

Ten Groups, Ten Facilitators: Process Evaluation of a Lecturer-Student Co-Facilitated Art Workshop at an Elementary School in Jayapura, Papua

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ABSTRACT

Community service reports in elementary schools rarely examine how an activity is delivered, leaving readers little they can replicate. This process evaluation examined a one-day printed-media-waste art workshop for 39 students in Papua, delivered by ten facilitators, seven lecturers and three students, in ten parallel groups. Data comprised group field notes, a self-efficacy scale, reflective journals, dual-rater artwork scoring, and 286 photographs. Barriers were operational rather than pedagogical: tool availability and the absence of a physical finished example accounted for six of ten stated changes. The self-efficacy scale registered no variation, while reflective journals produced actionable improvements. Half the children who attended came from grades outside the nominated group.

INTRODUCTION

Community service programmes in elementary schools are commonly reported through participant achievement, and rarely through the quality of their delivery. The consequence is a body of uniform reports concluding that activities ran smoothly, from which a reader planning a similar activity elsewhere can extract very little. Process evaluation addresses this gap directly by examining adherence to design, dose, quality of delivery, and participant responsiveness, and by identifying where and why delivery falters (Kim et al., 2015; Nurjono et al., 2019). Evidence from implementation research indicates that a substantial share of programmes fail before services reach participants at all, and that early implementation fidelity is strongly associated with whether delivery ever begins (Alley et al., 2023).

Art activities using recycled or waste materials are a well-established vehicle for combining creative work with environmental learning in resource-constrained schools (Çebi, 2025; Abdullah et al., 2025; Kang et al., 2026). Reports from Indonesian elementary settings consistently describe gains in creativity and environmental awareness following recycling-based craft training (Yuningsih & Jaizul, 2025; Fauziah & Wijayanto, 2024). What these reports seldom describe is what determines, at the level of the working table, whether children actually begin and finish their work.

A second gap concerns who delivers the activity. Studies of student facilitators in community service and interprofessional education report benefits for the facilitators themselves, including confidence and communication skills (Ismail et al., 2023; He et al., 2024; Kropp et al., 2015). Far less is documented about what happens when university students and lecturers facilitate side by side within a single activity, and whether the two groups encounter different obstacles.

This paper reports a process evaluation of a printed-media-waste art workshop delivered through ten parallel groups at an elementary school in Jayapura, Papua. It draws on five data sources collected on the days of delivery. The contribution offered is a set of countable operational determinants that other teams can reuse, rather than a conclusion that the activity succeeded. Three evaluation questions are addressed. First, what determined the smoothness of children's work at group level? Second, did lecturer-facilitated and student-facilitated groups encounter different patterns of obstacles? Third, to what extent did the instruments used capture what actually occurred?

IMPLEMENTATION AND METHODS

Implementation fidelity provides the analytic frame for this evaluation. The construct is conventionally decomposed into adherence to the intended design, dose or exposure, quality of delivery, and participant responsiveness (Kim et al., 2015). Applied to short community service activities, this framing shifts attention from what participants gained to what the delivery itself looked like, including the material conditions under which it took place. Process evaluations in community settings have repeatedly shown that variation in fidelity is driven by programme complexity, the presence of guiding protocols, and facilitator

preparation and confidence (Nurjono et al., 2019; Kok et al., 2018; McKeon et al., 2026).

Facilitator self-efficacy is the second construct. Interventions targeting teacher self-efficacy produce positive but moderate effects, and reviews recommend that such interventions incorporate reflective elements (Täschner et al., 2024). Studies combining efficacy scales with reflective writing report that the two instruments illuminate different aspects of professional learning, with reflective journals surfacing concerns that scales do not register (Menon et al., 2020; Dumlao & Pinatacan, 2019). This distinction proved directly relevant to the present evaluation.

Service learning provides the third frame. Its literature documents gains for student facilitators in confidence, communication, and civic engagement, and stresses that sustained institutional support and structured preparation shape those gains (Shek et al., 2019; Schultes et al., 2025). Within this literature the co-presence of faculty and student facilitators in a single delivery remains sparsely described.

Setting and participants. The activity was requested by the host school in letter 25/424/SD/C.1-M/2026 of 12 August 2026, which proposed a session for students in grades IV, V, and VI with a target of 49 participants. The team was assigned on 20 and 21 August 2026 under assignment letter 0803/IT12/KP.10.00/2026 issued by Institut Seni Budaya Indonesia Tanah Papua, and the session with children was held on Friday, 21 August 2026 at SD YPK Kwadeware, Jl. Toware-Patouw, Jayapura, Papua. Thirty-nine students attended, drawn from all six grades: 4, 9, 7, 8, 8, and 3 students from grades I to VI respectively. Twenty of them, in grades I to III, were outside the group the school had nominated. All children present took part; no sampling was applied.

Activity design. Children worked in ten parallel groups of approximately four, each accompanied by one facilitator. Techniques comprised collage, paper weaving, and papier-mâché, using discarded newspapers and magazines as the principal material.

Facilitators. Ten facilitators were coded F-01 to F-10 and held groups K1 to K10: seven lecturers and three students. Nine were affiliated with the Visual Communication Design study programme and one with the Dance study programme of the same institute.

Instruments. Five sources were used. First, a structured group field-note sheet recording attendance, artwork completion, the most frequent question, the most frequent technical difficulty, the number of minutes until children began attaching material, children who stopped mid-task, and verbatim quotations of spontaneous behaviour. Second, a six-item facilitator self-efficacy scale rated 1 to 5, completed before and after the session. Third, an open reflective journal covering terms explained in the facilitator's own words, unexpected events, and one thing the facilitator would change. Fourth, an artwork rubric with four aspects scored 1 to 4, completed independently by two raters. Fifth, photographic documentation, 286 files, classified into seven categories.

Analysis. Field-note data were aggregated into group-level descriptive statistics. Self-efficacy data were reported descriptively at item level. Reflective journals were coded thematically across the ten responses, with themes derived from the question on what the facilitator would change. Rubric scores were reported together with inter-rater agreement. The lecturer–student comparison was descriptive and qualitative; with ten groups, no test of difference was performed.

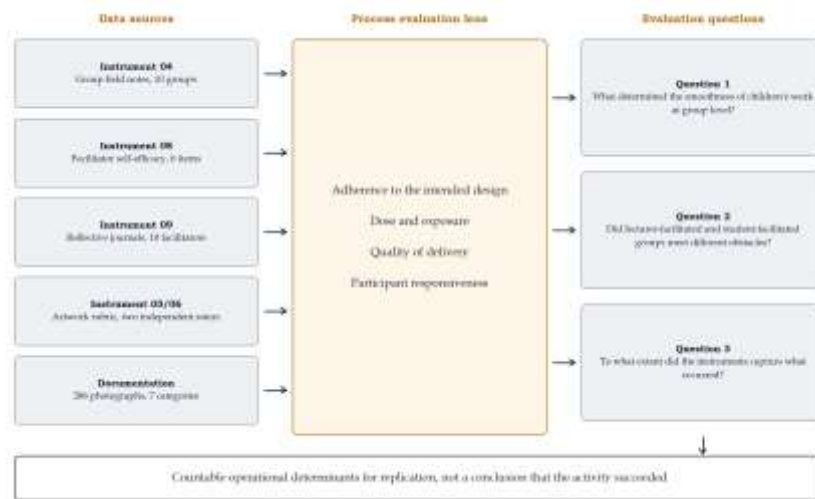


Figure 1. Conceptual Framework of The Process Evaluation

Note. Compiled By The Authors.

RESULTS AND DISCUSSION

Delivery at group level. The findings are summarised in Table 1. Of the 19 grade 4 to 6 students recorded on the field-note sheets, 16 completed an artwork. The interval between the start of the session and the moment children began attaching material ranged from four to eight minutes, with a median of five. Only a small number of children, three in total, stopped mid-task, and these were concentrated in two groups.

Table 1. Delivery Indicators By Group

Group	Facilitator status	Students recorded	Artworks completed	Minutes to first attachment
K1	Lecturer	2	2	7
K2	Lecturer	2	2	6
K3	Lecturer	2	1	4
K4	Lecturer	3	3	4
K5	Lecturer	1	1	5
K6	Lecturer	4	2	5
K7	Lecturer	2	2	5
K8	Student	1	1	6
K9	Student	1	1	8
K10	Student	1	1	5
Total	—	19	16	4–8 (median 5)

Note. Recorded students are grade 4 to 6 participants only. Twenty grade 1 to 3 participants took part in the activity but were not recorded on these sheets.

Recurring obstacles. Table 2 presents themes drawn from the reflective-journal question on what each facilitator would change. Six of the ten facilitators named either the physical availability of a finished example or the condition of the tools.

Table 2. Themes from the Question On What Facilitators Would Change

Theme	Facilitators
A finished example must be physically present on the table, not shown from the front	3
Tools checked and prepared before the session (sharp scissors, sealed glue containers)	3
Materials pre-formatted (guide lines on card, wider weaving strips)	2
Group structure and eliciting speech from quiet children	2

None of the four themes concerned command of the subject matter. One facilitator recorded that part of the opening period was spent arranging the borrowing of scissors.

Spontaneous behaviour among children. Field notes recorded children asking permission before using a group member's scissors and reminding one another to use glue sparingly. Neither arrangement had been instructed by facilitators.



Figure 1. Documentation of the Activity Implementation

Note. Panels: (1) a facilitator explaining the technique to a group; (2) children sorting pieces of printed material; (3) the shared scissors on a group working mat, with discarded newsprint as the working material; (4) a child attaching a piece to card; (5) a completed artwork; (6) groups at work across the room. Photographs by the authors.

Lecturer and student facilitators. Reflective journals from the three student facilitators differed from those of the seven lecturers in one respect. One student facilitator identified uncertainty about the correctness of their own guidance as the principal difficulty, a concern absent from the lecturers' journals, whose stated difficulties centred on managing individual children. This may indicate a difference in how the two groups experience the role, but with three student-facilitated groups it is reported as an indication requiring examination in subsequent activities rather than as an established pattern.

Artwork quality and inter-rater agreement. Table 3 reports total scores from the two raters for the ten artworks, one selected by each facilitator as the strongest in their group.

Table 3. Artwork Totals By Rater (Maximum 16)

Artwork	Technique	Rater 1	Rater 2	Difference
K1	Collage	11	12	+1
K2	Collage	12	14	+2
K3	Collage	11	14	+3
K4	Papier-mâché	13	15	+2
K5	Collage	11	11	0
K6	Paper weaving	11	12	+1
K7	Collage	10	10	0
K8	Collage	8	9	+1
K9	Collage	10	12	+2
K10	Collage	10	10	0
Mean	—	10.7	11.9	+1.2

Rater 1 scored within a range of 8 to 13, Rater 2 within 9 to 15. Totals were identical for three of ten artworks and differed by no more than one point for six of ten. Rater 2 was consistently more lenient by an average of 1.2 points.

What the instruments captured. The self-efficacy scale produced totals between 22 and 24 out of 30 across all ten facilitators, and all ten indicated willingness to facilitate a similar activity again. Item-level values recorded before and after the session were identical for every facilitator. Over the same period, the reflective journals from the same ten individuals produced the specific and actionable set of changes summarised in Table 2.

Coverage of participants. The written instruments were designed for the nominated group, grades IV to VI, and reached all 19 of those students. The organising team and the school principal agreed that the instruments would be administered only to those grades, so the 20 children from grades I to III who attended took part in the making activity without completing them. The group field-note sheets likewise recorded only the 19 nominated students, so artwork completion for the 20 younger attenders is undocumented.

The obstacles reported by facilitators were material rather than pedagogical. Six of ten stated changes concerned the presence of a physical exemplar and the condition of the tools; none concerned mastery of the techniques being taught. These results are consistent with process evaluations in other community settings, where variation in delivery has been traced to the availability of guiding protocols and concrete supports rather than to practitioner knowledge (Nurjono et al., 2019; Kok et al., 2018). The implications of this finding are practical: preparation of physical materials deserves the same planning attention usually given to session content.

The spontaneous arrangements children made around shared tools merit attention. Asking permission before taking a group member's scissors, and reminding one another to conserve glue, emerged without instruction. Scarcity of tools therefore did not produce disorder. It did, however, consume working time, and the two observations should be read together rather than as one offsetting the other.

The contrast between the two facilitator instruments is the most consequential finding for future evaluation design. A six-item Likert scale registered nothing, while an open reflective prompt administered to the same people on the same day yielded a specific list of improvements. This aligns with work reporting that reflective writing surfaces concerns that efficacy scales do not register (Menon et al., 2020; Dumlao & Pinatacan, 2019), and with the recommendation that efficacy interventions incorporate reflective components (Täschner et al., 2024). For single-day community service activities, a reflective journal appears the more informative instrument. This interpretation requires caution on one point. Item-level values on the morning and afternoon sheets were identical for every facilitator. This uniformity limits what may be concluded, and the self-efficacy data are therefore reported here as a single-point description rather than as a measurement of change.

The finding with the widest implication concerns coverage, and its cause is neither an oversight in instrument design nor any limitation of the children. The school nominated grades IV to VI, the instruments matched that group exactly, and the organising team and principal agreed to confine them to those grades. What the plan did not anticipate is that half the eventual attendance would come from outside it. In a small school, an activity of this kind draws in younger children who are present on the day, and the evaluation then has nothing to say about them. The lesson is one of planning rather than instrument choice: where attendance cannot be restricted, measurement should be prepared for the grades that may arrive, not only for those invited. Guides designed specifically for lower-grade recycled art activity provide one starting point for such planning (Kang & Daoruang, 2026).

Two features of the artwork data bound its interpretation. The rank order of the artworks was agreed between raters while the level of leniency differed systematically, which points to a calibration session using two sample works before scoring begins. In addition, the scored artworks were those selected by facilitators as the strongest in each group. They describe peak attainment, not typical attainment.

CONCLUSIONS AND RECOMMENDATIONS

Delivery at group level was largely completed, with 16 of 19 recorded students finishing an artwork and a median of five minutes before work began. Obstacles were operational, centred on tools and on the absence of a physical exemplar. Lecturer-facilitated and student-facilitated groups differed in one respect only, with a student facilitator reporting uncertainty about their own guidance; with three such groups this remains indicative. The instruments captured the activity unevenly: the reflective journal was informative, the efficacy scale was not, and neither reached the 20 children who attended from outside the nominated grades.

It is recommended that teams replicating this activity adopt five measures. First, provide at least two functioning pairs of scissors per table of four children, and check their sharpness before the session. Second, place one physically finished example per group on the table from the outset; an illustrative video alone does not give children a reference they can see and handle. Third, pre-format materials, including guide lines drawn on card and weaving strips wide enough to withstand pulling. Fourth, plan observation-based instruments for grades 1 to 3 from the design stage rather than written response sheets, since younger children are likely to attend whether or not they were nominated. Fifth, hold a calibration session between raters before artwork scoring begins.

Six limitations bound these findings. The evaluation covers one school and one single-day activity without a comparison group. The facilitation ratio of one facilitator to 3.9 children is considerably more generous than an ordinary classroom, which restricts transfer of the findings to conventional class sizes. The self-efficacy data cannot be read as change. The scored artworks were selected as the best in each group rather than sampled at random. The lecturer and student comparison rests on seven groups against three and is indicative only. Artwork completion for the 20 children from grades I to III is undocumented. Attendance reached 39 of the 49 participants the school had targeted.

Future research should focus on three directions. Structured observation instruments for lower primary grades should be developed and trialled in this setting. The apparent difference between lecturer and student facilitators warrants examination with a larger number of student-facilitated groups. Finally, the operational recommendations listed above should be tested directly, by comparing groups provided with a physical exemplar and checked tools against groups without them.

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