-term engagement or edu-

cational frameworks. Ramadhoan et al. (2024) provided a theoretical overview, urging institutional support for CPTED adoption in Indonesia.

In contrast, this research has explored how CPTED can involve young people, use creative learning methods, and include local communities in the process for making CPTED more inclusive, flexible, and effective.

Titled “ODASIS” project, this research looks at the first phase of a CPTED-based urban design project in Jakarta, which took place in May 2025. This project is part of the larger ODASIS initiative – an international program supported by Korea’s Ministry of Culture, Sports, and Tourism and the Gwangju Metropolitan City Government. ODASIS aims to build stronger cultural connections across Asia by promoting inclusive education, sustainable art exchange, and creative projects that are shaped by local communities. The goal is to support regional growth while encouraging solidarity among Asian cultures (ODASIS Proposal, 2025).

While the overall ODASIS project brings together art, education, and urban development, this paper focuses on the site-survey phase as a case study. During this phase, Indonesian and Korean university students worked together to observe the area, identify local problems, and come up with design ideas to make public spaces safer. This study aims to understand the educational benefits experienced by the Indonesian students.

This study addresses the limited research on *Crime Prevention Through Environmental Design* (CPTED) that integrates art education, student participation, and community engagement in the Indonesian context. Existing research has largely focused on technical and environmental aspects, with limited attention to CPTED as a pedagogical and participatory process. To fill this gap, the research explores how a CPTED-based public art project unfolds as an educational process that links design thinking, cross-cultural collaboration, and civic awareness. The study focuses on

the following research questions: 1) How do students comprehend and interpret CPTED principles during the site-survey phase of the ODASIS project?; 2) How do students apply their understanding of CPTED through direct interactions with local residents in identifying community safety issues and generating locally relevant ideas?; 3) How does cross-cultural and interdisciplinary collaboration among students influence their creative thinking and problem-solving processes in the project?; 4) In what ways does participation in the CPTED-based public art project cultivate students’ sense of civic responsibility and awareness of community safety?

METHOD

This study employs a qualitative methodology based on the Participatory Action Research (PAR) framework to examine the first phase of the ODASIS Jakarta project. PAR is chosen because both students and the four supervisors from Universitas Negeri Jakarta (UNJ) act as active agents in identifying problems and proposing solutions. As defined by Kemmis and McTaggart (2007:277), PAR is a collaborative learning process where individuals work together to transform social practices in their shared environments, emphasizing mutual responsibility and the influence of collective actions. It engages with real people in specific, localized contexts and involves a self-reflective cycle of planning a change, acting and observing, then reflecting on the outcomes (Kemmis & McTaggart, 2007:276). The second cycle of PAR process with its outcomes will be addressed in a follow-up paper.

Participants

The participants included 20 UNJ visual art education students, 4 architecture students from Gwangju University, and one professional architect from Korea. They also included 4 UNJ supervisors who are the authors of this research, and 2 ODASIS organizers from Gwangju, Korea. The larger number of UNJ students reflects

the main focus of this study on the educational impact within their local context, as the project was conducted in Jakarta. Meanwhile, the smaller Korean team composition follows the ODASIS program structure, in which a limited number of Korean experts and students act as facilitators and collaborators to support a larger group of local participants in cross-cultural learning and site-based engagement.

Research Locations

The research was conducted using a hybrid format that combined online coordination with onsite engagement. This approach enabled effective international collaboration while also allowing for in-depth fieldwork within the local context.

Between March and April 2025, preparatory discussions were held online, as the ODASIS organizers were based in Gwangju and the mentoring expert was located in Seoul, South Korea, while the UNJ representatives joined from Jakarta, Indonesia.

On-site activities were conducted from May 4 to May 9, 2025, at Universitas Negeri Jakarta (UNJ) for lectures and workshops, and in Kelurahan Galur (Galur Subdistrict), Central Jakarta, for site surveys. The fieldwork focused on the areas of RPTRA Komando Ceria as the primary site for the CPTED-based public art to be implemented in August 2025 (Figure 1).

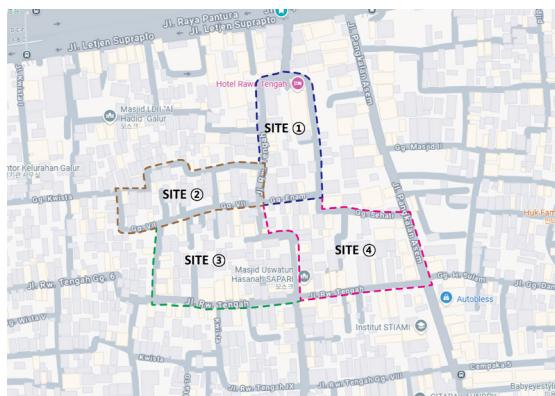


Figure 1. Site survey in Kelurahan Galur divided into 4 sites for 4 groups. Site ① for Group Blue, site ② for Group Brown, site ③ for Group Green and site ④ for Group Pink

According to *Badan Pusat Statistik* (Central Statistics Agency), Central Jakarta is the most densely populated area within DKI Jakarta (BPS, 2024). Within this administrative city, Johar Baru District stands out as the densely inhabited district (Kecamatan Johar Baru Dalam Angka, 2024:5). Galur Subdistrict, although the smallest of the four subdistricts in Johar Baru (Kecamatan Johar Baru Dalam Angka, 2024:8), has the second-highest population density after Kampung Rawa (Kecamatan Johar Baru Dalam Angka, 2024:35). This unique condition—limited land area combined with extreme density—creates pressing spatial problems, such as overcrowded housing, limited open space, and heightened safety risks in alleyways and shared facilities. For this reason, while the central government recommended Galur as the project site, its spatial challenges make it a highly relevant and urgent location for implementing CPTED-based interventions through the ODASIS project.

Research Procedure

This research is based on the procedure of Participatory Action Research.

The first stage is planning. At the start of this research, researchers and students identified and prioritized urban safety concerns through site surveys, interviews, and observations, and prepared for the collaborative design process. Planning stage involves following steps: Organizational structure -> Pre-site survey -> Recruiting participants -> Problem formulation -> Site survey preparation

The second stage is acting and observing. This stage involved processing and consequences by implementing site-specific learning activities such as safety map creation, CPTED workshops, group design development, and group presentations. Throughout this phase, researchers documented student responses and community interactions. Acting and observing stage includes following steps: Lecture -> Site-survey -> Safety map creation -> Ideation

The third stage is reflecting. After each key activity, researchers and students

engaged in reflective discussions, written journals, and post-activity discussions to assess what was learned and how the process might be improved. These reflections were crucial for understanding the evolving perceptions and competencies of the participants. The reflecting stage involves the following steps: Presentation to groups -> Presentation to local government authorities

The second cycle of PAR, implementation of the design solution, will be continued for CPTED execution in August 2025.

Data Collection and Analysis

A wide range of data was collected during the project, including field notes, student journals, materials for idea presentations, visual documentation (photos and videos), transcripts of interviews with local residents, and transcripts of interviews with students. Using multiple sources ensured data triangulation and increased reliability.

The analysis followed a document and thematic analysis approach conducted in three stages. First, all textual and visual data were organized and categorized according to activity type (lectures, site surveys, mapping, design ideation, and reflection). Second, data were coded inductively and deductively using categories derived from the four research questions: (1) CPTED learning, (2) context-based design solution, (3) cross-cultural collaboration, and (4) civic awareness. Third, emerging patterns across student reflections, group outputs, and interview transcripts were cross-compared to identify recurring themes related to learning outcomes and social engagement. This systematic process enabled the interpretation of how CPTED-based participatory activities contributed to students' understanding, design solution, collaboration, and civic responsibility.

RESULT AND DISCUSSION

Planning Organizational Structure

The ODASIS Jakarta project was a collaboration between AB27 (Gwangju, Korea) and UNJ (Jakarta, Indonesia). The structure involved 20 Indonesian visual art education students, 4 Korean architecture students, 1 Korean professional architect, 2 AB27 representatives, 4 UNJ supervisors, 3 UNJ assistants, and 4 UNJ organizing committee members. The collaborative structure facilitated intercultural exchange and interdisciplinary learning.

Pre-site Survey

UNJ supervisors conducted initial visits to five recommended locations by the Jakarta central government, including RPTRA Gondangdia, RPTRA Kebon Sirih, RPTRA Gempar Gemilang, RPTRA Komando Ceria, and RPTRA Mardani Asri. Based on criteria such as accessibility, community activity, and existing infrastructure, the selection narrowed to two RPTRA areas: RPTRA Kebon Sirih for community activity and RPTRA Komando Ceria for CPTED based public art. These visits laid the groundwork for problem identification in the specific areas.



Figure 2. A) RPTRA Gondangdia, located beneath the train railway; B) Entrance area of RPTRA Kebon Sirih; C) Children's playground at RPTRA Gempar Gemilang; D) Children playing football at RPTRA Komando Ceria; E) Mothers and children gathering at RPTRA Mardani Asri after school hours.

Recruiting Participants

Participants were recruited through an open call at UNJ, resulting in the selection of 20 students out of 36 submissions. AB27 selected 4 Korean students and assigned a professional architect to supervise as a mentor. This diverse group helped students learn from each other and from their mentor, making collaboration across different fields more effective.

Table 1. Student Participants Demography

ID	Group	Gender	Age	Affiliation
P1	Blue	M	23	Gwangju Univ.
P2	Blue	M	20	UNJ
P3	Blue	M	20	UNJ
P4	Blue	M	20	UNJ
P5	Blue	F	20	UNJ
P6	Blue	F	20	UNJ
P7	Brown	M	24	Gwangju Univ.
P8	Brown	F	21	UNJ
P9	Brown	F	19	UNJ
P10	Brown	M	20	UNJ
P11	Brown	M	20	UNJ
P12	Brown	F	19	UNJ
P13	Green	M	23	Gwangju Univ.
P14	Green	F	19	UNJ
P15	Green	F	20	UNJ
P16	Green	M	20	UNJ
P17	Green	F	22	UNJ
P18	Green	F	19	UNJ
P19	Pink	M	24	Gwangju Univ.
P20	Pink	M	19	UNJ
P21	Pink	F	21	UNJ
P22	Pink	M	19	UNJ
P23	Pink	F	18	UNJ
P24	Pink	M	20	UNJ

Problem Formulation

Students began formulating problems by exploring key CPTED concepts and their relevance to urban safety. Their understanding of safety and public space design was developed through initial discussions, focusing on identifying site-specific issues and how art could contribute to safer environments.

Site-survey Preparation

Participants were divided into four cross-cultural groups (Blue, Brown, Green, Pink), each consisting of 5 UNJ students and 1 Gwangju Univ. student. During the preparation phase, they learned about

CPTED, the local area, and their group tasks, which helped everyone feel involved and encouraging communication between cultures.

Acting and Observing Lecture

On May 5 and 7, students attended lectures on safety map creation and CPTED concepts, including case studies. These sessions connected theory with local examples, helping students learn how to apply CPTED ideas to real urban situations.



Figure 3. A) The expert delivers a lecture on safety map creation; B) The expert explains an example of a completed safety map; C) The expert introduces key CPTED principles; D) The expert assigns the site-survey task in Galur District, Central Jakarta.

In the safety map lecture, expert Jae Hak Jung explained why it is important to study urban alleyways together, since these often-overlooked spaces can be prone to theft, assault, and vandalism. He showed participants how to prepare and carry out field surveys by mapping unsafe areas, interviewing residents, and recording problems such as poor lighting or neglected spaces. The aim was not only to point out risks but also to involve the community in creating practical safety maps that could guide future improvements. This participatory method helps residents become more aware, take action for immediate safety, and support long-term urban planning.

During the CPTED lecture, he introduced CPTED as a multi-disciplinary strategy that integrates design, community participation, and policy to prevent crime and enhance quality of life. Drawing from theories by Jane Jacobs and Oscar Newman, he explained CPTED's core principles: natural surveillance, access control,

territorial reinforcement, activity support, and maintenance. He provided numerous case studies—ranging from Germany's Mitte District to Seoul's Salt Road project—to illustrate how thoughtful urban design, public art, and active community involvement can transform vulnerable areas into vibrant, safe spaces. He also addressed limitations of CPTED, noting that while environmental design reduces opportunity-based crimes, it must be continuously managed and adapted to local contexts to avoid unintended negative effects.

Site-survey

Fieldwork was conducted in *Kelurahan Galur* (Galur Subdistrict), where each group collected data through photography, interviews with residents (children, women, elderlies), and observational sketches. During observation, participants found that the Galur Subdistrict, located in the heart of Central Jakarta, is more than just a densely populated neighborhood. It is a community held together by deep social bonds and everyday acts of care. In the midst of narrow alleys and modest homes, residents build strength through shared routines, mutual support, and a spirit of togetherness that transcends material hardship. These close-knit relationships form the foundation of resilience, revealing how social connection can flourish even in the most constrained urban settings.

This in-depth site-survey activity deepened empathy and practical understanding of neighborhood dynamics.

During documentation, Group Blue conducted a detailed observation of RT 002/RW 07 (Site ① in Figure 1), focusing on safety-related aspects such as physical dangers (low-hanging electric cables, blind spots at intersections), neglected or abandoned infrastructure (damaged murals, vandalized walls, unused guard posts), and areas with limited lighting or surveillance. They also noted community behaviors and gathering spots, like small food stalls, local kitchens, and hangout points around patrol posts. Their documentation was structured geographically into four

zones and combined photos, notes, and resident interviews for a comprehensive understanding.

Group Blue interviewed four residents, including a shop owner, a woman, a rice seller, and a food stall seller. They mentioned that *pos ronda* (patrol post) and *warungs* (small shops) are used more for informal social gatherings than for security patrols. They mostly feel that most areas are safe, especially where spaces are active with residents, for example, in front of shops or mosques. However, *Gang 5* (alley 5) was repeatedly mentioned as an area with safety issues such as theft and snatching. In this area, surveillance is not driven by formal patrols but through active social presence and natural observation.



Figure 4. Group Blue documents safety concerns in neighborhood alleys.

Group Brown concentrated on documenting safety-related conditions around RPTRA Komando Ceria (Site ② in Figure 1), with a specific focus on narrow roads, dimly lit alleys, dead-end pathways, and areas where motorcycle traffic intersects with children's play spaces. They also observed the placement of CCTV, lighting, and children's facilities to assess how environmental conditions impacted everyday safety. Their approach combined resident interviews and visual documentation to capture both physical issues and local perceptions, especially from residents who regularly interact with these spaces.

Group Brown interviewed five residents, including elementary school students, middle-aged women and men, and a senior male resident. According to them, children's safety is a central issue, especially in narrow alleyways where motorcycles often pass through. Residents generally

feel safe, supported by adequate lighting and CCTV coverage, though *pos ronda* (patrol post) is rarely used for formal security. Play areas are multifunctional but under-maintained, as vacant lots are used for play and gatherings, but lack safety features such as lighting and proper surfaces. The community plays a key role in maintaining safety, often through informal presence and peer oversight rather than structured patrol systems.



Figure 5. Group Brown conducts interviews with local residents.

Group Green began by surveying Site ③ (Figure 1), particularly areas of RT 008/RW 06 alley, the intersection near Rawa Tengah Street, and several abandoned or underutilized spaces. They identified five critical points: a neglected open field once owned by a deceased resident, a dense residential area with narrow alleys, a busy intersection likely to accidents, an abandoned parking lot, and a vandalized wall. Their documentation focused on the lack of emergency infrastructure, risks posed by dense and poorly lit spaces, and community use of semi-public areas. Resident interviews added insights into past incidents and aspirations for safer, more usable environments.

Group Green interviewed 10 residents from children to the elderly. CCTV has helped reduce theft, but concerns remain about limited patrol presence in small alleys. Vacant land is a vital public asset, used for religious activities and children's play, though it is often dark and poorly maintained at night. Community members express strong hope for improved infrastructure, such as adding roofing, lights, and functioning toilets in the vacant land. Safety is viewed as a shared responsibility, with many residents contributing to collective surveillance through presence

and informal use of public space.



Figure 6. Group Green observes conditions around neighborhoods.

Group Pink focused on conducting a thorough walkthrough of Rawa Tengah Street and surrounding areas (Site ④ in Figure 1). They observed both physical conditions and social behaviors—such as the presence of unsupervised children, lack of public benches, poor lighting, unorganized electric cables, and unsafe corners. They conducted interviews with residents to understand perceptions of safety and documented problematic zones like abandoned buildings, dark alleys, and sites with histories of fights or drug use. The team also paid attention to positive elements in areas with good lighting, community murals, and active neighborhood monitoring.

Group Pink interviewed six adult residents. Brawls and youth disturbances were a past concern, particularly in conflict zones between Rawa Tengah and Kampung Rawa, but have decreased due to police presence. Petty theft, such as phone and motorcycle theft, still occurs, particularly during early morning hours like 2–4 AM, when areas are quiet. Drug use and late-night gatherings by teenagers are mentioned as ongoing safety risks, especially in less monitored zones. Lighting and CCTV coverage are generally strong, and 24-hour cafés and community activity help maintain a sense of security.



Figure 7. Group Pink explores neighborhood conditions and discusses their site-survey data.

All groups noted that areas with good lighting and CCTV felt safer, even though the coverage was not consistent. Community spaces such as *warungs* (small shops), cafés, and vacant lots function as key informal safety hubs, often more influential than official security posts. Across groups, early morning (2–4 AM) is seen as the most vulnerable period due to reduced activity and visibility. Children's safety became a shared concern, especially in narrow alleys or unstructured play spaces. Residents across all areas express interest in better infrastructure, such as safer playgrounds, sports facilities, seating, and shaded areas for gatherings.

Safety Map Creation

On May 6, students created safety maps using printed layouts of the area. Photos were described, interview excerpts were added, and potential danger zones were marked. This process helped students connect different types of information and made it clearer which areas had safety problems.



Figure 8. A) Group Blue reviews photographic data to identify zones for mapping; B) Group Brown prepares the map layout for marking danger zones; C) Group Green marks identified safety issues on the printed map; D) Group Pink presents key spatial problems found in the alley.

Group Blue synthesized their findings into a safety map of Site ① (Figure 1), highlighting specific issues in each sub-area, such as narrow alleys, broken drain covers, vandalized murals, and a lack of signage or CCTV. They proposed context-based solutions using symbols and descriptions, including adding convex mirrors at blind spots, repairing patrol posts, planting more greenery, and designing signage for public facilities. The map served as a diagnostic and conceptual design tool, vi-

ually connecting problem areas with actionable CPTED-based interventions.



Figure 9. Safety map of Site ① created by Group Blue.

Group Brown translated their observations and interview insights into a comprehensive safety map of Site ② (Figure 1). They marked key elements—such as CCTV locations, the mosque, kids' zones, and dangerous areas such as narrow intersections—on the paper. Real photographs and hand-drawn icons accompanied their descriptions, enhancing the clarity of the spatial data. Team members divided tasks to ensure accurate documentation, including photo placement, symbol drawing, and synthesizing interview notes, culminating in a group presentation of their site analysis.



Figure 10. Safety map of Site ② created by Group Brown.

Group Green assembled a safety map of Site ③ (Figure 1) using photos, notes, and symbols to mark hazards and

safe zones. They highlighted the five focus points, integrating findings from their interviews, for instance, the community's wish to revive the open field and concerns about poor visibility at intersections. Using icons and colored markers, they illustrated issues such as blind spots, neglected areas, and dangerous pathways, while also proposing CPTED-based preliminary responses. Their map served not only as a spatial analysis tool but also as a foundation for design ideation.



Figure 11. Safety map of Site ③ created by Group Green.

Group Pink developed their safety map of Site ④ (Figure 1) by posting printed location photos, transcribing interview contents, highlighting issues of crime-prone spots, lighting conditions, and surveillance presence. They used this information to mark their group map with zones labeled as safe, unsafe, or needing improvement. The process of combining data collection, visual mapping, and organizing themes became a source of their design solution.



Figure 12. Safety map of Site ④ created by Group Pink.

Ideation

On May 7, after the lecture on CPTED, each group developed creative yet practical design ideas that addressed the identified safety concerns. These included mural pathways, interactive signage, and multifunctional installations, which were compiled in one combined map. After each group's idea generation and presentation, they were asked to choose one spot within their site (Figure 13). For example, Group Blue chose Spot A, a long alley way located in Jl. Rawa Tengah No.13C, RT.1/RW.7. Group Brown chose Spot B, an intersection at Jl. Rawa Tengah No. 18c, RT. 3/RW. 6. Group Green and Group Pink selected Spot C together, an empty plot located in Jl. Rawa Tengah No.29, RT.8/RW.7.



Figure 13. Main three spots to develop design solutions by the groups.

Group Blue's ideas for a long alley way included: (1) folding benches under Betawi-style canopies; (2) murals themed on local history and literacy; (3) bougainvillea planting, directional art installations; (4) an interactive kinetic flower sculpture activated by motion sensors; and (5) CCTV and a beam for road sign (Figure 14). Their process emphasized multifunctionality (e.g., beautification + safety), cultural symbolism, and community usability.

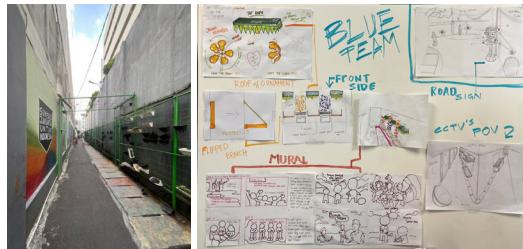


Figure 14. Final design solutions proposed by the members of Group Blue.

Group Brown's ideas for an intersection included: (1) renovating the guard post with safer seating and clear visibility; (2) repairing wooden benches to improve comfort and aesthetics; (3) creating colorful cat murals at key intersections to humanize and soften the space; and (4) adding Kids Zone markers and rumble strips to slow vehicles and improve road safety (Figure 15). Their ideation process emphasized usability, aesthetics, and local relevance, combining playful visual design with practical safety enhancements.



Figure 15. Final design solutions proposed by the members of Group Brown.

Group Green and Group Pink collaboratively redesigned an empty plot of land by dividing it into two functional zones—open and enclosed (Figure 16). Their design proposals included: (1) an adjustable canopy to make the area usable in various weather conditions; (2) a protective fence separating the inner play space from surrounding traffic; (3) three types of trash bins to promote waste awareness; (4) a child-friendly mural within the space; and (5) a small corner library equipped with storage for shoes and traditional musical instruments.



Figure 16. Final design solutions proposed by the members of Group Green and Group Pink.

Reflecting

Presentation to groups

Groups presented their design solution to one another and received peer feedback. This process encouraged them to reflect on their work, think critically, and consider different perspectives before making group decisions together.

Presentation to local government authorities

On May 9, all four group proposals were presented to *Kelurahan Galur* (Galur Subdistrict) officials. The session included feedback, discussions, and the final selection of one design for execution. This public presentation validated students' work and emphasized their roles as social contributors. It also reinforced the real-world impact of their ideas, contributing to their sense of social responsibility and real-world learning.



Figure 17. A) The Head of Kelurahan Galur delivers a welcome speech to the ODASIS team; B) The expert mentor introduces three designated spots in Kelurahan Galur where students developed their group proposals; C) The expert mentor presents design ideas proposed by the students.

Safety Map Creation and CPTED Learning

The project began with field assessments in two neighborhoods in Kelurahan Galur, Jakarta: RW 06 and RW 07. Stu-

dents walked around, took notes and photos, and talked informally with residents of different ages to identify safety issues and everyday challenges. These included dark alleys, confusing paths, and a lack of safe, inclusive places to gather. Problems such as these have also been noted in other studies of Indonesian urban spaces (Aulia, 2020; Malik et al., 2024).

As they observed the area, students learned to read both physical and social indicators of safety and risk and turn them into practical ideas for safer space design. This approach mirrors key CPTED principles such as natural surveillance, access control, and territorial reinforcement (Newman, 1972; Moffat, 1983; Crowe, 2013; Cozens et al., 2005; Kubalová et al., 2023). After attending CPTED lectures and mapping sessions, the students created safety maps to show which areas were risky and which had potential. They worked in teams to propose four creative public art interventions based on what they had learned and heard from the community. These ideas combined functional CPTED strategies with artistic, site-specific solutions. One of the proposals was later chosen together with local authorities for actual implementation.

Student reflections show how they internalized these lessons. P4 reflected, "During the lectures and safety map creation activities, I learned that CPTED is about designing environments to reduce the chances of crime and make people feel safer." For P18, the fieldwork offered her first experience conducting a safety survey: "It helped me become more aware of unsafe design elements in public spaces." Similarly, P12 emphasized the practical learning process: "In making safety maps, it was very exciting... from working in a compact team and paying attention to small things when surveying a place." Their comments highlight how fieldwork and teamwork made CPTED more understandable and meaningful.

Context-based Design Solution through Community Interaction

Throughout the project, students engaged directly with the specific environmental, social, and spatial conditions of Galur Subdistrict. Their observations and interviews revealed critical local challenges, such as narrow alleyways, poorly lit corners, and limited access to safe play spaces for children. P4 shared, "I took notes and photos to document areas that seemed unsafe... The most noticeable safety issues I identified were poor lighting, many blind spots... and the danger posed by motorcycles." P18 noted, "Many of the alleys were extremely small and had signs of vandalism... The narrowness of the alleys also posed a serious issue for evacuation." P12 added, "Access for children to play is lacking... they have to play in the neighborhood unit to access their play area."

This kind of context-sensitive design thinking reflects the evolution of CPTED from a purely physical design model to one that considers social needs and behaviors (Cozens & Love, 2015). P11 commented, "Community-based art projects like this have great value—they make us aware of the social function of art." Likewise, P23 emphasized, "These projects are valuable because they give us direct experience with public engagement, not just theory." As Lamoreaux and Sulkowski (2019) show, environments designed with CPTED principles not only enhance safety but also foster psychological comfort—demonstrating how physical design can strengthen people's sense of connection to their surroundings.

While students expressed positive reflections on their learning experiences, they also identified several practical concerns regarding the upcoming implementation phase. Most students anticipated technical and environmental challenges, particularly related to limited space in narrow alleys, unpredictable weather conditions, and time constraints during construction. They were also aware of logistical difficulties, such as managing materials, coordinating teamwork, and obtaining necessary permits. Beyond technical

issues, many students expressed concern about community involvement and long-term maintenance, emphasizing the need to ensure that residents not only accept but also help sustain the project outcomes.

Cross-cultural and Interdisciplinary Collaboration

Each group included five Indonesian visual arts students and one Korean architecture student. This setup gave students the chance to learn from both a different discipline and a different culture. Through group discussions, sketches, and planning sessions, students practiced communicating across language and design backgrounds.

Working with architecture students broadened the visual arts students' understanding of urban space. P4 explained, "I learned how they view space and the environment from a design and functional standpoint... This experience helped me appreciate the importance of a multidisciplinary approach." P18 shared, "They were not only intelligent in expressing their ideas, but also sociable, humorous, and open-minded... Working with them gave me a new perspective on creativity and communication." P12 noted, "Their perspectives enrich the way I see problems, and this collaboration makes the solutions we produce more comprehensive and applicable."

This reflects CPTED's broader shift toward interdisciplinary and multi-stakeholder approaches (Cozens et al., 2023). The students' experiences highlight how working across disciplines and cultures can generate more comprehensive solutions. P21 said "Collaborating with architecture students gave me more insight into the technical feasibility of ideas." P15 added, "I became more aware of the importance of a design that is not only aesthetic but also functional and socially impactful."

Civic Awareness and Responsibility

Over time, students began to see themselves not just as learners, but as people who can make a difference in their communities. This is a key goal of Participatory Action Research, which encourages people to become active agents of change (Kemmis & McTaggart, 2007). By talking to residents and proposing solutions, students learned that art and design can help solve real problems.

P14 said, "They were friendly, fun, and quite enthusiastic in answering our questions." This helped students connect more deeply with the community. She added, "This project shows that art can be a powerful tool for building awareness and fostering interaction between people." P21 noted, "Art is not just about beauty but about relevance—how it addresses real community issues."

Students also reflected on their growing sense of responsibility. P4 reflected, "I became more aware that as a student, my responsibility goes beyond academic learning... I also have a duty to actively contribute to the community." P18 said, "Even small actions like contributing ideas or participating in community projects can make a positive difference... I have a responsibility to use my skills to help improve the environment around me." P12 explained how her mindset changed: "Every time there is a place that allows something to be done quickly, I think about what can be done... I learn from there."

These reflections show that students developed not only technical skills but also a stronger sense of civic responsibility, aligning with newer approaches to CPTED that this research aims to demonstrate, including youth engagement and social learning. This process also resonates with Experiential Learning Theory (Kolb, 1984), as students learned through a continuous cycle of concrete experience, reflection, and creative problem-solving within real community contexts.

Limitations and Future Research

While this study provides important insights into how CPTED and participatory art education can work together, it also has some limitations. First, the project took place in only one urban neighborhood, so the results are most relevant to that set-

ting. For future research, they can still be compared with other places. Second, the short timeframe made it difficult to observe long-term changes in how students learn or how the community feels about safety. Longer-term effects can be explored in the future project. Third, most of the data came from student reflections. Future studies can add surveys or interviews with both students and community members before and after the project to strengthen the findings.

CONCLUSIONS

This study demonstrates that integrating CPTED principles with participatory public art projects can serve as a powerful interdisciplinary learning model in urban art education. The site-survey phase of the ODASIS project enabled students to engage with real-world safety issues, build empathetic connections with local residents, and collaboratively develop site-responsive design proposals. Through hands-on mapping, cross-cultural teamwork, and interaction with the local community, students expanded their understanding of how environmental design intersects with civic life.

The results highlight the value of using urban spaces as learning environments where theory meets practice. Students did not merely learn about CPTED and public art as separate concepts—they experienced their interdependence. By engaging in contextual problem-solving, they developed a deeper sense of responsibility as emerging professionals, artists, and citizens. Furthermore, cross-disciplinary and cross-cultural exchanges enriched the process, helping students recognize the importance of diverse perspectives in co-creating public spaces.

In an era where cities face increasing challenges around safety, equity, and cohesion, this approach offers a meaningful template for socially engaged art education. It shows that artistic practices, when integrated with participatory urban strategies, can cultivate not only more thought-

ful design but also more engaged and informed youth. Moving forward, such models hold the potential to transform both public spaces and educational frameworks in meaningful, sustainable ways.

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