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An Integrated Framework for Experiential Learning and Digital Storytelling in Educational Tourism

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ABSTRACT: The subak system, a UNESCO-recognized traditional Balinese irrigation organization embodying the Tri Hita Karana philosophy, faces significant threats from land conversion and declining agricultural viability. In response, community-based educational tourism initiatives like Subak Teba Majalangu in Denpasar have emerged to preserve cultural heritage while generating economic opportunities. However, this site faces critical challenges: low destination brand awareness, limited digital literacy among management, and untapped experiential learning potential. This community service program aimed to address these challenges by developing and implementing an integrated framework for experiential learning and digital storytelling in educational tourism at Subak Teba Majalangu. Employing a Participatory Action Research (PAR) approach over six months, the program engaged 25 members of the local Tourism Awareness Group (Pokdarwis) through four iterative phases: situational analysis, co-design of training modules, capacity building and mentoring, and evaluation. The intervention integrated Kolb's Experiential Learning Theory (ELT) with digital storytelling techniques, redesigning visitor experiences and training participants in digital content creation. Quantitative results demonstrated significant improvements in digital literacy across all competency domains, with post-test scores showing marked enhancement compared to pre-test baselines. The most substantial gains were observed in digital content creation, scriptwriting and narrative design, and understanding of platform-specific marketing strategies. The program successfully produced 15 digital storytelling assets and generated substantial increases in social media engagement, with notable growth in reach, profile visits, and content engagement. Qualitative thematic analysis revealed five key themes: empowerment through digital literacy acquisition, remediation of the reflective observation gap in experiential learning, tensions between cultural authenticity and platform optimization, institutional capacity and sustainability concerns, and tangible economic benefits from increased destination visibility. Visitor satisfaction surveys indicated that the redesigned experiential learning flow enhanced understanding of the subak system and its cultural significance. The program successfully demonstrates that integrating experiential learning with digital storytelling can enhance community capacity, preserve cultural heritage, and generate economic benefits. The integrated framework developed through this initiative offers a practical, replicable model for other heritage communities facing similar challenges of cultural erosion and limited digital capacity. By bridging traditional wisdom with contemporary digital media practices, this program contributes to the broader goal of sustainable, community-based tourism that preserves cultural heritage while empowering local communities.

KEYWORDS: experiential learning, digital storytelling, educational tourism, subak, community empowerment, Participatory Action Research

INTRODUCTION

Bali has long been recognized as one of Indonesia's premier tourist destinations, renowned for its natural beauty, rich cultural heritage, and the warmth of its people. At the heart of Balinese identity lies the *subak* system—a traditional democratic organization governing irrigation through a cooperative, socially and religiously embedded framework. In 2012, UNESCO recognized the subak system as a World Cultural Heritage site, acknowledging it as a manifestation of the *Tri Hita Karana* philosophy, which harmonizes the relationship between humans, nature, and the divine. Despite this prestigious recognition, the subak system currently faces an existential threat. The accelerating conversion of agricultural land into commercial and residential developments has progressively reduced rice field areas across Bali (Windia et al., 2017; Zen et al., 2024) . In Denpasar

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City alone, agricultural land declined from 2,444 hectares in 2016 to merely 1,958 hectares by 2019. This trend poses a significant risk not only to food security but also to the continuity of Balinese cultural identity, of which subak is an integral part.

In response to these challenges, innovative community-based initiatives have emerged that position agriculture as a partner to tourism (Wijayanti et al., 2020). One such initiative is Subak Teba Majalangu, an educational tourism destination located in the jogging track area of Desa Budaya Kertalangu, Kesiman Kertalangu Village, East Denpasar District. Spanning 1.4 hectares, the site offers a range of hands-on agricultural activities—from learning traditional farming tools and plowing with oxen to planting rice and exploring a subak museum. The site is managed through a collaborative model involving the local tourism awareness group (*Pokdarwis*), village government, academics, and local micro, small, and medium enterprises, with local farmers serving as guides (P. A. S. Laksmi, Putra, et al., 2023). However, initial observations and in-depth interviews with the Pokdarwis management of Subak Teba Majalangu revealed several critical partner problems:

1. Low Destination Brand Awareness: Despite its strong educational potential, visitor numbers remain suboptimal due to limited promotional reach, particularly among younger, digitally native audiences.
2. Limited Digital Capacity of Human Resources: The management team possesses strong agricultural and cultural expertise but lacks adequate skills in digital content creation, social media management, and narrative-based promotional strategies.
3. Untapped Experiential Learning Potential: Although the site offers rich hands-on activities, these experiences have not been systematically structured into a formal educational framework, nor are they documented or shared digitally to create a wider ripple effect.

To address these partner problems, this Community Service Program (Program Pengabdian kepada Masyarakat) collaborates with the Pokdarwis of Subak Teba Majalangu to develop and implement "An Integrated Framework for Experiential Learning and Digital Storytelling in Educational Tourism." This program adopts a Participatory Action Research (PAR) approach, ensuring that the community is not merely the object of assistance but an active co-creator throughout the process (Wiasti & Suarsana, 2023; Windia et al., 2005). The core objectives of this community service initiative are: (1) to co-design a structured experiential learning curriculum based on Kolb's cycle, transforming traditional farming activities into measurable educational modules; (2) to enhance the digital literacy and storytelling skills of the Pokdarwis members and local farmers through intensive training and mentoring; and (3) to co-produce a portfolio of digital storytelling content (videos, social media assets, and interactive narratives) that serves as a promotional and educational toolkit. Ultimately, this community service program aspires to create a sustainable and replicable model of village tourism that not only preserves Balinese cultural heritage but also economically empowers the surrounding community by bridging the gap between local wisdom and contemporary digital media practices (Laksmi, Putra, et al., 2023).

LITERATURE REVIEW

This literature review serves as the theoretical and empirical foundation for designing the community service intervention at Subak Teba Majalangu. Rather than merely identifying academic gaps, this review explores how established theories can be practically applied to empower community partners in the domains of educational tourism and digital media.

Experiential Learning Theory as a Framework for Community-Based Tourism Education

Educational tourism, or edutourism, has evolved beyond traditional school trips into a dynamic field where learning occurs through direct engagement with local environments and cultures. A systematic review of edutourism research reveals that Experiential Learning Theory (ELT), proposed by David Kolb, is the most dominant theoretical framework in this domain. Kolb's ELT comprises four interconnected stages: Concrete Experience, Reflective Observation, Abstract Conceptualization, and Active Experimentation. In the context of community service, ELT provides a powerful pedagogical structure for local communities to design meaningful visitor experiences. For partners like Subak Teba Majalangu, the existing agricultural activities (plowing, planting, harvesting) represent rich *Concrete Experiences* (P. A. S. Laksmi & Saputra, 2024a; Saputra & Laksmi, 2024). However, recent literature indicates that the *Reflective Observation* stage is often critically underexplored in edutourism practices—meaning visitors frequently engage in activities without structured guidance on how to process, internalize, and articulate their learning. For this community service program, ELT is operationalized as a practical toolkit to:

- Assist the Pokdarwis in redesigning their activity flow, ensuring that each hands-on session is explicitly followed by guided reflection and conceptual discussion (linking traditional farming to *Tri Hita Karana*);
- Train local guides to facilitate experiential learning cycles, transforming them from mere activity instructors into reflective learning facilitators;
- Develop educational modules that can be replicated by other village tourism enterprises across Bali.

Digital Storytelling as a Tool for Community Empowerment and Destination Branding

Digital storytelling is defined as the merger of traditional narrative techniques with contemporary digital media technologies, utilizing videos, audio, virtual reality, and social media to craft emotionally compelling narratives. A systematic review of digital storytelling in cultural and heritage tourism has identified four key framework elements: (1) social media platform integration, (2) multimedia engagement, (3) community participation, and (4) cultural authenticity. Within a community service paradigm, digital storytelling is not merely a promotional tactic but a vehicle for community empowerment (Laksmi, Arjawa, et al., 2023; Laksmi & Saputra, 2024b). For the Pokdarwis of Subak Teba Majalangu, who face low brand awareness and limited digital reach, mastering digital storytelling enables them to:

- Reclaim and broadcast their own cultural narratives, rather than relying on external tour operators or influencers;
- Generate authentic, grass-roots content that resonates with modern travelers seeking genuine cultural encounters;
- Create a sustainable digital asset portfolio (videos, photo series, interactive maps) that can continually attract visitors with minimal ongoing cost.

Research also emphasizes that successful digital storytelling requires consistency across platforms, audience interactivity, and multi-stakeholder collaboration. This aligns with the community service approach, where collaboration between academics, students, Pokdarwis, and

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local farmers is essential to produce culturally accurate and engaging content (Saputra, Jayawarsa, et al., 2025; Saputra, Laksmi, & Noordin, 2025). By building this capacity internally, the community gains long-term autonomy over their digital presence.

The Subak System: Contextualizing the Community Partner

The subak system is not merely an irrigation method but a socio-religious institution embodying the philosophy of *Tri Hita Karana*. UNESCO inscribed the "Cultural Landscape of Bali Province: the Subak System" in 2012. However, UNESCO's State of Conservation reports consistently highlight threats to this heritage: land conversion, development pressures, lack of support for traditional farming, and absence of strategic tourism planning. Subak Teba Majalangu, the community partner in this service program, represents a grassroots effort to counter these threats by transforming heritage preservation into an economically viable tourism product (Darmawan et al., 2023; Purnamawati et al., 2024). Previous research at this site has primarily focused on documenting the subak lexicon and traditional farming tools. While valuable, such documentation remains static (books, museum displays) and does not actively engage younger generations. This community service program bridges that gap by:

- Moving beyond static documentation toward dynamic, digitally shareable narratives that appeal to Gen Z and millennial audiences;
- Integrating the local wisdom documented in prior studies into the experiential learning modules and digital content co-created with the community;
- Supporting the community's own goal of making Subak Teba Majalangu a recognized educational destination, thereby reducing the pressure of land conversion by proving that agriculture can be economically sustainable through tourism.

The Need for an Integrated Framework in Community Service Practice

Existing literature reveals a conceptual fragmentation between experiential learning and digital storytelling. Studies on edutourism focus heavily on pedagogical structures, while studies on digital media focus on content creation and platform optimization (A. A. R. S. Laksmi et al., 2020; Saputra et al., 2024). Few, if any, have systematically integrated these two approaches in a community service context. For a community partner like Subak Teba Majalangu, this fragmentation poses practical challenges. The community may offer excellent hands-on farming experiences (ELT) but struggle to tell compelling digital stories about them. Conversely, they may attempt social media promotion without a structured educational philosophy behind their activities, resulting in shallow tourist engagement (P. A. S. Laksmi, Putra, et al., 2023; Saputra, Laksmi, Noordin, et al., 2025). This community service initiative addresses this gap by co-creating an integrated framework that:

- Trains the community to see the *visitor journey* through the lens of Kolb's ELT cycle while simultaneously documenting that journey for digital narrative production;
- Provides a practical blueprint (the framework) that the Pokdarwis can independently use long after the service program concludes, ensuring sustainability;
- Serves as a replicable model for other subak communities in Bali facing similar challenges, thereby extending the impact of this service beyond the immediate partner site.

METHOD

This community service program employs a Participatory Action Research (PAR) design. PAR was selected as the overarching framework because it fundamentally aligns with the program's dual objectives: (1) solving the practical, context-specific problems faced by the Pokdarwis of Subak Teba Majalangu (low digital literacy and low destination awareness), and (2) generating actionable, co-created knowledge (the integrated framework) that empowers the community to sustain the initiative independently. PAR emphasizes iterative cycles of planning, acting, observing, and reflecting, ensuring that the community members are active co-researchers rather than passive subjects of the intervention.

Site and Community Partner Description

The program is situated at Subak Teba Majalangu, an educational tourism destination located within the jogging track area of Desa Budaya Kertalangu, Kesiman Kertalangu Village, East Denpasar District, Bali. Spanning 1.4 hectares, the site features agricultural demonstration plots, a subak museum, and livestock enclosures. The primary community partner is the local Tourism Awareness Group (*Pokdarwis*) (Windia et al., 2005) , which comprises 25 active members, including local farmers, village youth, and representatives of micro, small, and medium enterprises (MSMEs). The selection of this site was purposive, based on: (a) the site's UNESCO-recognized cultural heritage status, (b) the partner's explicitly articulated need for digital capacity building, and (c) the site's existing infrastructure, which supports the implementation of experiential learning activities.

Program Phases and Intervention Design

The community service intervention was structured into four sequential, yet iterative, phases spanning a period of six months. Each phase integrates Kolb's Experiential Learning Cycle and the core tenets of digital storytelling co-creation (Wiasti & Suarsana, 2023).

Phase 1: Situational Analysis and Participatory Needs Assessment (Months 1-2)

The initial phase focused on establishing a mutual understanding of the partner's assets and challenges. The research team conducted:

- Participatory Rural Appraisal (PRA): Focus Group Discussions (FGDs) were held with the Pokdarwis members to map existing agricultural activities, visitor demographics, current promotional efforts, and perceptions of the destination's brand identity.
- Digital Literacy Baseline Survey: A structured questionnaire was administered to all 25 Pokdarwis members to quantitatively assess their existing competencies in digital content creation, social media management, and narrative design. This baseline served as the pre-test data for evaluating the program's impact.
- Asset Mapping: Direct observation and photographic documentation were used to inventory the site's physical, cultural, and historical assets (e.g., traditional farming tools, museum artifacts, irrigation infrastructure).

Phase 2: Co-Design of the Framework and Training Modules (Month 3)

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In this phase, the academic team and the Pokdarwis collaboratively translated the assessment findings into an actionable plan.

- Co-Design Workshops: Two intensive workshops were facilitated. The first workshop utilized Kolb's ELT cycle to deconstruct the visitor journey at Teba Majalangu. Participants mapped which existing activities correspond to *Concrete Experience* (e.g., plowing with oxen), *Reflective Observation* (e.g., guided discussions after planting), *Abstract Conceptualization* (e.g., explaining *Tri Hita Karana*), and *Active Experimentation* (e.g., visitors designing their own mini-garden plots).
- Curriculum Blueprinting: The second workshop focused on digital storytelling. The team introduced the "Four Pillars of Heritage Digital Storytelling" (Authenticity, Emotion, Visual Functionality, and Platform Integration). The Pokdarwis co-identified 10 key "narrative hotspots" within the site, which would become the focus of their digital content creation.

Phase 3: Implementation, Capacity Building, and Mentoring (Months 4-5)

This phase constituted the core action cycle of the PAR approach.

- Training of Trainers (ToT): The Pokdarwis members (specifically targeting the youth subgroup aged 18-30) participated in a structured 5-day intensive training. The curriculum covered basic videography, scriptwriting for short-form video (Reels/TikTok), audio narration techniques, and platform-specific marketing strategies (Instagram and YouTube).
- On-Site Mentoring and Co-Creation: Following the training, the academic team conducted bi-weekly mentoring sessions. Together with the researchers, the participants produced a portfolio of 15 short digital storytelling assets (3–5 minute videos) that integrated their experiential agricultural activities with historical and philosophical subak narratives.
- Pilot Implementation: The newly created digital narratives were soft-launched on the official social media channels of Subak Teba Majalangu. Concurrently, a cohort of 50 volunteer visitors was invited to experience the newly redesigned "ELT-aligned" educational tour, allowing the team to test the feasibility and reception of the integrated framework in a real-world setting.

Phase 4: Evaluation, Reflection, and Framework Finalization (Month 6)

The final phase involved systematic data collection to evaluate the program's outcomes and consolidate the insights into the final integrated framework.

- Post-Test Assessment: The digital literacy questionnaire was re-administered to the same 25 Pokdarwis members to measure the quantitative change in capacity.
- Reflective FGDs: A final FGD was held to gather qualitative feedback from the participants regarding the challenges faced during content creation, their perceptions of the framework's utility, and their recommendations for long-term sustainability.
- Framework Validation: The draft of the integrated framework was presented back to the community partners and local village authorities in a validation seminar. Feedback from this session was used to refine the final document.

Data Analysis Procedures

- Quantitative Data Analysis: The pre-test and post-test questionnaire scores were analyzed using descriptive statistics (mean, standard deviation) to determine the overall trend in digital literacy improvement. Where applicable, a Paired-Sample T-Test was employed using SPSS software to assess the statistical significance of the capacity change ($p < 0.05$) among the 25 participants.
- Qualitative Data Analysis: All FGDs and interviews were audio-recorded, transcribed verbatim, and subjected to Thematic Analysis using Braun and Clarke's six-step framework. The analysis employed an inductive-deductive hybrid approach—themes were derived both from the raw data (inductive) and from the theoretical constructs of Experiential Learning and Digital Storytelling (deductive). NVivo software was utilized to manage and code the qualitative datasets.
- Triangulation: To enhance the credibility of the findings, data triangulation was performed by cross-verifying insights from interviews, participant observations, and quantitative metrics.

RESULTS AND DISCUSSION

The digital literacy pre-test and post-test assessments administered to the 25 Pokdarwis members revealed a substantial improvement across all measured competency domains. The mean score increased from 2.34 (SD = 0.52) on the pre-test to 4.12 (SD = 0.38) on the post-test, representing a 76.1% improvement. A paired-sample t-test confirmed that this difference was statistically significant ($t(24) = 12.84$, $p < 0.001$, Cohen's $d = 3.85$), indicating a very large effect size. The most notable improvements were observed in the following competency areas:

Competency Domain	Pre-test Mean	Post-test Mean	Improvement
Digital content creation (videography/photography)	1.92	4.24	+120.8%
Social media management and platform knowledge	2.16	4.08	+88.9%
Scriptwriting and narrative design	1.84	3.92	+113.0%
Understanding of platform-specific marketing strategies	2.08	4.16	+100.0%
Confidence in using digital tools independently	2.56	4.20	+64.1%

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These findings align with similar community service programs employing Participatory Action Research approaches, where digital literacy training has demonstrated significant impacts on participant knowledge and skills. Comparable programs have reported 70% of participants demonstrating enhanced digital competencies following structured interventions. The substantial improvement in content creation skills (120.8%) is particularly noteworthy, as it addresses the partner's critical need for enhanced digital promotional capacity.

Digital Storytelling Outputs

During the implementation phase, the Pokdarwis members, working collaboratively with the academic team, successfully produced 15 digital storytelling assets. Each video ranged from 3 to 5 minutes in duration and featured narratives that integrated experiential agricultural activities with historical and philosophical subak narratives (Akhtar et al., 2021a, 2021b). The content portfolio included:

- Eight short-form videos documenting the complete visitor experiential learning journey—from plowing with oxen (*Concrete Experience*) to reflective discussions with farmers (*Reflective Observation*), followed by explanations of *Tri Hita Karana* philosophy (*Abstract Conceptualization*), and finally visitors designing their own planting experiments (*Active Experimentation*).
- Four behind-the-scenes videos featuring interviews with local farmers explaining traditional farming tools and their cultural significance.
- Three narrative-driven promotional videos showcasing the subak museum, livestock enclosures, and the overall educational tourism experience.

These outputs represent a tangible shift from static documentation—such as museum displays and written lexicons—toward dynamic, digitally shareable narratives capable of appealing to younger, digitally native audiences (Adeola & Evans, 2019). The co-creation process ensured that the narratives retained cultural authenticity while being optimized for contemporary social media platforms.

Visitor Engagement Metrics

Following the soft-launch of the digital narratives on the official social media channels of Subak Teba Majalangu (Instagram and YouTube), engagement metrics showed promising initial results over a four-week observation period:

Metric	Pre-launch (4-week baseline)	Post-launch (4-week period)	Change
Total reach	1,247	8,936	+616.6%
Profile visits	89	412	+363.0%
Content engagement (likes/comments/shares)	156	1,203	+671.2%
Follower growth	+12	+187	+1,458.3%

The 50 volunteer visitors who participated in the redesigned "ELT-aligned" educational tour were asked to complete a brief satisfaction survey. Of the 47 respondents (94% response rate), 44 (93.6%) reported that the structured experiential learning flow enhanced their understanding of the subak system and its cultural significance, compared to previous unstructured visits. This finding is consistent with research demonstrating that experiential learning programs in educational tourism successfully encourage participation and evoke empathy for farmers and ecological thinking, as well as valuing culture (Roziqin et al., 2023).

Qualitative Findings: Thematic Analysis

The thematic analysis of FGD transcripts, interview data, and participant observation notes revealed five dominant themes that illuminate the program's processes, outcomes, and challenges.

Theme 1: Empowerment through Digital Literacy Acquisition

Participants consistently expressed a sense of empowerment resulting from their newly acquired digital skills. One Pokdarwis member, a 28-year-old village youth, articulated this transformation:

> *"Before this program, I only knew how to scroll through Instagram. Now I can actually create content that tells our story. I feel like I have a voice now—a way to show the world what we have here at Teba Majalangu."* (Participant 7, Male, 28 years)

Another participant, a local farmer in his mid-40s, reflected on the generational implications:

"I thought digital things were only for young people. But now I understand that if we don't learn to tell our stories digitally, our grandchildren will only know subak from books and museums. This training showed me that I have knowledge worth sharing." (Participant 12, Male, 44 years)

These sentiments echo broader findings in community-based tourism literature, where digital storytelling has been shown to increase cultural visibility, foster cultural pride, and improve collaboration between youth and elders. The program successfully bridged the generational divide by positioning elders as knowledge holders and youth as digital facilitators—a collaborative model that empowered both groups (Schönherr et al., 2023).

Theme 2: The Reflective Observation Gap and Its Remediation

A recurring insight from the FGDs was the recognition that the existing visitor experience at Subak Teba Majalangu, while rich in hands-on activities, lacked structured opportunities for reflection. One Pokdarwis leader explained:

> *"Before, visitors would come, plant some rice, take photos, and leave. They had fun, but I don't think they really understood why we do things the way we do—the philosophy behind it. Now, with the reflection session we added after each activity, visitors ask deeper questions. They want to understand Tri Hita Karana."* (Head of Pokdarwis, Female, 52 years)

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This observation directly addresses the literature's identification of the Reflective Observation stage as critically underexplored in edutourism practices. The program's intervention—redesigning the activity flow to incorporate guided reflection—successfully remediated this gap, transforming the visitor experience from mere entertainment to meaningful learning.





Theme 3: Authenticity Versus Platform Optimization

While participants embraced digital storytelling, a tension emerged between maintaining cultural authenticity and optimizing content for social media algorithms. One participant noted:

> *"We want to show the real subak—the hard work, the rituals, the community spirit. But we also learned that short videos with dramatic music get more views. How do we balance these two things?"* (Participant 15, Female, 23 years)

This tension reflects what the literature describes as the "digital authenticity paradox," where social media algorithms prioritize engagement-driven content over culturally accurate heritage representations. The program addressed this challenge through structured mentoring sessions that emphasized the "Four Pillars of Heritage Digital Storytelling"—Authenticity, Emotion, Visual Functionality, and Platform Integration—enabling participants to produce content that was both culturally faithful and algorithmically optimized (Gutierriz et al., 2025; Talwar et al., 2023).

Theme 4: Institutional Capacity and Sustainability Concerns

Despite the program's successes, participants expressed concerns about long-term sustainability. One Pokdarwis member articulated this anxiety:

> *"We've learned so much, and we've created good content. But what happens when the university team leaves? Who will continue to train new members? Who will maintain the social media accounts consistently?"* (Participant 9, Male, 31 years)

This concern underscores the importance of institutionalizing the capacity-building outcomes. The program addressed this by establishing a dedicated "Digital Content Team" within the Pokdarwis structure, comprising five trained members who would serve as trainers for future cohorts. Additionally, the integrated framework document was designed as a user-friendly guideline that the community could independently reference.

Theme 5: Economic Empowerment and Destination Visibility

Participants reported tangible economic benefits resulting from the increased digital visibility. One MSME representative noted:

> *"Since our videos started getting more views, we've received more inquiries from school groups and families wanting to visit. Our homestay bookings have increased. This is not just about promotion—it's about survival for our community."* (Participant 20, Female, 39 years)

This finding aligns with research demonstrating that digital promotion on social media can increase tourist visits and MSME transactions. The program successfully demonstrated that cultural preservation and economic empowerment are not mutually exclusive but mutually reinforcing (Kayumovich, 2020; Tiago et al., 2021).

DISCUSSION

The findings of this community service program contribute to the growing body of literature on the integration of experiential learning and digital storytelling in educational tourism contexts. The program's success in co-creating an integrated framework offers several theoretical and practical insights. *First,* the results affirm that Kolb's Experiential Learning Cycle provides a robust pedagogical structure for designing meaningful visitor experiences in cultural heritage tourism. The redesigned activity flow at Subak Teba Majalangu—moving visitors through Concrete Experience (plowing, planting), Reflective Observation (guided discussions), Abstract Conceptualization (explaining *Tri Hita Karana*), and Active Experimentation (designing mini-garden plots)—successfully enhanced visitor understanding and satisfaction. This finding corroborates previous research demonstrating that experiential learning programs in agricultural tourism settings encourage participation and evoke ecological thinking (Anggreni et al., 2023; Darmawan et al., 2023).

However, the program also revealed that the Reflective Observation stage requires deliberate design and facilitation. The literature has identified this stage as critically underexplored in edutourism practices, and the program's intervention successfully remediated this gap. This suggests that future educational tourism initiatives should prioritize structured reflection as an integral component of the visitor experience, rather than treating it as an optional add-on. *Second,* the program demonstrates that digital storytelling can serve as a powerful vehicle for both destination

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branding and community empowerment. The substantial increase in social media engagement (616.6% increase in reach) following the content launch confirms the effectiveness of digital storytelling in enhancing destination visibility. More importantly, the qualitative data revealed that the process of creating digital narratives fostered cultural pride, intergenerational collaboration, and a sense of agency among community members. This finding aligns with research showing that digital storytelling increases cultural visibility, fosters cultural pride, and transforms traditional performances into dynamic cultural narratives (Hidayah et al., 2023; Sara et al., 2023).

Third, the program's success in integrating these two approaches—experiential learning and digital storytelling—suggests that the two are not merely compatible but mutually reinforcing. Experiential learning provides the substantive content and pedagogical structure that gives digital narratives depth and authenticity. Digital storytelling, in turn, provides a medium for capturing, amplifying, and sharing experiential learning outcomes, thereby extending the impact of the educational experience beyond the physical visit. This synergy addresses the conceptual fragmentation identified in the literature, where studies on edutourism focus heavily on pedagogical structures while studies on digital media focus on content creation and platform optimization (Hardy et al., 2002; Kasinathan et al., 2020).

The program offers several practical implications for community-based tourism development, particularly in heritage contexts facing similar challenges of land conversion, cultural erosion, and low destination awareness. The substantial improvement in digital literacy scores (76.1%) demonstrates that structured, participatory training can effectively enhance community capacity in digital content creation and marketing. However, the sustainability concerns expressed by participants highlight the importance of institutionalizing these capacity-building outcomes. The establishment of a dedicated "Digital Content Team" within the Pokdarwis structure represents one approach to ensuring continuity. Future programs should consider integrating capacity-building activities with organizational development, ensuring that training outcomes are embedded in formal institutional structures (Monroy-Rodríguez & Caro-Carretero, 2023; Niedbala et al., 2020).

The collaborative model employed in this program—involving academics, students, and community partners—demonstrates the potential of higher education institutions as catalysts for community empowerment. The university team brought technical expertise in experiential learning design and digital media production, while the community partners contributed deep local knowledge and cultural authenticity (Godovykh et al., 2022). This synergy aligns with the broader literature on university-community partnerships in sustainable tourism development. However, the program also highlights the need for clear exit strategies and mechanisms for ongoing support, as the departure of the academic team could create a capacity void.

The tension between cultural authenticity and platform optimization, identified as a key theme in the qualitative data, represents a broader challenge in heritage digital storytelling. While social media algorithms favor engagement-driven content, heritage narratives require cultural accuracy and contextual depth (Christou, 2006; Richards, 2007). The program's emphasis on the "Four Pillars of Heritage Digital Storytelling" provided a framework for navigating this tension. Future programs should continue to explore strategies for maintaining cultural authenticity while leveraging the reach and engagement potential of digital platforms.

METHODOLOGICAL REFLECTIONS

The Participatory Action Research (PAR) approach employed in this program proved effective in achieving both practical outcomes (improved digital literacy, enhanced destination visibility) and knowledge generation (the integrated framework). The iterative cycles of planning, acting, observing, and reflecting ensured that the program remained responsive to community needs and adaptive to emerging challenges. Several methodological strengths contributed to the program's success:

1. Co-design processes ensured that the training curriculum and digital content were culturally appropriate and locally relevant.
2. Mixed-methods evaluation enabled triangulation of findings, enhancing the credibility of the results.
3. Extended engagement (six months) fostered trust and allowed for meaningful relationship building between the academic team and the community.

However, certain limitations should be acknowledged. The relatively small sample size (25 Pokdarwis members) limits the generalizability of the quantitative findings. The four-week observation period for social media metrics may be insufficient to assess long-term engagement trends. Additionally, the program did not systematically measure the economic impact of increased destination visibility, though qualitative data suggested positive effects.

CONTRIBUTIONS

This program makes several contributions to the literature on educational tourism, experiential learning, and digital storytelling. *First*, it addresses the identified research gap regarding an integrated framework that systematically combines experiential learning with digital storytelling in the context of subak-based educational tourism. The framework developed through this program provides a practical blueprint that can be adapted to other cultural heritage contexts facing similar challenges. *Second*, it contributes empirical evidence on the effectiveness of PAR approaches in community-based tourism development. The program demonstrates that participatory, culturally grounded interventions can achieve measurable improvements in digital literacy, destination visibility, and community empowerment. *Third*, it enriches the literature on the subak system by moving beyond static documentation toward dynamic, digitally mediated heritage preservation. Prior research at Subak Teba Majalangu has primarily focused on lexicography and local wisdom documentation. This program extends that work by demonstrating how digital narratives can amplify the educational and promotional potential of the site.

LIMITATIONS

While the program achieved its core objectives, several limitations suggest avenues for future research:

1. Long-term impact assessment: Future studies should conduct follow-up evaluations at 6-12 months post-intervention to assess the sustainability of digital literacy gains and the continued use of the integrated framework.

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2. Economic impact measurement: Systematic measurement of economic outcomes—such as increased visitor numbers, MSME revenue, and employment—would provide more comprehensive evidence of the program's impact.
3. Comparative studies: Replicating the integrated framework at other subak sites in Bali would enable comparative analysis and refinement of the framework for different contexts.
4. Visitor perspective: While this study focused on community outcomes, future research should systematically examine visitor learning outcomes and the effectiveness of the ELT-aligned tour design from the visitor's perspective.

CONCLUSION

This community service program successfully developed and implemented an integrated framework for experiential learning and digital storytelling in educational tourism at Subak Teba Majalangu. The program achieved significant improvements in digital literacy among Pokdarwis members (76.1% increase), produced 15 digital storytelling assets, and generated substantial increases in social media engagement (616.6% increase in reach). Qualitative findings revealed themes of empowerment, reflective practice, authenticity-platform tension, sustainability concerns, and economic benefit. The program demonstrates that when experiential learning and digital storytelling are thoughtfully integrated, educational tourism can become a powerful instrument for cultural resilience and community empowerment. The integrated framework developed through this program offers a practical, replicable model for other heritage communities facing similar challenges of cultural erosion, low destination awareness, and limited digital capacity. By bridging traditional wisdom with contemporary digital media practices, this program contributes to the broader goal of sustainable, community-based tourism that preserves cultural heritage while generating tangible economic benefits for local communities.

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