

Operationalising VARK Learning Styles in a Religious Upper Secondary School: A Practitioner Reflection on a 13-Month University Social Responsibility Grant

Anis Athira Syahirah Saifuddin¹, Farah Fatinah Enche Shaari^{2*}

Universiti Teknologi MARA, Melaka,

*Corresponding Author

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ABSTRACT

Executing University Social Responsibility (USR) community grants within rigid higher education frameworks creates operational, administrative, and temporal friction for academic practitioners. This qualitative study examines the operational realities, structural constraints, and adaptive coping mechanisms experienced by an eight-member university project team (N = 8) during a 13-month grant-funded initiative (July 2025–July 2026). The grant aimed to adapt and implement Fleming's Visual, Auditory, Read/Write, and Kinaesthetic (VARK) learning style framework for upper secondary students at Sekolah Menengah Agama (SMA) Arab JAIM As-Syakirin, integrated alongside an international matching grant collaboration with Universitas Muhammadiyah Makassar (UNISMUH). Grounded in the Iron Triangle of Project Management (Time, Cost/Resources, and Scope) and Schön's Reflective Practice Framework, empirical qualitative data were gathered using a structured individual reflective protocol based on Gibbs' Reflective Cycle. Utilising Braun and Clarke's reflexive thematic analysis, four primary empirical themes emerged: (1) Multi-Phase Temporal Friction, characterised by non-linear field execution due to clashing academic calendars, national examination preparation, school sports competitions (MSSD), and emergency postponements caused by a student food poisoning outbreak; (2) Institutional Red Tape and Financial Friction, marked by shifting Bursary Department requirements, tedious physical signature routing across campus, and reliance on out-of-pocket financial advances by academic staff; (3) Pedagogical Scope Adaptation, reflecting trade-offs required following copyrighted VARK instrument re-applications, pilot simulations expanding single-modality sessions, participant sample drops from student suspensions/expulsions, and mid-project alignment with UiTM's PRIME 3-star rating mandate; and (4) Adaptive Practitioner Workarounds, highlighting the reliance on practitioner reflection-in-action, task reallocations, and informal digital communication channels to maintain project momentum. The findings demonstrate how academic practitioners absorb administrative and financial burdens to protect community trust. The paper concludes with actionable policy recommendations for higher education institutions, including standardised bursary checklists, dedicated grant desk officers, mandatory administrative buffer windows, and grace periods for mid-grant policy changes.

Keywords: University Social Responsibility (USR); Community Grant Management; Iron Triangle Constraints; Reflective Practice; Qualitative Inquiry; VARK Learning Styles; Higher Education Governance; Islamic Secondary Education

INTRODUCTION

In recent years, Higher Education Institutions (HEIs) have faced increasing calls to expand their societal mandate beyond traditional teaching and research to encompass active, meaningful engagement with local communities. This evolving mission, broadly conceptualised as University Social Responsibility (USR), positions universities as critical drivers of socio-economic development, educational transformation, and public welfare. However, aligning academic functions with societal needs requires HEIs to translate their knowledge, expertise, and institutional values into tangible contributions that address community needs and

support sustainable development (Wang et al., 2026). Through USR initiatives, academic personnel and students leverage university resources and specialised expertise to address pressing community needs. In the educational sector, USR programmes frequently take the form of school-university partnerships designed to introduce innovative pedagogical practices, improve learner engagement, and bridge educational equity gaps in primary and secondary schools.

To fund and operationalise these community-engaged initiatives, universities heavily rely on competitive, time-bound community grants provided by government bodies, corporate sponsors, or internal institutional funds. While these grants offer essential financial backing, they simultaneously subject project teams to rigorous administrative mechanisms, predefined deliverables, and strict milestone deadlines. The execution of such grant-funded projects requires university teams to navigate complex dual environments: the formal, bureaucratic architecture of the higher education institution on one end and the dynamic, highly structured, and often inflexible ecosystem of partner schools on the other. Navigating these institutional demands can be further complicated by organisational inertia and resistance to change, particularly when staff and faculty are required to manage multiple responsibilities with limited resources while also meeting increasing grant reporting and documentation requirements (Lugg et al., 2024).

Despite the growing literature celebrating the positive outputs and community impacts of USR initiatives, a significant gap remains regarding the internal operational reality experienced by the practitioners who manage these grants. Much of the existing scholarship adopts a success-oriented narrative that emphasises final outcomes, such as student performance improvements, post-intervention survey scores, or high-level stakeholder satisfaction, while glossing over the systemic friction, administrative delays, and logistical trade-offs involved in project execution. Even when community grants span a full year, navigating multi-phase academic cycles, university fiscal quarters, changing school terms and sudden institutional policy updates creates persistent operational friction. Academic practitioners are routinely forced to act not merely as educational facilitators but as project managers negotiating bureaucratic procurement procedures, clashing institutional calendars, out-of-pocket financial advances, and unpredictable field constraints over an extended timeline. This expanded project-management role can also create tension among academic personnel, particularly those accustomed to less formal research environments, as hierarchical procedures and detailed administrative structures may be perceived as constraining scientific creativity and offering limited value to their academic work (Santos, 2021). This study directly addresses this empirical gap by critically examining the lived operational challenges encountered by a university project team during a 13-month community grant initiative. Running from July 2025 through July 2026, the project was designed to introduce and implement Fleming's Visual, Auditory, Read/Write, and Kinaesthetic (VARK) learning style framework for upper secondary students at Sekolah Menengah Agama (SMA) Arab JAIM As-Syakirin, a specialised religious secondary school under the Malacca Islamic Religious Department (Jabatan Agama Islam Melaka - JAIM).

GRANT TIMELINE



Figure 1: Grant Timeline of the USR Project

While the overarching pedagogical objective of the grant was to optimise learning strategies for upper secondary learners preparing for major academic assessments across the school year, the university team confronted numerous operational challenges throughout the 13-month intervention window. These included navigating university Treasury and Bursary disbursement protocols across fiscal periods, managing out-of-pocket emergency funding, aligning project schedules with religious school examination blocks, sports events (MSSD), and sudden disruptions such as student food poisoning and school disciplinary actions (expulsions and suspensions), adapting standard VARK diagnostic tools to fit copyright requirements and Islamic school contexts, and complying with mid-project institutional changes like the PRIME 3-star rating mandate.

To capture these complex dynamics, this study employs a qualitative reflective design. By analysing structured, individual reflective journals completed by eight grant team members (Respondents R1 - R8), the study evaluates the project through the lens of project management constraint theory, specifically the Iron Triangle (Atkinson, 1999) of Time, Cost/Resources, and Scope, complemented by Schön's Reflective Practice Framework (Schön, 1986). Rather than evaluating student learning outcomes, this paper focuses inward on the practitioner experience, offering a critical account of how grant constraints shape, limit, and alter the execution of school-based USR projects.

To guide this inquiry, the study addresses one overarching primary research question and four supporting sub-questions:

- **Primary Research Question:**

- How do university grant team members navigate operational, institutional, and temporal constraints during the execution of a 13-month University Social Responsibility (USR) project in a secondary school setting?

- **Sub-Research Questions:**

- **RQ1 (Operational Constraints):** What administrative, financial, and logistical bottlenecks are experienced by university team members during the delivery of a grant-funded community initiative across a 13-month cycle?
- **RQ2 (Temporal Pressures):** How do temporal dynamics, emergency postponements and school calendar clashes across a 13-month window influence the implementation and perceived quality of VARK pedagogical interventions for upper secondary students?
- **RQ3 (Relational Dynamics):** In what ways do communication flows and stakeholder alignment between the university team, university administration, matching grant partners, school leadership (SMA Arab JAIM As-Syakirin), and grant administrators impact project execution over an extended timeframe?
- **RQ4 (Adaptive Coping):** What adaptive strategies do team members employ to overcome execution challenges, and what lessons emerge for sustainable USR grant management?

By documenting and analysing these practitioner reflections, this paper contributes to the broader literature on higher education governance, community engagement management, and educational project execution. It provides university administrators, funding bodies, and academic practitioners with realistic insights into the operational friction points of year-long USR grants, proposing actionable governance strategies to foster more resilient, flexible, and sustainable university-community partnerships.

LITERATURE REVIEW

The successful execution of University Social Responsibility (USR) initiatives lies at the intersection of higher education policy, project management theory, and reflective practitioner inquiry. While community engagement is widely praised as an essential pillar of modern higher education, operationalising a 13-month grant-funded intervention in secondary school environments introduces distinct administrative, temporal, and pedagogical challenges.

This section synthesises the literature across three core dimensions:

1. The evolving landscape and operational realities of USR grant execution across a 13-month lifecycle;
2. The Iron Triangle of Project Management as an analytical lens for structural constraints; and
3. Schön's Reflective Practice Framework as a methodological foundation for practitioner inquiry.

University Social Responsibility (USR) and Community Grant Execution

Higher Education Institutions (HEIs) have increasingly formalised their societal engagement through University Social Responsibility (USR) frameworks, which require universities to utilise their human capital, academic expertise, and institutional funding to promote sustainable community development. In this context, systematically assessing and operationalising USR initiatives is essential for addressing the challenges associated with institutional transformation, while enabling HEIs to develop effective strategies to measure and enhance the societal impact of their socially responsible practices (Wang et al., 2026). In the educational domain, USR typically takes the form of university-school partnerships designed to enrich student learning, modernise teaching methodologies, and enhance educational equity in primary and secondary schools.

To finance these community-focused interventions, Higher Education Institutions (HEIs) rely heavily on competitive grant mechanisms supported by various funding sources, including government agencies, corporate sponsors, internal institutional schemes, philanthropic foundations, and cross-border matching grants (Loblay et al., 2022). While such grant funding provides essential resources and institutional legitimacy for implementing USR programmes, managing grant-funded projects across an extended lifecycle can also create recurring operational and administrative challenges. In particular, projects implemented over a 13-month lifecycle may require university teams to navigate the following challenges:

- **Extended Multi-Phase Lifecycles:** Operating across a full 13-month period (July 2025 – July 2026) requires university teams to navigate multiple academic terms, school examination periods, state-mandated holidays, and academic year transitions.
- **Institutional Bureaucracy and Financial Oversight:** University project managers must navigate rigid procurement workflows, Bursary/Treasury approval requirements, and redundant financial acquittal regulations. These processes often cause disbursement delays, requiring staff to raise temporary out-of-pocket funds to keep field operations moving.
- **Cross-Institutional and Matching Grant Governance:** Partnering with specialised schools—such as Sekolah Menengah Agama (SMA) institutions governed by state religious authorities like Jabatan Agama Islam Melaka (JAIM)—and international co-funding partners (e.g., Universitas Muhammadiyah Makassar [UNISMUH]) requires managing dual governance structures, cross-border signature approvals, and complex administrative hierarchies.
- **Dynamic Institutional Standards:** Academic project leaders frequently face evolving institutional benchmarks mid-grant, such as meeting UiTM's PRIME 3-star rating mandate for USR projects. Such shifting criteria require extending timelines, adjusting scope, and compiling additional documentation mid-implementation.

Much of the existing USR literature centres on external output metrics, such as post-intervention test scores or participant satisfaction metrics, while providing limited visibility into the internal operational experiences of the academic practitioners managing the grant. Spanning a 13-month timeline requires sustained project management, ongoing stakeholder

The Iron Triangle of Project Management: Analysing Constraints

To evaluate the structural constraints inherent in executing a 13-month grant, this study adopts the Iron Triangle of Project Management (Atkinson, 1999). Also known as the Triple Constraint Theory, this model

posits that every project operates within three fundamental, interdependent boundaries: Time, Cost/Resources, and Scope/Quality.

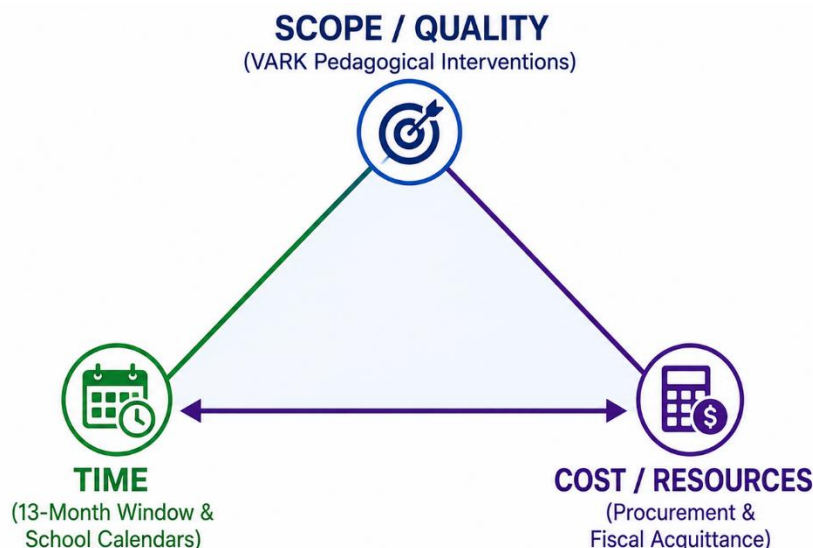


Figure 2: Triple Constraint Theory

In the context of a 13-month school-based USR grant, the Iron Triangle provides a structured framework for analysing operational trade-offs:

1. Time (Temporal Constraints)

Bounded by a 13-month timeline running from July 2025 through July 2026, temporal constraints extend beyond mere duration. In an educational environment, project schedules must align with external academic calendars—including national examination blocks, school sports competitions (e.g., MSSD), term breaks, and academic year transitions. Over a 13-month period, these recurring interruptions, alongside sudden disruptions like student food poisoning outbreaks or disciplinary suspensions/expulsions, fragment active implementation into distinct, isolated phases.

2. Cost / Resources (Financial and Administrative Constraints)

The resource dimension encompasses financial allocations, physical learning materials, food vendor logistics, and the bureaucratic rules governing their release. University administrative frameworks emphasize audit compliance, leading to multi-stage approval workflows for procurement, bursary document submissions, and expense reimbursements. Across a 13-month grant span, delays in financial disbursements force team members to manage limited budgets or rely on personal cash advances to secure materials and refreshments on time.

3. Scope and Quality (Pedagogy and Deliverables)

Scope refers to the explicit deliverables promised in the grant proposal—specifically, implementing Fleming's Visual, Auditory, Read/Write, and Kinaesthetic (VARK) learning style framework for upper secondary learners at SMA Arab JAIM As-Syakirin. Under Triple Constraint Theory, when **Time** schedules shift or **Resource** disbursements stall, project leads must adjust the project **Scope or Quality** to maintain overall project viability. This includes re-applying for copyrighted diagnostic tools (VARK Limited Learn), restructuring multi-modality workshops into single-modality 2-hour sessions based on simulation findings, and modifying student sample sizes due to school disciplinary actions.

Applying the Iron Triangle illuminates how academic practitioners managing community grants must continuously balance administrative compliance, timeline adherence, and pedagogical quality over a 13-month period.

Schön's Reflective Practice Framework: Practitioner as Researcher

To capture how team members interpret and navigate these operational constraints, this study utilises Donald Schön's (1986) Reflective Practice Framework. Schön posits that professional practice in complex institutional environments requires navigating unpredictability through two primary modes of reflection:

Table 1: Schön's Reflective Practice Framework

Reflective Mode	Mechanism	Application in 13-Month USR Context
Reflection-in-Action	On-the-spot decision-making and real-time adaptations while an activity or project phase is actively underway.	Explains the real-time improvisations and tactical workarounds deployed by team members when facing unexpected school schedule changes, procurement delays, or logistical friction.
Reflection-on-Action	Retrospective analysis conducted after a project phase or project completion to evaluate actions, outcomes, and underlying causes.	Operationalised through the structured qualitative reflection journals completed by all eight grant team members (R1–R8) at the conclusion of the 13-month grant period (July 2026) to generate empirical insights.

SCHÖN'S DUAL-REFLECTION CYCLE

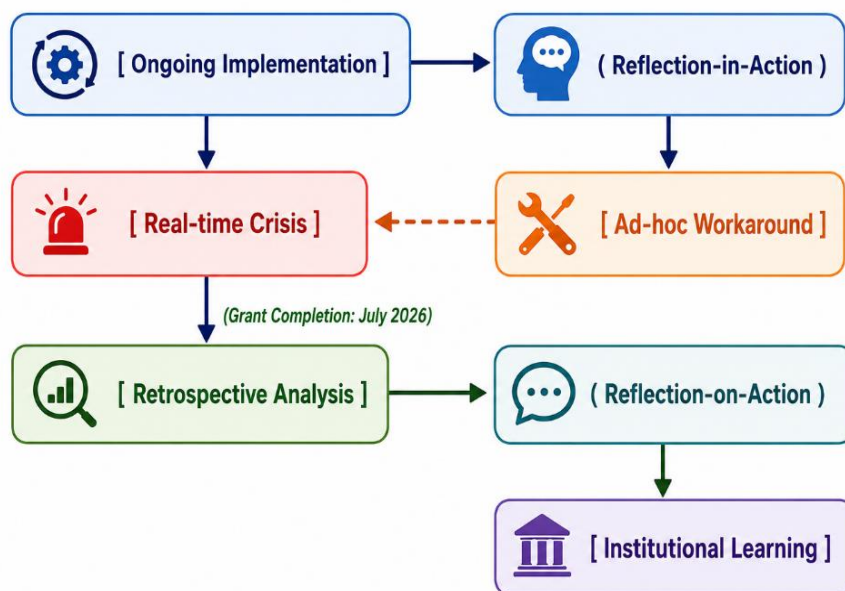


Figure 3: Schön's Dual-Reflection Cycle

Combining Schön's framework with Gibbs' (1988) Reflective Cycle establishes a structured method for transforming practitioner narratives into systematic qualitative data

Synthesis and Theoretical Mapping

Integrating the Iron Triangle of Project Management (Atkinson, 1999) with Schön's Reflective Practice Framework (Schön, 1986) provides a comprehensive dual-theoretical framework for this study:

Table 2: Application of Theoretical Framework

Dual Theoretical Map	
Theoretical Lens	Function in this Study
1. Iron Triangle of Project Management (Barnes, 1969; Atkinson, 1999)	Categorizes project constraints: • Temporal (13-month span, exams, illness, sports events) • Resource/Cost (Bursary, advances, UNISMUH approvals) • Scope/Quality (VARK copyright, PRIME rating, sample drops)
2. Reflective Practice Framework (Schön, 1983; Gibbs, 1988)	Captures practitioner responses: • Reflection-in-Action (Workarounds) • Reflection-on-Action (Journals)

This dual perspective addresses a key gap in the literature by linking structural project constraints (Time, Cost, Scope) with practitioner reflection, offering a critical qualitative account of executing a 13-month educational USR grant within a religious secondary school context.

METHODOLOGY

This study adopts a qualitative, reflective practitioner inquiry design to examine the operational, institutional, and temporal constraints experienced by university team members executing a 13-month University Social Responsibility (USR) grant. Rather than measuring student-level educational outcomes, the methodological focus is positioned inward on the lived experiences, decision-making processes, and adaptive strategies of the academic practitioners themselves over an extended project lifecycle.

Research Design

A qualitative reflective research design was selected as it allows practitioner-researchers to critically evaluate complex organizational phenomena within real-world contexts (Creswell & Poth, 2018). Grounded in Donald Schön's (1983) model of the "practitioner-as-researcher," this methodology recognizes that professionals operating in messy, constraint-heavy environments generate valuable empirical insights through systematic reflection.

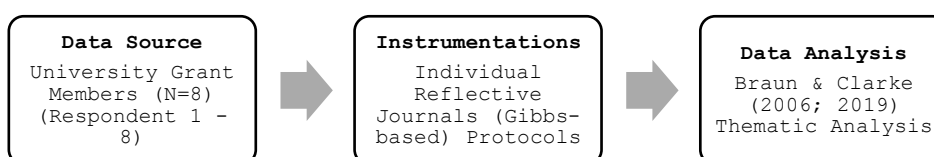


Figure 4: Qualitative Reflective Inquiry Pipeline

The approach combines **retrospective individual reflective journals** with a structured qualitative protocol to analyze how systemic grant mechanisms intersect with school-level operational realities across a full 13-month lifecycle (July 2025 – July 2026).

Research Setting and Participants Profile

Research Context

The study was situated within a 13-month USR community grant initiative running from July 2025 through July 2026. The grant was executed in partnership with Sekolah Menengah Agama (SMA) Arab JAIM As-Syakirin, a government-aided Islamic secondary school situated in Malacca, Malaysia, governed under the purview of the Malacca Islamic Religious Department (Jabatan Agama Islam Melaka - JAIM). The initiative also involved a cross-border matching grant collaboration with Universitas Muhammadiyah Makassar (UNISMUH). The core mandate of the grant was to adapt and implement Fleming's Visual, Auditory, Read/Write, and Kinaesthetic (VARK) learning style framework for upper secondary students preparing for major national examinations across an entire academic year.

Participant Selection and Profile

Purposive sampling was utilised to recruit all eight primary members (N = 8) of the university grant project team. Participants represented diverse functional roles within the grant structure, ensuring comprehensive coverage of administrative, financial, logistical, and pedagogical perspectives:

Table 3: Participants Profile Summary

Participants	Primary Assigned Role	Key Operational Responsibilities
Respondent 1	Facilitator	Activity facilitation and student mentoring
Respondent 2	Food & Logistics Coordinator	Food vendor negotiation, meal budgeting and supply rotation
Respondent 3	Activity Planner/Secretary	Activity design, administrative documentation and secretarial tasks
Respondent 4	Facilitator	Activity facilitation and logistic support
Respondent 5	Project leader/Grant lead	Overall project governance, school liaison, UNISMUH matching grant, schedule tracking, & PRIME 3-star rating management
Respondent 6	Bursary/Treasurer	Financial accounting, expenses claims, attendance tracking, and Bursary compliance
Respondent 7	Module Lead/Corresponding Author	VARK copyrighted module adaptation, survey design, workshop simulation, and research framework
Respondent 8	Student Welfare & Certificate Coordinator/Facilitator	Certificate design/printing, goodie bag logistics, & signature routing

Data Collection Instrument: Gibbs-Based Reflective Protocol

Data were collected using a structured, open-ended Individual Reflective Journal Protocol (Bennett, 1989) completed independently by each of the eight grant members following the formal conclusion of the grant.

To ensure qualitative depth and prevent superficial reporting, the protocol was operationalised through Gibbs' (1988) Reflective Cycle. The instrument was streamlined into eight core qualitative prompts divided into four analytical sections, specifically framed around project management constraints across the 13-month period:

Table 4: Gibb-based Reflective Journal Protocol

GIBBS-BASED REFLECTIVE JOURNAL PROTOCOL	
Protocol Section	Specific Qualitative Reflection Prompts
Part 1: Role & Timeline (Description)	1. What were your main responsibilities in this project, and did your plans change once we started? 2. How did the deadlines affect your ability to get your tasks done on time?
Part 2: Challenges & Friction Points (Feelings and Evaluation)	3. What was the single biggest obstacle or delay you personally faced during this grant (e.g., procurement, school schedule, university approvals)? 4. State a specific moment when you felt most stressed or overwhelmed about delivering your part of the project? What happened?
Part 3: Communication & Resources (Evaluation & Analysis)	5. How would you describe the effectiveness of communication between you, team members, UiTM PJI, UiTM Treasury, or SMA Arab JAIM As-Syakirin staff? 6. How would you describe your experience of obtaining the funds, materials, and permissions needed on time?

Reflections were submitted asynchronously via digital forms, allowing participants to reflect candidly without peer influence or groupthink.

Data Analysis: Reflexive Thematic Analysis

The qualitative narrative data from the individual journals were analysed following Braun and Clarke's (2006, 2019) Reflexive Thematic Analysis framework. This six-phase analytic process allowed the researchers to identify, code, and organise meaningful patterns (themes) related to project execution constraints over the 13-month duration.

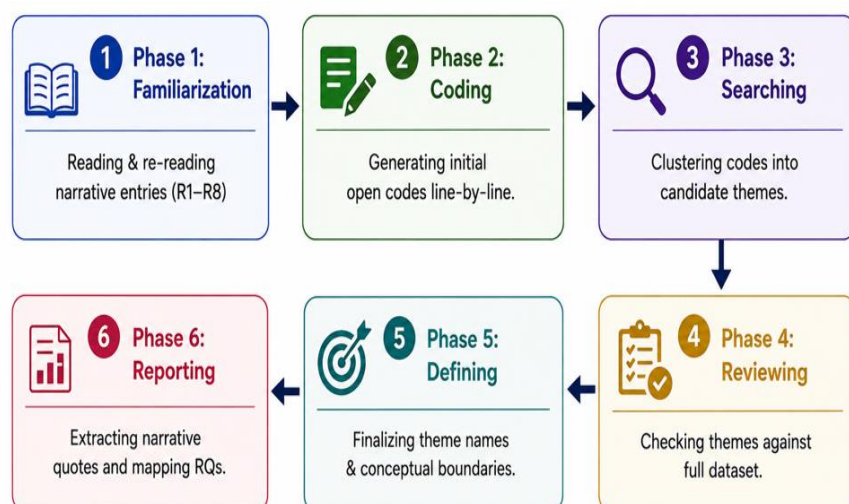


Figure 5: Six-Phase Thematic Analysis Workflow

1. **Familiarisation with Data:** Repeated reading of all narrative responses from Respondents R1 to R8 to build an immersive understanding of each practitioner's lived experience.
2. **Generating Initial Codes:** Line-by-line open coding of qualitative excerpts capturing administrative red tape (Bursary forms, PJI clearances), unexpected interruptions (student food poisoning, MSSD sports, suspensions), instrument copyright barriers, and ad-hoc coping workarounds (out-of-pocket advances, WhatsApp channels).
3. **Searching for Themes:** Grouping initial codes into broader candidate themes aligned with the Iron Triangle of Project Management (Time, Cost/Resources, Scope) and Schön's Reflection-in-Action.
4. **Reviewing Candidate Themes:** Refining candidate themes against the full dataset to verify internal homogeneity (data within themes fit together) and external heterogeneity (clear distinctions between themes).
5. **Defining and Naming Themes:** Establishing final conceptual definitions and titles for four distinct empirical themes.
6. **Producing the Report:** Selecting rich, verbatim quote extracts from Respondents R1 through R8 to illustrate the findings within the narrative text.

Rigor, Trustworthiness, and Ethical Consideration

To establish academic rigour and trustworthiness (Lincoln & Guba, 1986), several qualitative safeguards were implemented:

- **Credibility & Member Checking:** Drafts of the coded categories and extracted themes were returned to team participants (R1–R8) to confirm that the interpretations accurately represented their operational challenges and reflections.
- **Audit Trail & Dependability:** Comprehensive records of raw reflective entries, line-by-line codebooks, thematic maps, and analytical memoing were maintained throughout the analysis phase.
- **Reflexivity:** As practitioner-researchers examining their own grant performance, the authors actively practised reflexivity—acknowledging potential personal biases and focusing objectively on systemic institutional and operational barriers rather than personal recriminations.
- **Ethics and Confidentiality:** Institutional ethics compliance was observed. All participant reflections were anonymised using alphanumeric identifiers (Respondent 1 through Respondent 8). Informed consent was obtained, and permission to collect reflective data for research and publication purposes was formally recorded.

FINDINGS AND RESULT

The thematic analysis of individual reflective journals completed by all eight grant team members (N = 8, Respondents R1–R8) revealed four primary empirical themes capturing the operational realities and lived challenges of executing the 13-month University Social Responsibility (USR) grant at Sekolah Menengah Agama (SMA) Arab JAIM As-Syakirin.

These themes map directly onto the dimensions of the Iron Triangle of Project Management (Time, Cost/Resources, Scope) and reflect the Reflection-in-Action coping mechanisms described in Donald Schön's framework across the July 2025–July 2026 project lifecycle.

Table 5: Guide on Mapping Empirical Themes to the Iron Triangle

MAPPING EMPIRICAL THEMES TO THE IRON TRIANGLE		
Empirical Theme	Iron Triangle Dimension	Primary Research Question
1. Multi-Phase Temporal Friction & Emergency Schedule Disruptions	Time Constraint	RQ2 (Temporal Dynamics & External Disruptions)
2. Institutional Bureaucracy, Red Tape & Financial Claims	Cost & Resource Constraint	RQ1 (Operational Bottlenecks)
3. Pedagogical Adaptation, Modality Extensions & Sample Drops	Scope & Quality Constraint	RQ2 (VARK Copyright, Scope Realisation & PRIME Rating)
4. Adaptive Workarounds, Simulations & Task Reallocations	Practitioner Reflection-in-Action	RQ3 & RQ4 (Relational Dynamics & Coping Mechanism)

Theme 1: Multi-Phase Temporal Friction and Emergency Schedule Disruptions (Time Constraint)

The 13-month timeframe (July 2025 to July 2026) required the project team to navigate a complex, highly fragmented school ecosystem. Team members noted that having a full year did not eliminate timeline pressure; rather, field visits were non-linear and repeatedly interrupted by school-level priorities, examination periods, sports competitions, and sudden emergencies.

Table 6: Grant Timeline and External School-Level Disruptions

Grant Timeline (July 2025 – July 2026)	External School-Level Disruptions
- July-Sep 2025: Setup & Copyright Re-application - Oct 2025 – Jan 2026: Workshop Delivery - Feb – Apr 2026: Modality Extension Sessions - May – Jul 2026: Data Analysis & Financial Close	- MSSD District-Level Sports Events - Sudden Student Food Poisoning Outbreak - Academic Examinations and Term Holidays - Student Expulsions & Suspensions

R2 emphasised the non-linear nature of the school visits and the challenge of maintaining learning continuity among upper secondary students:

"I think biggest obstacle is school schedule. Since the school decided the schedules, the visits were not in a linear progress. So, each visit, we need to make sure students were still aware of what already done during the last visit." — **Respondent 2 (Food & Logistics Coordinator)**

The most severe operational friction occurred when unforeseen external events—specifically a student food poisoning outbreak and overlapping sports competitions—forced last-minute postponements, directly threatening project momentum:

"Some aspects of the original plan had to be adjusted after the programme started. One significant change occurred when several students experienced food poisoning, which required the programme to be postponed at short notice. As the project leader, I had to respond quickly by communicating with the school and project members, identifying a new suitable date, and reorganising the programme schedule. Other adjustments were also necessary to accommodate the school calendar, examinations, holidays, and the availability of both the students and facilitators." — **Respondent 5 (Project Leader)**

"The moment I felt most stressed was when one of the workshops had to be postponed at very short notice due to a food poisoning incident involving the students... When the workshop was eventually rescheduled, we also faced a reduced number of participants because some students had been suspended, while others were representing the school in the MSSD district-level sports competition on the same date as the workshop." —

Respondent 5 (Project Leader)

Furthermore, academic practitioners struggled to balance demanding teaching workloads, compulsory semester tasks, and administrative sign-offs alongside field execution:

"Meeting the deadlines was challenging because this project directly overlapped with my primary work duties and other mandatory coursework throughout the semester... the tight deadlines created significant pressure, requiring me to put in extra hours and strictly manage my time to keep everything on schedule." —

Respondent 8 (Student Welfare & Certificate Coordinator)

"The biggest challenge throughout the entire process is our teaching load. Conducting a study takes time and resources away, balancing the two takes a toll on my rest and wellbeing." —

Respondent 7 (Corresponding Author / Module Lead)

Theme 2: Institutional Bureaucracy, Red Tape, and Financial Claim Bottlenecks (Resource Constraint)

The second empirical theme highlights severe operational friction arising from university financial compliance mechanisms. Team members, particularly those managing money matters and logistics, reported extensive delays caused by redundant documentation requirements, shifting Bursary instructions, and multi-layered signature chasing across university departments.

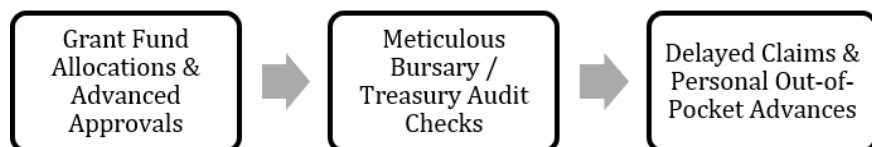


Figure 6: Flow of Financial and Administrative Constraints

R6 detailed the frustration of navigating shifting instructions from the Bursary Department, which required repeated physical trips to submit claims:

"As a first timer to be in charge of money matters, I had encountered some hassles, especially when it comes to preparing the documents. This is due to different instructions/suggestions given by different personnel in the Bursary Department. I had to return 4-5 times to get the documents submitted. For example, the suggestion was that documents had to be submitted monthly instead of one-off submission by the end of project. Therefore, the documentation submission was a bit delayed." —

Respondent 6 (Bursary / Treasurer)

"The biggest obstacle was dealing with the Bursary Departments, as they had asked/demanded documents that are sometimes redundant. Also, they are being meticulous in cross checking the budget... Consequently, I had to put aside this work and resumed after marking work was done." —

Respondent 6 (Bursary / Treasurer)

The institutional bureaucracy surrounding claims and permissions led to significant administrative burdens, prompting the team to raise temporary out-of-pocket funds to keep field operations moving:

"It was not so difficult, the team was very obliging to raise temporary emergency funds to cover the necessary funds needed." —

Respondent 4 (Facilitator)

"The most overwhelming moment occurred when I had to continuously travel back and forth to the project site while simultaneously managing the certificates. Balancing the back-and-forth transit with designing the certificates and chasing down upper management for required signatures under a tight deadline created an immense amount of pressure." —

Respondent 8 (Student Welfare & Certificate Coordinator)

"Probably the treasury's bureaucracy and claims processes. I understand finance is critical, but the many forms and signatures that you have to complete made me notice that most of the inconvenience is absorbed by the academic staff. I hope there is a simpler flow of process that does not involve the lecturers running around campus chasing signatures." — **Respondent 7 (Corresponding Author / Module Lead)**

Cross-institutional governance further added complexity, as obtaining necessary approvals from international matching grant partners required navigating external institutional pipelines:

"Since this was also a matching grant, I had the additional responsibility of communicating and coordinating with the matching grant team at Universitas Muhammadiyah Makassar (UNISMUH)... obtaining the necessary approvals and signatures sometimes took time because the documents had to go through their own institutional procedures as well." — **Respondent 5 (Project Leader)**

Theme 3: Pedagogical Adaptation, Modality Extension, and Sample Drops (Scope/Quality Constraint)

Faced with temporal disruptions and legal/administrative requirements, the project team was forced to adapt the **Scope and Quality** of the pedagogical interventions. These adaptations included reconceptualising research frameworks following copyright rejections, expanding session durations, modifying material budgets, and navigating mid-grant institutional policy mandates.

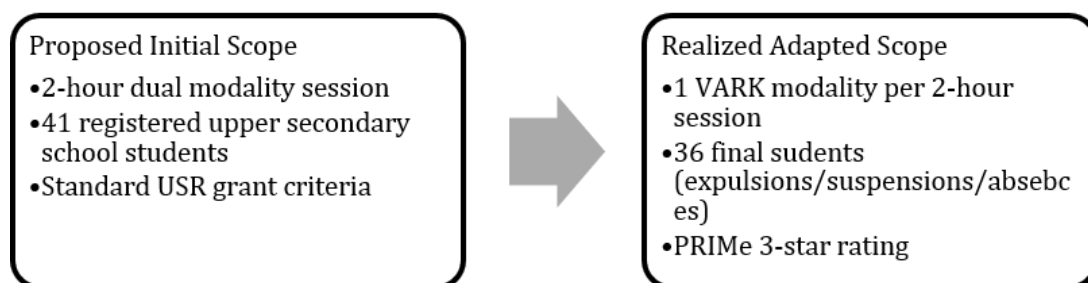


Figure 7: Scope Adaptation from Proposed to Realised Implementation

R7 described the major hurdle of having their initial copyrighted diagnostic questionnaire application rejected by VARK Limited Learn, forcing a total study re-conceptualisation:

"Re-applying for the use of VARK copyrighted questionnaire because the initial application was rejected; the reason given- methodology was found problematic; it focused more on teaching. 1st author and I had to re-conceptualise the study and re-direct the workshop. The second application was successful." — **Respondent 7 (Corresponding Author / Module Lead)**

Furthermore, pilot simulations conducted by the research team revealed that the original plan of combining two VARK modalities into a single two-hour workshop was pedagogically unfeasible, forcing an extension of the workshop series that increased operational costs:

"The workshop was originally planned to combine two modalities in one session (2 hours), but during a simulation conducted with the facilitators/researchers, we found that the time was too limited for two modalities. We then decided to extend the workshop by focusing on 1 VARK modality per session. This affected the length of the workshop and also increased our cost." — **Respondent 7 (Corresponding Author / Module Lead)**

Sample attrition also compromised data collection scope, as school disciplinary actions permanently reduced the participant pool:

"We started with 41 students, but were left with only 36 at the end of the workshop due to cases of expulsion and suspension from school. This affected the data collection." — **Respondent 7 (Corresponding Author / Module Lead)**

Additionally, sudden mid-project changes in institutional requirements—specifically UiTM's PRIME system mandating a 3-star rating for USR projects—forced the project leader to extend the project timeline and re-evaluate project scope:

"There were also changes in the requirements, such as the need to achieve 3 stars, which required a longer timeframe. Luckily, the grant period could be extended, giving us more time to meet the requirements and complete the project." — **Respondent 3 (Activity Planner / Secretary)**

"In addition, the change in the PRIME star rating requirement for UiTM USR projects created an unexpected challenge at the administrative level. The new requirement meant that I had to reassess the original project plan and extend the project timeline in order to fulfil the requirement of achieving a 3-star rating." — **Respondent 5 (Project Leader)**

Theme 4: Adaptive Workarounds, Simulations, and Task Reallocations (Reflection-In-Action)

To overcome administrative friction, schedule clashes, and pedagogical challenges, team members deployed real-time **Reflection-in-Action**. They adapted through internal role reassignment, workshop simulations, flexible communication strategies, and personal resilience.

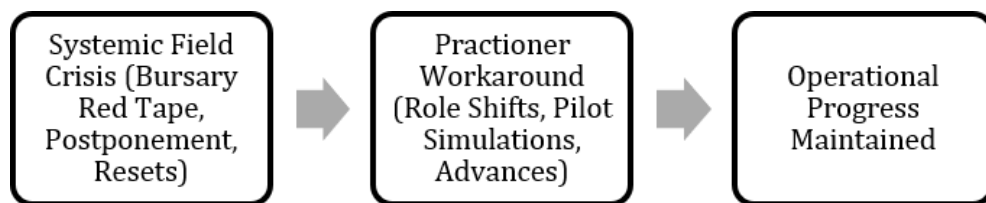


Figure 8: Crisis, workaround, and operational outcome flow

When unexpected vacancies or administrative needs arise, team members flexibly accepted new roles to keep project documentation on track:

"The biggest challenge I faced was when I was suddenly asked to become Secretary 1. Before that, I had already completed my part in planning the activities. The change was unexpected, so I had to quickly adjust to my new role and responsibilities. However, I managed to adapt and trying to complete the tasks given to me." — **Respondent 3 (Activity Planner / Secretary)**

To address classroom delivery anxiety and ensure pedagogical quality, facilitators made quick adjustments on the floor despite limited formal training:

"I think due to the lack of training to deliver the material in the classroom, I feel a bit overwhelmed and sometimes need to be quick to make sure the lesson were properly delivered." — **Respondent 2 (Food & Logistics Coordinator)**

Participants emphasised that strong internal teamwork and clear communication were essential to overcoming institutional barriers:

"Communication within the project team was clear and responsive, which made it easier to delegate tasks, share updates, and make necessary adjustments." — **Respondent 5 (Project Leader)**

"Teamwork is important by helping each other we are helping ourselves in turn." — **Respondent 4 (Facilitator)**

"The biggest personal lesson I learned... is to expect the unexpected and always have a backup plan... managing project constraints is not only about following the original plan, but also about being adaptable, staying calm under pressure, and being prepared with practical alternatives when things do not go as expected."

— **Respondent 5 (Project Leader)**

DISCUSSION

The empirical findings from this 13-month University Social Responsibility (USR) grant initiative illuminate the lived operational realities, structural friction points, and adaptive strategies of academic practitioners working within school-university partnerships. While higher education policy routinely celebrates community engagement as a transformative "Third Mission", the reflective accounts of Respondents R1 through R8 demonstrate that executing grant-funded community initiatives requires academics to constantly negotiate competing institutional, financial, and temporal pressures.

This section synthesises the empirical insights with the study's theoretical lenses—the Iron Triangle of Project Management and Schön's Reflective Practice Framework—while connecting these dynamics to the broader literature on higher education governance and USR management.

Temporal Compression and the Non-Linearity of Community-Engaged Work

In classical project management theory, the Time dimension of the Iron Triangle assumes a linear progression toward fixed milestones (Makovec, 2025; Atkinson, 1999). However, the findings reveal that in community-engaged educational grants, time is fundamentally non-linear, unpredictable, and fragmented. Over the 13-month project lifecycle, the team did not experience a continuous operational window; rather, their schedule was subjected to "multi-phase temporal compression" driven by external, non-negotiable school priorities.

The reflective narrative of Respondent 5 underscores how unforeseen crisis events—such as the student food poisoning outbreak—and clashing school priorities (MSSD sports competitions, examination blocks, and student suspensions/expulsions) disrupted planned field visits. As Respondent 2 noted, these disruptions meant field visits lacked linear progress, forcing facilitators to continually re-establish student recall and learning continuity between fragmented sessions.

These findings align with emerging USR literature, which critiques traditional grant structures for applying rigid corporate project timelines to dynamic community settings. More broadly, although engaged and applied research has considerable potential to promote equitable outcomes, academic researchers continue to encounter systemic constraints, including inflexible academic career timelines and inadequate institutional infrastructure to support such work (Yusuf et al., 2026). When university grant schedules collide with the immovable calendar of a state religious school (SMA Arab JAIM As-Syakirin), academic practitioners bear the temporal burden. As highlighted by Respondents 7 and 8, balancing heavy academic teaching loads, semester coursework, and grant deadlines forced practitioners to absorb project friction through personal fatigue and extended working hours, which aligns with Wright et al. (2025), where the intersection of community engagement projects, research deadlines, and routine instructional/coursework demands creates severe role overlap, resulting in chronic fatigue and academic burnout.

TRADITIONAL GRANT TIMELINE (Linear Model)



REAL-WORLD FIELD REALITY (Squeezed & Fragmented)

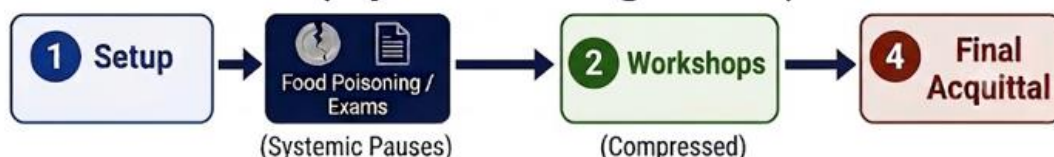


Figure 9: Comparison of planned grant phases and actual field disruptions

Institutional Bureaucracy, Financial Friction, and Out-of-Pocket Risk

The Cost/Resource constraint of the Iron Triangle was heavily shaped by university financial compliance mechanisms. While grant auditing frameworks are designed to guarantee fiscal accountability, the reflections of Respondent 6 (Bursary/Treasurer) reveal how inconsistent instructions, redundant documentation requirements, and repeated submission rejections create severe operational bottlenecks.

A critical empirical insight from this study is the phenomenon of practitioner-absorbed financial risk. When university procurement workflows or Bursary advance claims were delayed, academic staff did not allow project activities to stall. Instead, as noted by Respondent 4, team members raised temporary emergency out-of-pocket funds to cover necessary field expenses, food vendor commitments, and workshop supplies. This practice can be understood within the broader challenges associated with complex project administration, where multiple management units, insufficient staffing, complicated approval processes, procedural inefficiencies, and errors or deficiencies in documentation can contribute to procurement delays and, consequently, delays in overall project implementation (Chan & Wang, 2025).

Similarly, Respondent 8's account of repeatedly travelling across campus under tight deadlines to chase physical signatures from leadership illustrates how bureaucratic processes shift administrative labour onto academic staff. Such governance challenges may be particularly pronounced in institutionally hybrid settings, where difficulties arise not simply because of inadequate rules or enforcement, but from the interaction and potential conflict between formal institutional procedures and informal practices (El Assadi et al., 2026). This operational friction was further compounded by cross-institutional governance. As Respondent 5 observed, coordinating matching grant approvals with an international partner (UNISMUH) required navigating two distinct institutional bureaucracies, adding extra administrative layers to routine sign-offs.

These experiences corroborate literature on higher education governance, which warns that bureaucratic inertia in central bursaries often undermines community trust and places unfair financial and logistical burdens on project facilitators (De Barros et al., 2024).

Pedagogical Scope Adaptations and Quality Trade-offs

Under Triple Constraint Theory, when Time schedules fragment and Resource/Cost mechanisms stall, the project manager must adjust the project's Scope or Quality to prevent complete failure. Existing evidence further highlights the importance of effective cost and quality management in project success, demonstrating that sound budgeting contributes to cost control while quality management remains critical to achieving

positive project outcomes, particularly when organisational support influences how the triple constraints are managed (Watanabe et al., 2024). The dataset provides rich evidence of how pedagogical scope was iteratively adapted in response to external and legal barriers.

The most prominent scope modification occurred during the research design phase. Respondent 7 highlighted how the initial rejection of their copyrighted questionnaire application by VARK Limited Learn required a complete re-conceptualisation of the study's theoretical framework. Furthermore, pilot simulations conducted by the research team revealed that trying to cover two VARK modalities within a single two-hour workshop was pedagogically ineffective. To protect the educational quality of the intervention, the team expanded the workshop series to focus on one modality per session. While this adjustment improved pedagogical depth, it reduced overall timeline flexibility and increased operational costs.

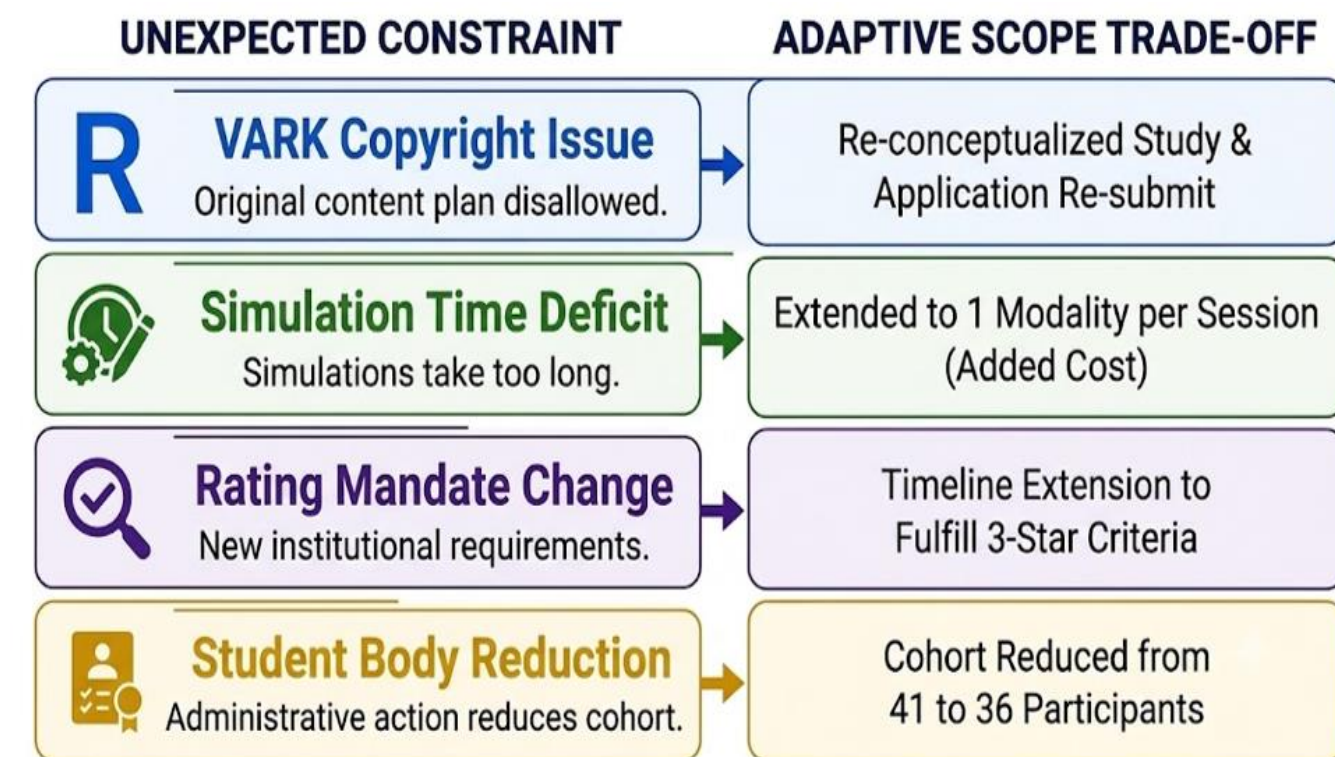


Figure 10: Overview of project constraints and adaptive responses by category

Scope was also impacted by external institutional mandates. As Respondents 3 and 5 noted, the sudden mid-project introduction of UiTM's PRIME 3-star rating requirement forced the team to reassess project deliverables and extend the overall grant timeline. Finally, sample attrition—caused by school disciplinary expulsions and suspensions—reduced the participant cohort from 41 to 36 students, altering the quantitative data collection scope. These trade-offs highlight that in educational USR grants, project "scope" is not a static contract but a dynamic, evolving balance between academic rigour, institutional policy, and community feasibility (Rodriguez-Izquierdo, 2025).

Practitioner Reflection-in-Action as on Organisational Coping Mechanism

Donald Schön's (1986) Reflective Practice Framework offers a powerful lens for understanding how the grant team survived these operational constraints. Rather than relying solely on rigid, pre-planned project scripts ("technical rationality"), team members engaged in continuous Reflection-in-Action thinking on their feet, improvising workarounds, and reallocating responsibilities in real time.

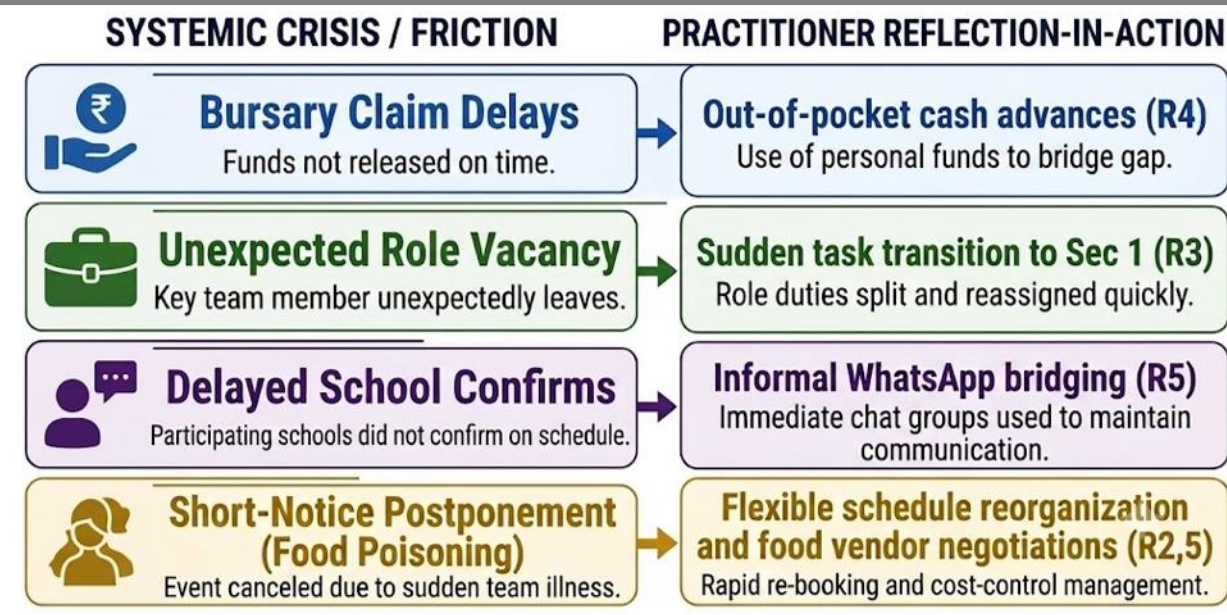


Figure 11: Schön Reflection-in-Action Applied to Grant Constraint

As demonstrated in the empirical data, reflection-in-action manifested across several operational dimensions:

1. **Role Flexibility:** When administrative needs shifted, Respondent 3 adapted immediately to take on the Secretary 1 role despite having already finished their original activity planning tasks.
2. **Relational Bridging:** To overcome delayed formal communications from school leadership, Respondent 5 established informal messaging channels (WhatsApp) with school staff, enabling real-time adjustments before formal letters were processed.
3. **Pedagogical Self-Correction:** Facilitators like Respondent 2 recognised their lack of formal classroom delivery training mid-session and adjusted their instructional style on the floor to ensure workshop objectives were met.

Through **Reflection-on-Action** (retrospective analysis completed via the reflective journals), the team converted these operational crises into institutional learning. Respondents 6, 7, and 8 emphasised the necessity of establishing clear Bursary SOPs, conducting early pilot simulations, and building administrative buffer time for leadership sign-offs in future grants.

Ultimately, the discussion demonstrates that the success of university-community grant initiatives relies heavily on the resilience, adaptability, and informal problem-solving capacities of academic practitioners who bridge the structural gap between university bureaucracy and community realities (Hartmann et al., 2023).

CONCLUSION

This qualitative reflective study examined the operational realities, structural constraints, and adaptive coping mechanisms of an eight-member university project team executing a 13-month University Social Responsibility (USR) grant at Sekolah Menengah Agama (SMA) Arab JAIM As-Syakirin. By framing practitioner experiences through the Iron Triangle of Project Management (Time, Cost/Resources, Scope) and Schön's Reflective Practice Framework, the study demonstrates that running university-community partnerships involves navigating systemic operational friction. Rather than progressing smoothly, project delivery was continuously shaped by non-linear school schedules, emergency postponements (such as student food poisoning), shifting Bursary documentation rules, instrument copyright barriers, out-of-pocket financial advances, and mid-grant institutional rating mandates (UiTM PRIME 3-star requirement).

Ultimately, the findings reveal that the successful delivery of USR grants relies on the resilience, informal relational bridging, and real-time reflection-in-action of academic practitioners who absorb administrative burdens to protect community trust.

Actionable University Policy Recommendations

Based on the empirical reflections and constructive suggestions provided by Respondents R1 through R8, four actionable policy guidelines are proposed for Higher Education Institutions (HEIs), funding bodies, and research management centres (such as PJI and Bursary) to optimise future community grant governance:

Establish Standardised, Centralised Bursary SOPs and Dedicated Officers

- **The Policy Issue:** Frequent changes in claims submission rules, redundant documentation demands, and conflicting advice from different Treasury staff caused severe delays and forced lecturers to make multiple physical trips across campus.
- **Policy Recommendation:** Universities should publish a standardised, step-by-step financial checklist at the onset of every grant cycle. Furthermore, a dedicated Bursary desk officer should be assigned to community grants to ensure consistent advice, streamlined approval workflows, and predictable reimbursement timelines.

Introduce Mandatory Administrative Buffer Windows and Agile Scheduling Policies

- **The Policy Issue:** Project execution was severely disrupted by unexpected external events, including student illness, examination blocks, school sports competitions (MSSD), and disciplinary suspensions.
- **Policy Recommendation:** Funding bodies should embed a mandatory, formal 2-to-3-month "contingency/buffer window" into all community grant contracts. Project timelines should explicitly allow for non-linear implementation and short-notice rescheduling without requiring penalising formal extensions or triggering administrative audits.

Implement Grace Periods for Mid-Project Institutional Policy Updates

- **The Policy Issue:** Introducing new institutional evaluation criteria (such as the PRIME 3-star rating requirement) mid-project created administrative confusion, forced timeline extensions, and added reporting pressure on ongoing initiatives.
- **Policy Recommendation:** Institutional policy changes or rating criteria updates should not be applied retroactively or immediately to active grants. Universities should institute a policy grace period, applying new compliance frameworks only to future grant cycles, or provide dedicated administrative support to help ongoing teams transition without scope disruption.

Digitalise Signature Routing and Streamline Procurement for Small-Value Claims

- **The Policy Issue:** Academic staff lost valuable teaching and research time physically chasing upper-management signatures for certificates and managing small-value emergency cash advances.
- **Policy Recommendation:** HEIs should fully digitalise signature routing protocols for project documentation and certificates. Additionally, establishing a fast-track, digital micro-procurement channel or pre-approved petty cash fund for community grants would eliminate the need for lecturers to raise personal out-of-pocket funds during field emergencies.

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