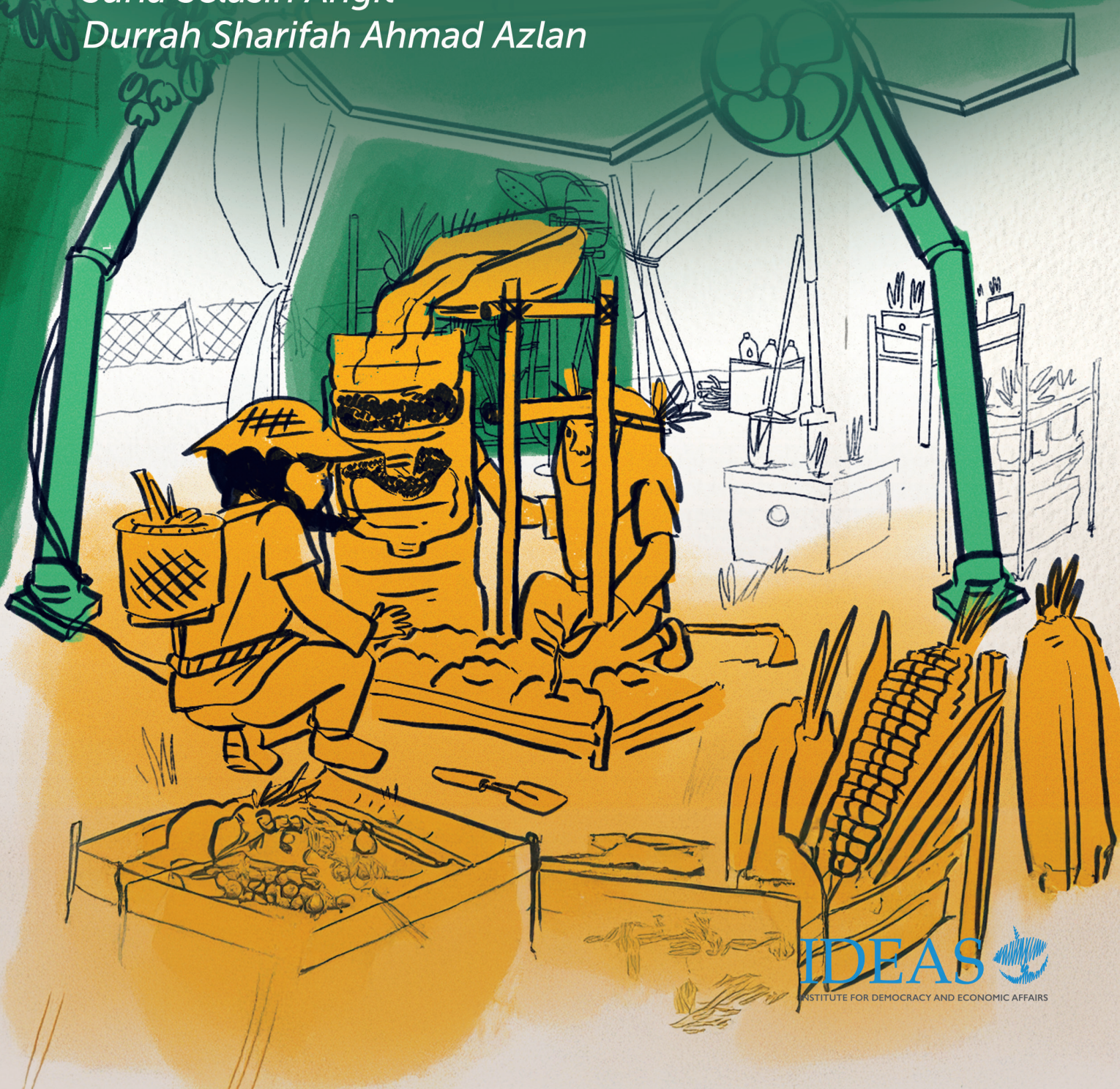


# Lessons from the Ground: Orang Asli Education Programme Implementation Insights

*Suria Selasih Angit  
Durrah Sharifah Ahmad Azlan*





## Table of Contents

<b>Table of Contents</b>	<b>ii</b>
<b>Copyright</b>	<b>iii</b>
<b>Authors</b>	<b>iv</b>
<b>Acknowledgement</b>	<b>v</b>
<b>Executive Summary</b>	<b>vi</b>
<b>1. Introduction</b>	<b>1</b>
1.1 Context Setting: People, Place and Purpose	2
<b>2. Pre-Implementation Phase: Strengthening the Foundation</b>	<b>6</b>
2.1 Bringing Forward Orang Asli Community Voices	6
2.2 Alignment with Public Sector Stakeholders	9
2.3 Capacity Building for Programme Implementers	10
<b>3. Implementation Phase: Bringing the Plan to Life</b>	<b>13</b>
3.1 Programme 1: Establishment of a Robotics Club at SMK A by IIUM	13
3.2 Programme 2: I-Skilled Competencies Enhancement for Orang Asli Students at SMK B by USIM	17
<b>4. Post-Implementation Phase: Reflecting on Advancing Inclusion in Education Practice</b>	<b>20</b>
4.1 Reflections from Orang Asli Parents	20
4.2 Challenges and Areas for Improvement	24
4.3 Reflections from Programme Implementers	25
4.4 Challenges and Lessons Learned by Implementers	26
<b>5. Conclusion and Recommendations</b>	<b>27</b>
5.1 Strengthening the Existing Multi-stakeholder Network through Continuous Trust-building Efforts	29
5.2 Sustaining Efforts through Culturally Grounded Planning	31
5.3 Capacity Building of Funders, Policy-makers, Programme Implementers, Teachers and Orang Asli Parents/ Communities	31
5.4 Adopt a Holistic Approach to Address Systemic Challenges	31
5.5 Leveraging Technology for Meaningful Engagement and Communication	33
<b>References</b>	<b>33</b>

Copyright © 2025 by IDEAS. All rights reserved.  
First published in April 2025

Published by:  
IDEAS Policy Research Berhad (IDEAS)  
The Lower Penthouse, Wisma Hang Sam, 1, Jalan Hang Lekir 50000 Kuala Lumpur

[www.ideas.org.my](http://www.ideas.org.my)  
Reg No.: 1219187-V

The copyright of this research report belongs to the Institute for Democracy and Economic Affairs (IDEAS). All or any part of this research report may be reproduced provided acknowledgement of source is made or with IDEAS' permission. IDEAS assumes no responsibility, warranty and liability, expressed or implied by the reproduction of this publication done without IDEAS' permission.

Design and layout: Norhayati Murni Misran  
Cover illustration: Ooi Huiqi

## Authors



**Dr Suria Selasih Angit**

Dr Suria Selasih Angit, the project's lead researcher, is an assistant professor at the School of Education, University of Nottingham Malaysia. She holds a PhD in Education and a Master of TESOL from The University of Melbourne, Australia. Suria began her illustrious academic career with the Ministry of Education Malaysia as an English language teacher after obtaining her B.Ed. (Hons) TESL from the National University of Malaysia and has since been involved in various educational programmes locally and internationally. As an Orang Asli (OA) Temiar academic, researcher and advocate, Suria is committed to co-creating social and learning environments that genuinely support Indigenous aspirations and self-determination—particularly for OA communities. She also hopes that her OA Student Icon Award will inspire more Orang Asli students to unleash their potential and shine in all arenas.



**Durrah Sharifah Ahmad Azlan**

Durrah Sharifah Ahmad Azlan is a Research Executive under the Social Policy Unit at IDEAS Malaysia. Previously, she assisted with research focusing on the Orang Asli healthcare utility and health systems policies. She is actively involved in the Malaysian civil society and NGO sector, volunteering and working with organisations across various causes, including mental health, politics, and education. Durrah did her MSc in Global Health Policy at the London School of Economics and Political Science.



## Acknowledgement

The authors would like to express their deepest gratitude to the participating Orang Asli community in Gua Musang, the Ministry of Education Malaysia, the Kelantan State Education Department, the Department of Orang Asli Development (Jabatan Kemajuan Orang Asli [JAKOAJ]), the implementing partners, along with the numerous civil society organisation (CSOs) and non governmental organisations (NGOs) that have been involved in this project. Their support and collaboration have been crucial to the successful implementation of the education programmes.

The authors would like to thank Dr Suria Angit, Alissa Rode, and Dr Stewart Nixon for their support in reviewing the report. Heartiest appreciation goes to the previous project managers and researchers, Yvonne Tan, Melanie Chan, Nurul Izzati Kamrullah, Julia Merican, and Kirjane Ngu, for their contribution to this project. The authors would also like to thank Faiz Zaidi and Amir Ridzuan Jamaludin for their support in project management, Zuhdi Farhan, Ryan Panicker, Wan Adam and Aza Jemima Ahmad in event management and communications, and Norhayati Murni Misran for coordinating the design of this publication. Special thanks to Gajaletchumy Saravanan for her meticulous management of the project's finances. Valuable contributions were also made by Nimitraa Youganesparan, Ng Ji Herhn, Faiqah Feroze, Ariq Ramadhan, and Aisyahatul Amieza during their internship with the project, and their support is gratefully acknowledged.

This project was supported by Yayasan Sime Darby. However, the opinions expressed in this report are those of the author(s) and do not necessarily represent Yayasan Sime Darby.

**Supported by:**



**YAYASAN**

## Executive Summary

This report, *Lessons from the Ground: Orang Asli Education Programme Implementation Insights*, is part of the Institute for Democracy and Economic Affairs' (IDEAS) broader initiative, Inclusive Education for Orang Asli Children. It explores the challenges, successes, and key takeaways from implementing educational programmes tailored for the Orang Asli community in Malaysia. Despite various policies aimed at closing educational gaps, a persistent divide remains between policy development and effective execution. Thus, this report provides actionable insights to bridge this divide by enhancing collaboration among stakeholders, centering Orang Asli voices, and integrating culturally responsive approaches to improve educational outcomes for Orang Asli students. The following summarises key information from the programmes:

### Pre-Implementation

- Prioritised meaningful engagement with Orang Asli communities through consultations and co-creation of programme design, fostering trust and ownership.
- Strengthened alignment with public sector stakeholders (e.g., Department of Orang Asli Development (Jabatan Kemajuan Orang Asli [JAKOA]), school leaders, education departments) to ensure contextual relevance.
- Built implementer capacity through workshops on Indigenous pedagogies, and monitoring and evaluation frameworks to support culturally responsive and impact-driven implementation.

### Implementation

- Executed two tailored programmes in Gua Musang, Kelantan: a Robotics Club at SMK A (by International Islamic University Malaysia [IIUM]) and the NextGen I-Skilled Competency Programme at SMK B (by Islamic Science University Malaysia [USIM]).
- The Robotics Club provided students with hands-on Science, Technology, Engineering, and Mathematics (STEM) learning (e.g. coding, 3D printing, drone tech), leading to national competition wins and peer-led outreach to other schools.
- The NextGen I-Skilled programme focused on entrepreneurship, digital marketing, and leadership, culminating in a student-led carnival and the launch of the NextGen I-Skilled Club.
- Both initiatives emphasised practical skill-building, student ownership, and culturally responsive content, with strong community and parental engagement throughout.

### Post-Implementation

- Reflections from Orang Asli parents and programme implementers highlighted strengthened school-community ties, increased parental involvement, and noticeable student growth in confidence, technical skills, and interest in STEM and entrepreneurship.
- Parents felt more connected and valued in their children's education, while also gaining new knowledge and community-building opportunities. Implementers reported meaningful community collaboration and the benefits of culturally responsive practices.
- However, challenges such as logistical barriers, limited parent participation, and the need for more diverse, non-STEM-focused programmes were also noted.
- Sustainability, inclusive engagement, and deeper coordination with education authorities were identified as key areas for future improvement.

---

The recommendations below are derived from lessons learnt through this project, emphasising scalable, community-led strategies to institutionalise gains. They prioritise collaborative action, cultural agility, and addressing structural inequities.

1. Strengthen multi-stakeholder networks with clear role delineation to ensure shared accountability.
2. Embed Indigenous pedagogies in programme design, guided by Orang Asli communities.
3. Scale participatory monitoring and evaluation (M&E) processes using accessible technology (e.g., WhatsApp) for real-time community feedback.
4. Address systemic barriers hindering community participation (e.g., transportation subsidies, flexible parental engagement models).

This initiative underscores the transformative potential of culturally responsive education interventions. IDEAS urges for there to be strengthening of partnerships between government agencies, civil society organisations (CSOs), non-governmental organisations (NGOs), and community leaders to ensure effective implementation. Additionally, prioritising participatory approaches will amplify Orang Asli voices in shaping educational strategies. By leveraging these lessons and implementing strategic improvements, stakeholders can work towards an inclusive, equitable, and culturally attuned education system that empowers Orang Asli children to thrive. IDEAS remains committed to this vision and invites all stakeholders to join this collective effort for sustainable development and social equity.

## 1. Introduction

The need to improve educational outcomes for Orang Asli students has long been recognised, as this community remains persistently disadvantaged within Malaysia's education system (Nordin et al., 2020). In response, numerous policies and programmes have been introduced over the years, reflecting a strong policy commitment to address educational disparities and ensure more inclusive opportunities for Orang Asli children (Human Rights Commission of Malaysia [SUHAKAM], 2010). For example, the Malaysia Education Blueprint 2013-2025 outlines deliberate steps in formulating adaptive curricula that promote both school retention and academic achievement for the Orang Asli children through Ministry of Education's Initiative #57 (Ministry of Education, 2018). However, persisting gaps remain between policy intent and effective grassroots implementation (Othman, 2022).

Responding to the need to bridge this gap, the Institute for Democracy and Economic Affairs (IDEAS) has embarked on a project called *Inclusive Education for Orang Asli Children*, which includes a series of studies that seeks to understand the educational challenges faced by Orang Asli students and subsequently identify the underlying challenges that are faced by Orang Asli students. Previous IDEAS publications *Policy Paper No. 66: Education Policies in Overcoming Barriers Faced by Orang Asli Children* (Wan, 2020) and *Contextualizing Education Policy to Empower Orang Asli Children* (Wan & Idrus, 2021) highlighted the need to address the root causes of educational disparities, offering 12 policy recommendations focused on students, teachers, schools, and systemic reforms. Key themes from these reports include the integration of Orang Asli cultures into the curriculum, the empowerment of teachers and communities, and the importance of multi-stakeholder collaboration.

Following these recommendations, the 2-year *Inclusive Education for Orang Asli Children* project was implemented to bridge the divide between policy recommendations and their real-world application, fostering an environment conducive to the successful implementation of educational programmes tailored to the needs of the Orang Asli community. The *Actors on the Ground* report identified key actors in Orang Asli education, highlighted gaps in coordination, and emphasised the need for culturally responsive policies and programmes. It also led to the establishment of the Seed Community for Orang Asli Education, a collaborative network aimed at driving collective action and policy advocacy. Meanwhile, *Voices from the Ground* amplified the voices of Orang Asli communities, teachers, and civil society organisations (CSOs), stressing the importance of trust-building, strength-based discourse, and addressing systemic challenges such as poverty and cultural mismatches.

Building on this foundational work, this report, titled *Lessons from the Ground: Orang Asli Education Programme Implementation Insights* is the final publication that documents the learning journey of multiple stakeholders involved in the process. Apart from documenting the journey, the report also seeks a clearer and consolidated understanding of project learnings by answering the following guiding questions:

1. What challenges and lessons have emerged from the implementation of Orang Asli education programmes?
2. How can these lessons inform and enhance collaborative efforts to address educational issues more effectively?

To answer these questions, this report provides a comprehensive analysis of the execution of the Orang Asli education projects. It begins with the pre-implementation phase, detailing the preparations and challenges faced before programme execution, followed by an examination of the implementation phase, highlighting successes, processes, and challenges encountered during programme rollout. The post-implementation phase captures reflections from Orang Asli parents and implementers, offering insights into the benefits gained and areas for improvement. Finally, the report synthesises key lessons learned and provides recommendations for future initiatives, concluding with a call to action for stakeholders to sustain and scale these efforts.

## **1.1 Context Setting: People, Place and Purpose**

This section outlines the foundational steps taken to design and implement tailored educational programmes at three Orang Asli schools. The process began with a needs analysis and evolved into a collaborative, community-driven intervention aimed at bridging gaps in Orang Asli education, as outlined in the different stages below:

### **Stage 1: Needs Analysis and Stakeholder Engagement**

In the initial phase of this project, the IDEAS team set out to identify the specific needs of three Orang Asli schools, with the goal of designing and implementing a carefully tailored six-month educational programme at each school. This exploration, which included various research activities and multi-stakeholder engagements, is detailed in the first publication for this project, *Voices from the Ground*.

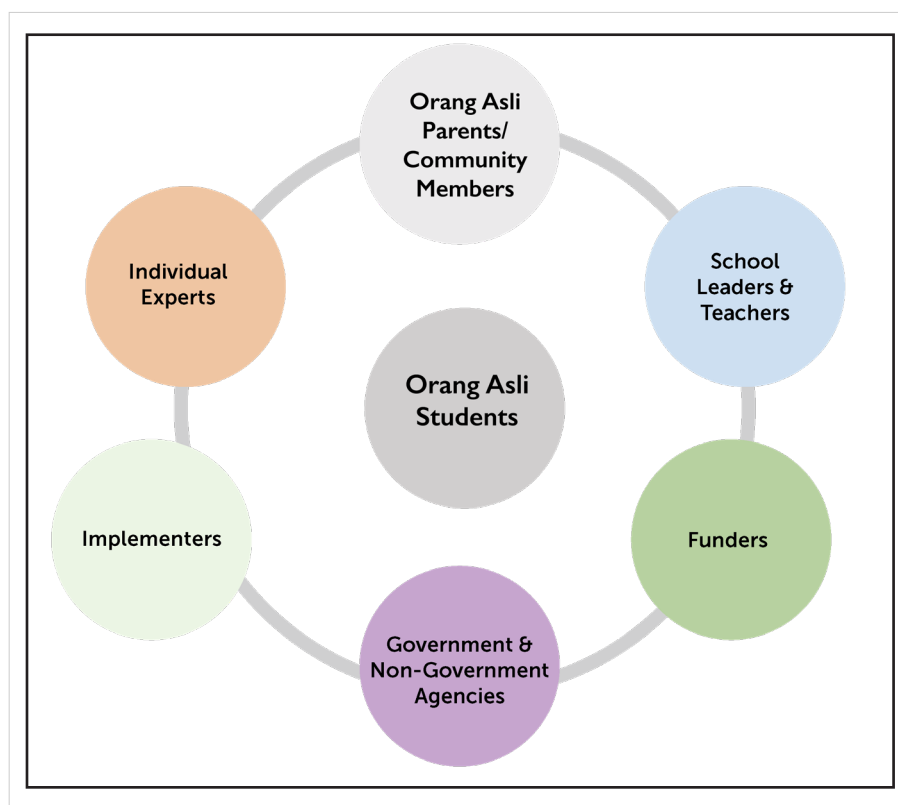
### **Stage 2: Forming a Collaborative Multi-Stakeholder Network**

Through ongoing engagement and trust-building exercises with all stakeholders, programme implementers were identified: International Islamic University Malaysia (IIUM) and Islamic Science University Malaysia (USIM), who demonstrated the readiness to take on this initiative based on a positive track record and compelling proposals. Recognising the importance of community involvement, the project provided for meaningful participation from Orang Asli community members, including three Orang Asli parents and one Orang Asli community leader. These individuals played a crucial role in shaping the process. Additionally, participating school leaders and teachers were instrumental in identifying key resource persons within each school.

IDEAS, as the programme coordinator, facilitated the collaboration by bringing in government agencies and other experts as needed. With Orang Asli students at the heart of the initiative, these stakeholders formed a collaborative multi-stakeholder network, as illustrated in Figure 1. The figure represents Orang Asli students at the center of a

supportive ecosystem, surrounded by various stakeholders working in collaboration to ensure their equitable access to education.

**Figure 1: Multi-stakeholder Network for the Project**



### **Stage 3: Designing Programme with Purpose and Place**

As a collaborative network, the stakeholders at each school continued the engagement and consultation process to refine the shared goals and the overall programme design. Table 1 below summarises the specific needs and presents the overall programme design for each participating school:

**Table 1: Identified Specific Needs**

School	Specific Needs	Implemented Programme	Programme Implementer
SMK A	Highlighting students' talents at a higher level - beyond the school and district level	<b>Establishment of a Robotics Makerspace Club:</b> Aim to bridge the technological gap, foster Science, Technology, Engineering, and Mathematics (STEM) education, and enhance creativity with workshops, club meetings, and competitions	<b>International Islamic University Malaysia (IIUM)</b> , previously through Makers@IIUM conducted a National Robotic STEM Programme for Orang Asli and Peribumi in the past, having managed to reach out to 83 Sekolah Kebangsaan (Asli)
SMK B	Developing vocational and entrepreneurship skills for post-school success	<b>I-Skilled Competencies Enhancement:</b> Provides training in soft skills, including digital entrepreneurship, public communication, and leadership, with mentoring for long-term success	<b>Islamic Science University Malaysia (USIM)</b> previously designed and conducted community-based training programs to develop essential soft skills for vulnerable groups such as the Orang Asli, youth and lower-income groups

The above-listed proposed programmes were designed with several policy recommendations highlighted in IDEAS' previous publication (Wan & Idrus, 2022) to be incorporated. Table 2 below outlines strategies for incorporating the recommendations:

**Table 2: Selected policy recommendations and strategies for incorporating them**

<p><b>There must be a greater focus on learning and addressing underlying challenges instead of symptomatic issues</b></p> <p>Programmes should be designed to address underlying issues identified through our needs analysis, in addition to extending learning beyond the conventional measures, emphasising future-focused skills that will equip Orang Asli students with the practical skills to help them navigate schooling experiences and eventually realise their future aspirations.</p>
<p><b>Existing programmes must be monitored and evaluated to ensure their efficient and effective delivery and implementation</b></p> <p>Steps must be taken to ensure that the intervention programmes are consistently monitored and evaluated, specifying the key performance indicators (KPIs), and monitoring and evaluation (M&amp;E) process before being implemented.</p>
<p><b>Trust and collaboration between schools and Orang Asli communities needs to be built as Orang Asli parents (and by extension their communities) are important partners in education</b></p> <p>At the inception of the project, fostering trust must be a primary agenda, acknowledging the significance of sustained, and mutually beneficial interactions. Commitment to trust building goes beyond mere information exchange and providing platforms for Orang Asli voices.</p>

### **Orang Asli communities should be empowered to be their own agents of change and participate in the process of Orang Asli-related policies**

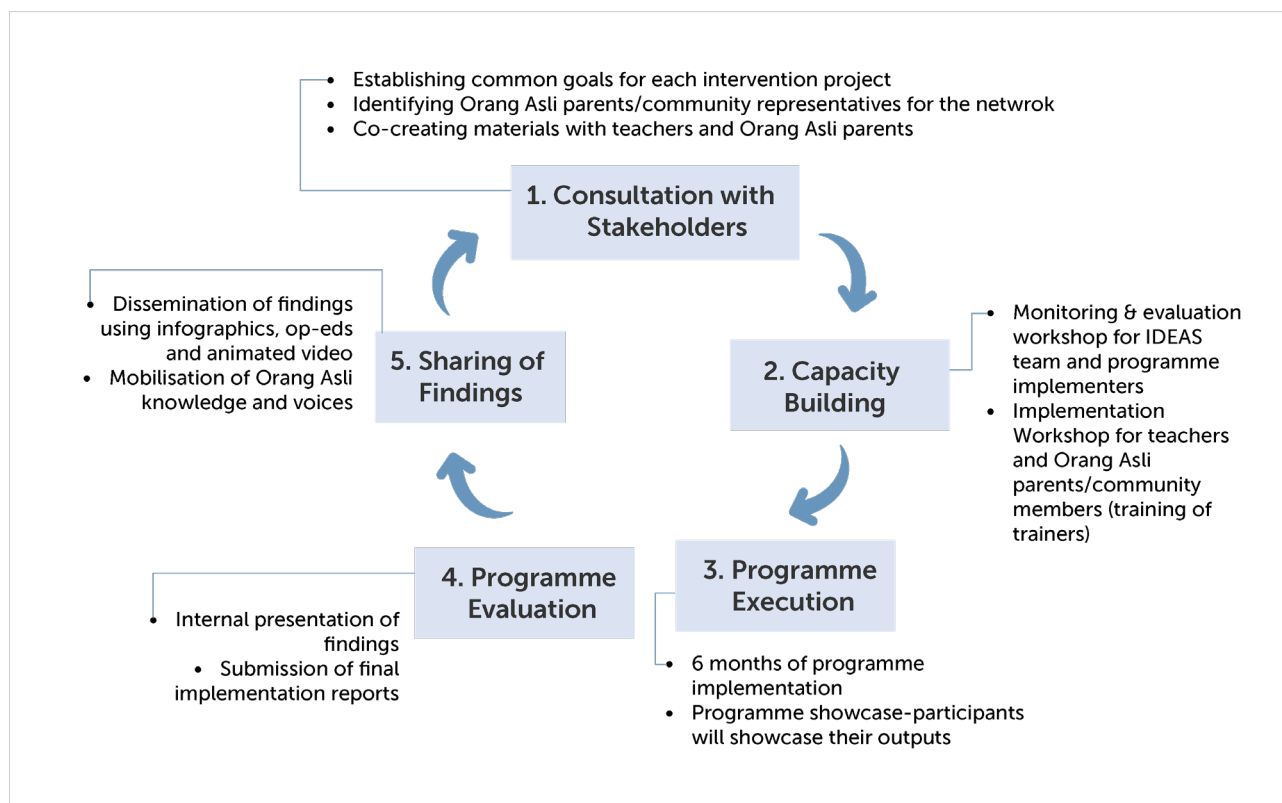
It is best for Orang Asli parents community members themselves to take part in the programmes as active members, including guiding non-Orang Asli stakeholders in a two-way learning process that focuses on improving cultural competencies of all stakeholders involved through deciding elements of the local cultures and history to be integrated into the programme designs, providing feedback for monitoring and evaluation purposes, and potentially evaluating aspects of the programmes related to the integration of local Orang Asli knowledge.

### **A positive or strength-based discourse should be created to shift away from the deficit discourse on Orang Asli**

Shifting away from the deficit discourse that often labels Orang Asli students as underachievers within the limited definition of learning that solely focuses on academic achievement, programmes are encouraged to highlight Orang Asli students' talents and skills beyond the conventional measures of school assessments.

In summary, each programme was designed to address specific challenges faced by Orang Asli students, with the aim of enhancing their skills, confidence, and readiness for future opportunities. Below is a flowchart of the programmes implemented by IIUM and USIM, including their activities, aims, successes, and lessons learned. In terms of the overall process, each programme follows the cycle depicted in Figure 2, although the pace of each stage may vary.

**Figure 2: Multi-stakeholder Network for the Project**



The following subsections outline the overall process of each programme, beginning with the pre-implementation phase, and provide insights into the lessons learned, challenges encountered, and key outcomes observed. They also highlight best practices and offer recommendations for future initiatives.

## **2. Pre-Implementation Phase: Strengthening the Foundation**

The pre-implementation phase focused on intentional efforts to strengthen the multi-stakeholder network that had been established in the first phase of this project. This phase included the following three major aspects that brought together relevant stakeholders into the table for a co-creation process:

1. Bringing Forward Orang Asli Community Voices
2. Alignment with Public Sector Stakeholders
3. Capacity Building for Programme Implementers

The following sections elaborate on the lessons learnt from these pre-implementation activities done with the different stakeholders.

### **2.1 Bringing Forward Orang Asli Community Voices**

Recognising the historical underrepresentation of Orang Asli community members in various sectors including education (Angit & Jarvis, 2024; Rosnon, 2016; Wan & Idrus, 2022), most importantly, this project prioritises meaningful engagement of Orang Asli parents to ensure their voices and needs are integral to the development and implementation of these programmes. In achieving this aim, the following activities were undertaken extensively in collaboration with the Orang Asli parents:

#### **1. Series of Consultations**

A series of consultations was held with Orang Asli community members to provide a safe and open space for them to share their insights, concerns, and aspirations, ensuring that their voices played a direct role in shaping the programme's direction. These include the utilisation of sharing circles as outlined in the Voices from the Ground report that provided key insights into the specific needs of Orang Asli students and local communities.

**Figures 3 and 4: Consultations held with Orang Asli Community/Members**



In one of the sharing circles held, the two proposed intervention programmes for SMK A and SMK B were discussed with the parents. Parents shared feedback on the programmes, helping refine community engagement aspects. They expressed appreciation for being actively involved in the process, highlighting that it was their first experience as contributors, rather than passive participants, in educational programmes.

*"This is the first time I am invited to give ideas about how a programme should be implemented. I am just a housewife, I don't know about education, but I want my children to be successful."*

*"I have joined many programmes before, but usually we were just sitting and listening. I'm not sure if I can teach (the children) but I can help monitor their progress."*

Overall, all participants expressed excitement and a strong commitment to engage actively in the programme and support their children's education. However, some concerns, such as a lack of transportation and work commitments, were raised as potential challenges that could affect their full participation.

*"Sometimes, it's hard to take leave. Like today, my boss has been calling me. They know I'm here, but I'm needed at the shop."*

*"I don't have transport. If it's at SMK A, it's still okay. SMK B is far away."*

Despite the challenges, another parent kindly offered help, demonstrating her willingness to support one another:

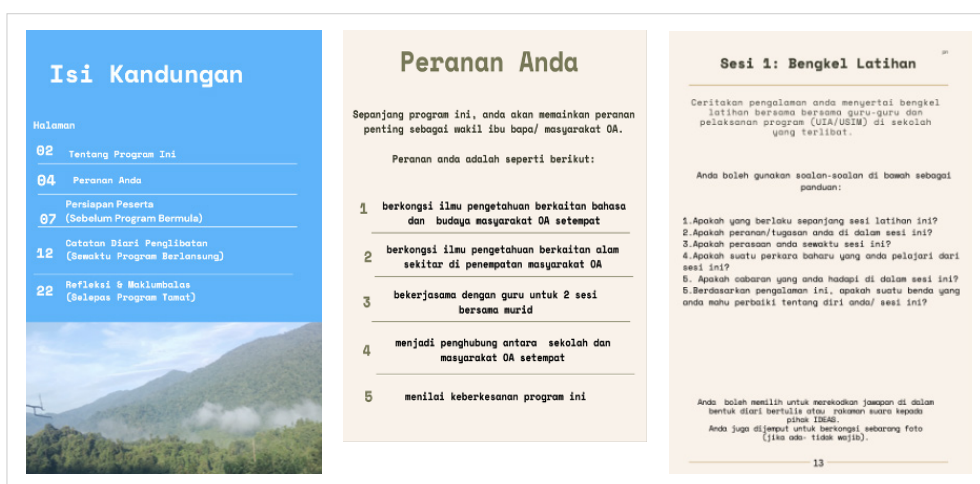
*"It's okay. You can come with me. I have transport"*

The IDEAS team then explained that these concerns would be relayed to the programme implementers, with the hope that the small token of appreciation offered at each session would, to some extent, facilitate parents' involvement in both programmes.

## 2. Planning for Continuous Community Involvement

To continuously involve the Orang Asli community throughout the two educational programmes, a community engagement toolkit was shared with the parents in the pre-implementation phase. The community engagement was designed to support continuous learning from the insights of parents throughout the programmes, pinpointing areas of strength and/or improvement. The toolkit adopts a reflective approach and is divided into three stages: pre-programme, during programme, and post-programme implementation.

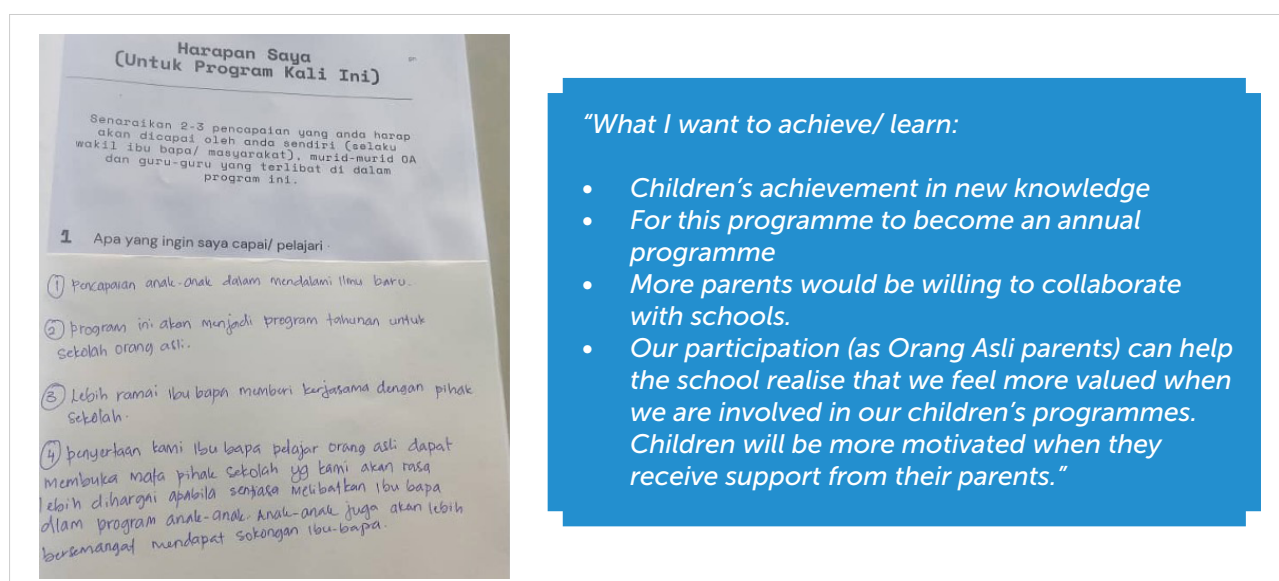
**Figure 5: Content from Community Engagement Toolkit**



A key feature is the reflective diary, where parents can document and assess their experiences using questions adapted from Gibb's (1998) Reflective Cycle, a framework which is widely used to promote reflective practices in education. This framework encourages participants to think critically about their experiences, what they learned, and how they could apply these insights to future practices. In the toolkit, participants were able to submit entries in writing or via WhatsApp audio messages. This activity aims to generate valuable insights for the programme's monitoring and evaluation through critical evaluations of their involvement.

The participating parents shared their hopes and aspirations as part of their first journal entry for the programme. Utilising WhatsApp as a familiar and accessible platform, parents submitted their reflections either by sharing snapshots of their written entries from the provided toolkit or by sending their reflections via WhatsApp messages. The following figures capture these hopes and inspirations:

**Figure 6: Hopes and Aspirations Written by an Orang Asli Parent**



The wants expressed by this parent shows a strong desire for their child’s continued growth and success in acquiring new knowledge, particularly in science and technology, as well as their hope that the programme will become an annual event, encouraging more collaboration between schools and parents. By being actively involved, parents feel more valued, which, in turn, motivates their children. They also aspire for greater awareness among Orang Asli parents about the importance of technology, and for schools to offer more opportunities for parental engagement in the future.

Additionally, parents hope that the programme strengthens the relationship between Orang Asli students, their families, and the schools. They believe that with continued support and collaboration, their children will become more competitive and successful in the future, securing a brighter future for both their children and the community as a whole.

## 2.2 Alignment with Public Sector Stakeholders

Engaging with key public sector stakeholders was also a foundational step to ensure the educational programmes were contextually relevant, needs-driven, and sustainable. Throughout this phase, a series of consultations was held with government agencies, school leaders, teachers, community leaders, and programme implementers to align expectations, identify potential challenges, and co-develop strategies for effective programme execution.

A key highlight of this process was a stakeholder roundtable discussion held at SMK A, where diverse perspectives from the State Education Department, District Education Office, JAKOA and school leaders were gathered to refine the programme’s implementation strategies. This inclusive approach ensured that all voices and concerns were acknowledged, fostering collective ownership and accountability in the project.

**Figure 7: Stakeholder Roundtable Discussion done at Participating School**



## 2.3 Capacity Building for Programme Implementers

In line with the policy recommendations made by Wan and Idrus (2021), this project prioritised the integration of robust M&E practices and the inclusion of Indigenous pedagogies to ensure that educational programmes are both impact-driven and culturally responsive to the needs of Orang Asli students. To support this, IDEAS organised two capacity-building workshops to equip programme implementers with the key skills needed to design and implement impactful initiatives.

The first workshop, the M&E Workshop, was led by Dr. Ranjit Singh Gill and conducted in February 2024 to strengthen implementers' ability to assess the programme's effectiveness and make data-driven improvements. This workshop served as a capacity-building opportunity for all participants, including IDEAS personnel, to ensure readiness for the implementation phase. The workshop aimed to familiarise participants with the M&E process, deepen their understanding of programme logic, and develop an M&E framework tailored to each project.

Bringing together all programme implementers, the workshop fostered a shared understanding of impact measurement strategies and accountability frameworks. By the end of the session, programme implementers were provided with an M&E template designed to guide data collection and evaluation throughout the programme, ensuring a structured approach to monitoring progress and assessing impact.

**Figure 8: Participants at M&E Workshop**



In addition, implementers also participated in the Indigenous Pedagogies Workshop, led by Dr. Suria Angit, in February 2024. As Indigenous pedagogies were new to many implementers, this online workshop served as an introduction to key principles and approaches that honour Orang Asli students' cultural and linguistic backgrounds. Adopting a reflective approach, the session guided implementers in incorporating elements of Indigenous pedagogies into their programmes, ensuring that their interventions were not only educationally effective but also aligned with the lived experiences and aspirations of Orang Asli students and communities.

**Figures 9 and 10: Online Indigenous Pedagogy Workshop**

**Alignment with SDG Framework**  
Goal 4 – Ensure inclusive and equitable quality education for all

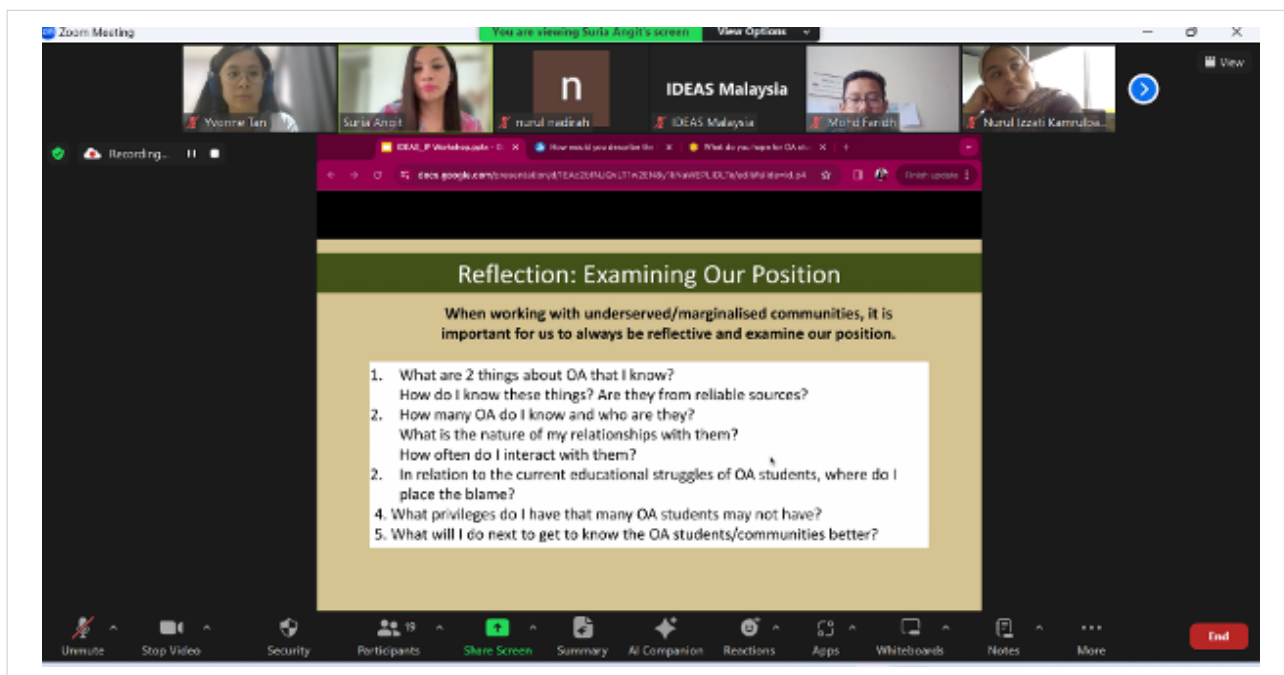
**Suria Angit**

**Dimensions**

Content/ Context	Teaching-Learning Method	Other characteristics/Process
<ul style="list-style-type: none"> <li>Creation of culturally responsive materials that highlights OA knowledge</li> </ul> <p>What specific OA knowledge/ topic? How many/ to what extent?</p>	<ul style="list-style-type: none"> <li>Incorporation of OA/Indigenous ways of learning into the mainstream setting</li> </ul> <p>What specific approach/method? How many/ to what extent?</p>	<ul style="list-style-type: none"> <li>Involvement of parents/ community as partners (not only as passive observers)</li> <li>Capacity building of OA parents community members</li> <li>Involvement of non-OA students in the programme – fostering friendships</li> </ul> <p>how many engagements? What types of engagements? What active roles? What activities? How many?</p>

Recording... | You are viewing Suria Angit's screen | View Options | View

Unmute | Stop Video | Security | Participants (15) | Share Screen | Summary | AI Companion | Reactions | Apps | Whiteboards | Notes | More | End



The pre-implementation phase emphasised several crucial lessons for success. Culturally responsive approaches, involving community members in programme design, ensured relevance and fostered a sense of ownership, with participants appreciating their active involvement. Building trust through respectful consultations and collaboration is vital. In addition, capacity building of those working in the Orang Asli education space is essential for ensuring sustainable and effective implementation. These lessons highlighted the importance of inclusivity, respect, and addressing underlying barriers for effective educational interventions.

By the end of the pre-implementation phase, the project had established a clear framework for the intervention programmes, identified the specific needs of the participating schools, and built a foundation of trust and collaboration among stakeholders. These lessons learnt set the stage for the successful implementation of the programmes in the next phase.

### 3. Implementation Phase : Bringing the Plan to Life

The implementation phase of the project involved the execution of two distinct programmes tailored to the needs of the participating schools in Gua Musang, Kelantan. Each programme was designed to respond to the specific needs highlighted by stakeholders on the ground, Orang Asli students, Orang Asli parents, their communities, and the teachers in the participating school.

#### 3.1 Programme 1: Establishment of a Robotics Club at SMK A by IIUM

IIUM's programme aimed to introduce Science, Technology, Engineering, and Mathematics (STEM) education, particularly robotics, to Orang Asli students at SMK A. The project sought to address the lack of resources and qualified educators in robotics, providing students with hands-on experience in coding, 3D printing, and drone technology. The initiative aimed to establish a Robotics Club and Makerspace at SMK A, enhance students' technical skills and interest in STEM fields, and offer opportunities for students to compete in national and international robotics competitions.

#### Key Highlights of the Programme

1. Demonstration (Mini Workshop) before Implementation: The IIUM team introduced teachers and parents to the activities the students would participate in as part of the Robotics Club. Some of the activities demonstrated included simple coding exercises for programming using an open-access platform, highlighting the foundational concepts of robotics and programming, as well as 3D Printing for students to design and create prototypes for use in competitions. During the demonstration, both parents and teachers, as well as the IDEAS team, were invited to participate in the hands-on activities that would further engage them in the learning process.

**Figure 11: Presentation by IIUM**



2. Workshops (19–21 July 2024): A 3-day workshop introduced students to robotics programming, 3D printing, and drone technology. Students developed prototypes, including a water purification system and a bus stop safety mechanism as a response to the systemic challenges faced by the community.

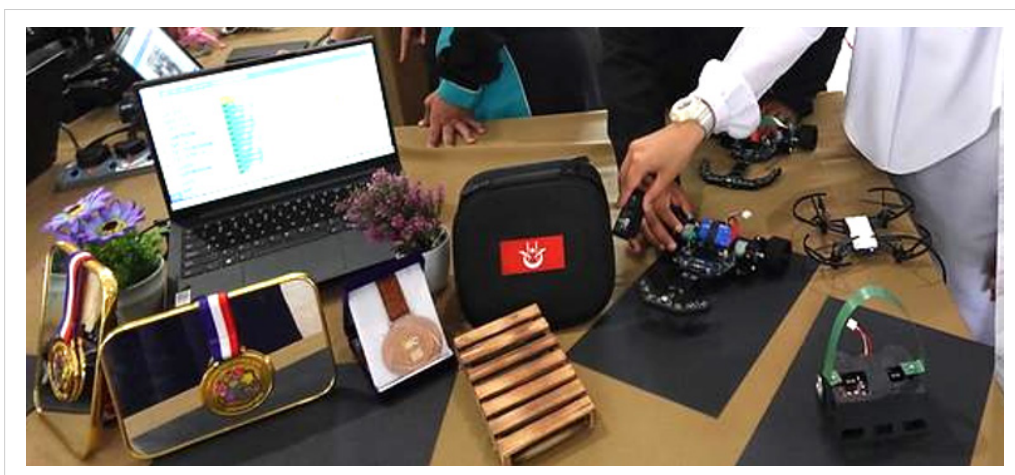
**Figure 12: Workshop by IIUM**



### 3. Competitions:

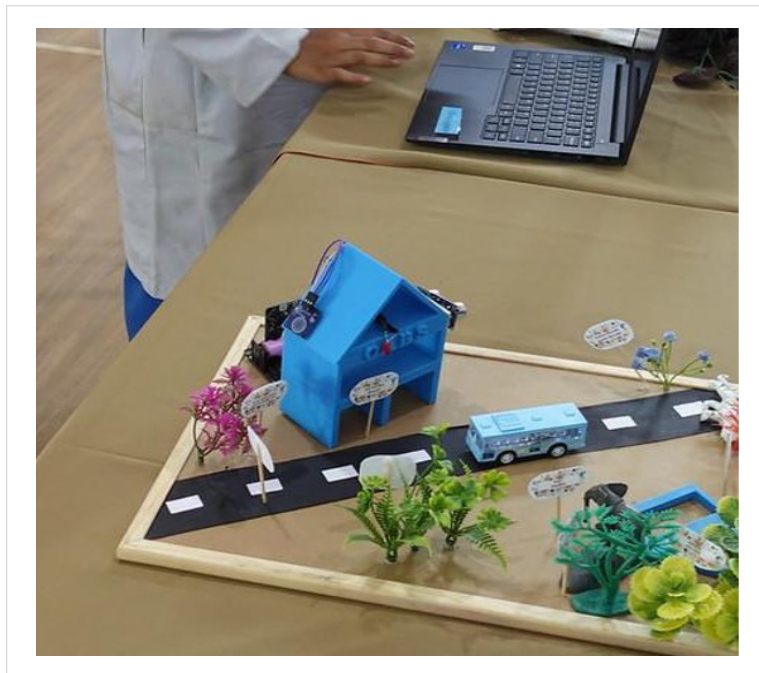
- IIUM Robotics Competition 2024 (IRC'24): SMK A students participated in four categories, winning a bronze medal in the Creative SDG category.
- Techlympics 2024 (East Coast Zone): Students won a gold medal in the drone competition.

**Figure 13: Showcase of Winning Medals of Orang Asli Students From SMK A in Techlympics 2024 and IRC '24 Together with Coding System used to Control the Drone and 'Sumo Robot'**



- Peer-Led Workshops (14–15 December 2024): SMK A students facilitated robotics workshops for six nearby schools, promoting STEM education within the broader Orang Asli community.

**Figure 14: Prototype Of Automated Animal and Object Detection System for Bus Stops Developed by Orang Asli Students From SMK A in Addressing Safety Challenges to Travel to School**



### Successes:

- Skill Development:** Students gained hands-on experience in robotics, coding, and 3D printing, with many showing significant improvement in technical skills.
- Competition Success:** SMK A's achievements in IRC'24 and Techlympics 2024 highlighted the potential of Orang Asli students in STEM fields.
- Community Impact:** The peer-led workshops expanded STEM education to other Orang Asli schools, promoting collaboration and knowledge sharing.

### Lessons Learned:

- Hands-On Learning Enhances Engagement and Confidence:** Practical and interactive learning approaches proved highly effective in engaging students and in building confidence. Activities such as building prototypes and participating in competitions provided real-world experience that motivated students, showcasing the value of experiential learning in building technical skills. The Orang Asli parents were particularly excited about the potential learning opportunities for their children and the real-world applications of robotics. One parent noted that this robotics programme would be a

departure from the usual activities that mainly focused on the “problems”, as it would leverage Orang Asli students’ talents, helping them showcase their abilities in using modern technology.

- **Addressing Resource Limitations:** The programme highlighted significant challenges due to limited resources, such as the lack of advanced robotics equipment and technical support. This underscored the importance of sustained funding, continuous technical assistance, and partnerships with other institutions to ensure the sustainability and growth of the initiative.
- **The Impact of Community Collaboration:** The initiative demonstrated the importance of community involvement. By involving the parents and extending the programme to other Orang Asli schools through peer-led workshops, the project successfully created a ripple effect, generating a broader interest in STEM education and nurturing a sense of unity and collective growth within the Orang Asli community. Parents reported feeling grateful for the opportunity to actively participate in the programme. One parent mentioned that as a full-time housewife she rarely had the chance to learn advanced skills like the ones observed in the demonstration and was thrilled to have the opportunity to try them out. Following the workshop a parent sent this Whatsapp message as part of their journal entry:

*“There, I was able to see how a robot is designed and shaped into a small model. We also had the chance to get to know the teachers better and strengthen the relationship between us as parents and the teachers. I am curious to learn more about robotics. Here, we were able to see it with our own eyes.”*

**Figure 15: Sharing by Orang Asli Parent in Robotics Workshop**



- **Long-Term Investment in Skills Development:** The success in competitions, such as the gold medal in Techlympics 2024, demonstrates that with the right guidance and resources, Orang Asli students have great potential in STEM fields. The project emphasises the need for ongoing mentorship and skill development, ensuring students continue to build on the foundation laid by the programme.

### 3.2 Programme 2: I-Skilled Competencies Enhancement for Orang Asli Students at SMK B by USIM

USIM's programme, titled I-Skilled Competencies Enhancement for Orang Asli Students, focused on equipping students at SMK B with essential soft skills such as digital marketing, entrepreneurship, communication, and leadership. In response to the socioeconomic challenges faced by the community, the programme aimed to bridge the gap between students' current skills and the demands of the modern job market, particularly for Orang Asli students who often face challenges in transitioning from school to employment. The initiative sought to enhance students' digital and entrepreneurial skills, boost their self-confidence and leadership abilities, and provide practical career guidance and exposure to real-world applications.

#### Key Activities:

1. Workshops (22–24 August 2024): A 3-day workshop was conducted, covering five modules:
  - *Modul Keusahawanan Belia Orang Asli* (Youth Entrepreneurship): Students learned to identify business opportunities and develop innovative solutions.
  - *Modul Keusahawanan dan Digital* (Digital Entrepreneurship): Training in digital tools such as Canva and social media marketing.
  - *Modul Komunikasi Efektif* (Effective Communication): Focused on public speaking and interpersonal skills.
  - *Modul Kepimpinan Belia* (Youth Leadership): Emphasised teamwork, decision-making, and problem-solving.
  - *Modul Kenali Diri* (Self-Awareness): Helped students understand their strengths and weaknesses.
2. *Karnival Bakat dan Kerjaya Anak Orang Asli* (10 November 2024): Students showcased their skills and entrepreneurial projects, including bakery products, rosemary cordial, and digital marketing campaigns. The carnival also marked the official launch of the NextGen i-Skilled Club, a platform for continuous skill development.

**Figures 16 and 17: Booths By Orang Asli Students of SMK B for Karnival Bakat dan Kerjaya Anak Orang Asli Showcasing Cultural Items and Food Products**



### Successes:

- Platform to Showcase Skills and Confidence: Students demonstrated their skills and potential in digital marketing, communication, and leadership skills. Post-workshop surveys showed high levels of student commitment and satisfaction with the programme.
- Community Engagement: The carnival engaged with teachers, and community members, fostering a sense of pride and support for the students' achievements.
- Sustainability: The establishment of the *NextGen i-Skilled Club* ensured ongoing skill development and monitoring.

**Figure 18: Compilation of Posters made Digitally by Orang Asli Students from SMK B following Workshop**



### Lessons Learned:

- Empowering Students through Ownership and Responsibility:** Giving students ownership of the Karnival Bakat dan Kerjaya event was a significant factor in building their confidence and leadership skills. The responsibility of organising and showcasing their own projects encouraged them to demonstrate initiative, which not only enhanced their sense of accomplishment but also revealed their untapped potential. This highlighted the importance of involving students in the planning and execution stages of their learning experiences.
- Cultural Sensitivity as a Catalyst for Engagement:** Incorporating Orang Asli cultural values into the programme design proved crucial in ensuring its relevance and effectiveness. By aligning the content with the students' cultural identity, the programme became more meaningful, fostering greater engagement and pride in their learning journey. This highlighted the importance of culturally aware programming when working with diverse communities to promote genuine connection and participation.
- Sustainability through Continued Development:** The establishment of the NextGen i-Skilled Club was a vital step in ensuring the long-term impact of the programme. By creating a platform for ongoing skill development, the programme set the foundation for continuous learning and support. This highlights the importance of building sustainable structures that encourage lifelong learning and keep students engaged beyond the duration of the initial workshops.

The implementation phase highlighted both successes and challenges in addressing the educational needs of Orang Asli students. USIM's *I-Skilled Competencies Enhancement* and IIUM's *Robotics Club* demonstrated the potential of targeted interventions to enhance students' skills and confidence. Both programmes emphasised the importance of hands-on learning, community engagement, and sustainability. By building on these lessons, future initiatives can further enhance educational outcomes for Orang Asli students, contributing to the broader goal of sustainable development and social equity.

## **4. Post-Implementation Phase: Reflecting on Advancing Inclusion in Education Practice**

The post-implementation phase of the project provided valuable reflections, mainly from Orang Asli parents and complemented by programme implementers, offering insights into the benefits gained, challenges faced, and areas for improvement. This section synthesises the feedback gathered through interviews, focus group discussions, and reflective diaries, highlighting the impact of the programmes on students, parents, and the broader community. The questions used for gathering feedback were also developed based on Gibb's (1988) reflective cycle framework. It is worth noting that this report does not include reflections from teachers involved in the programme, as the primary focus of this phase was on capturing the perspectives of parents and implementers. Future evaluations could incorporate teacher reflections to provide a more comprehensive understanding of the programmes.

### **4.1 Reflections from Orang Asli Parents**

This section presents key lessons learned from the parents' perspectives, captured through their reflections and an online focus group discussion conducted during the post implementation period. By reflecting on the experiences and feedback from the post-implementation phase, the project aims to build on its successes and address identified challenges. These insights will inform future initiatives, ensuring they are more inclusive, effective, and sustainable, ultimately contributing to the broader goal of improving educational outcomes for the Orang Asli community.

Overall, the stories shared by parents provide key insights into the opportunities created and the challenges navigated through their experiences. Additionally, parents also offered valuable recommendations for future improvements in their sharing.

#### **Feeling More Connected to Their Children's Education, Schools, and Teachers**

According to the parents, the programme has strengthened the connection between parents, students, and schools, creating opportunities for deeper engagement beyond traditional school meetings such as parent-teacher association meetings or exam result collection days. Many parents shared that they appreciated the opportunity to interact with teachers in a more meaningful way. Through their involvement, parents found it easier to communicate with teachers and better understand their children's educational

experiences. One parent reflected that this experience helped them overcome feelings of hesitation and unfamiliarity, allowing them to engage more confidently with educators.

*"I was happy to be involved. The experience was enjoyable and meaningful. Usually, parents only go to school for PIBG meetings or to collect exam results. But through this programme, I had the opportunity to strengthen my relationship with teachers, which is something that doesn't often happen. Now, I recognize more teachers, and they recognise me too."*

### **Feeling Valued as Active Contributors in Their Children's Education**

The programme has provided parents with a sense of purpose and inclusion in their children's education. Traditionally, school activities are largely teacher-led, with limited parental participation. However, parents in this initiative felt empowered by their role, whether by assisting during competitions, observing hands-on learning sessions, or simply encouraging their children to stay motivated.

Some parents highlighted that their involvement in the programme challenged the perception that only academically strong individuals contribute to education. A parent shared that despite not having a strong academic background, they were eager to learn and support their child's education in any way possible.

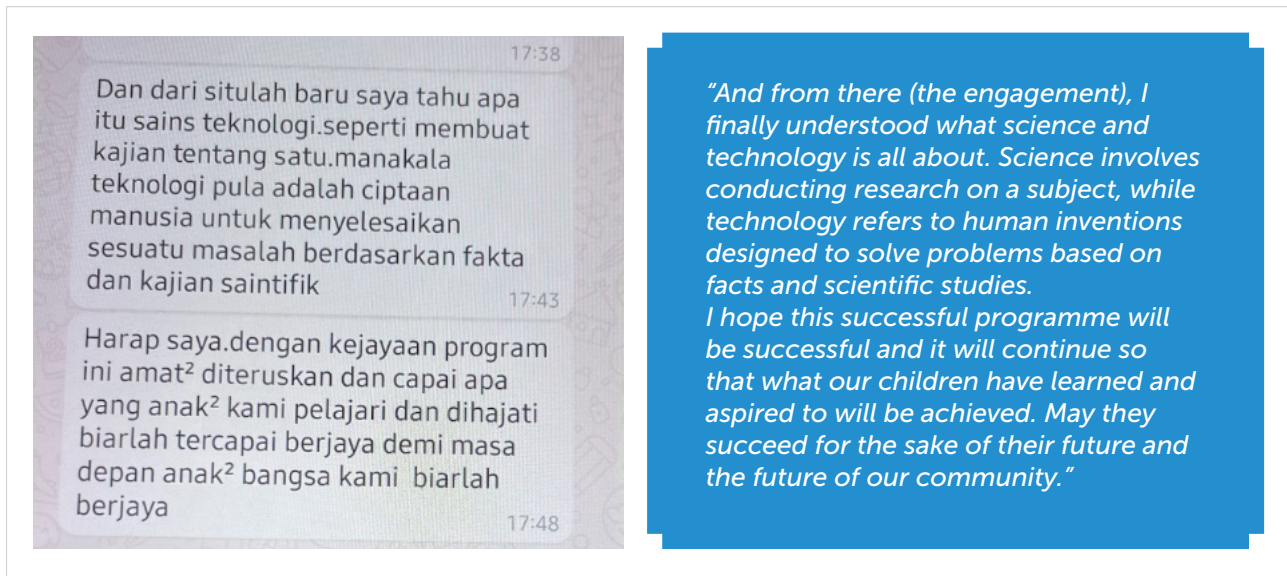
*"I've always been interested in volunteering. I may not be academically inclined, but ever since I had children, I have made an effort to learn about their education and get involved. I truly hope this programme continues."*

Additionally, parents suggested expanding parental participation, ensuring that both working and non-working parents have opportunities to engage in similar initiatives.

### **Opportunities for New Learning and Community Building**

Beyond supporting their children, parents also experienced personal growth through their participation in the programme. Many shared that they had little prior exposure to robotics or technology, and the programme opened their minds to new knowledge. One parent reflected through Whatsapp messages:

**Figure 19: Sharing by Parent through Whatsapp**



In addition, parents shared that they gained valuable new skills and developed greater confidence in building relationships with others. One parent reflected that, prior to joining, she felt socially isolated and seldom interacted with people outside of her household. However, the skills she acquired through the programme helped her feel more confident in engaging with others, particularly teachers, and ultimately strengthened her ability to build better relationships with teachers.

*“I didn’t know much about technology or robotics, and even speaking with new people made me feel shy and awkward. I had never traveled anywhere, so I often felt out of place. However, through this programme, I learned how to build relationships with teachers, which is important because they are the ones educating our children.”*

Another notable strength of this programme that is worth highlighting here is the opportunity for parents to share the knowledge they gained with other community members. Parents felt that this not only raised awareness but also contributed to building the capacity of others in the community. When asked about their experiences of sharing, parents expressed similar sentiments:

*“We’ve learned so many new things, and when we return home, we share our experiences with other parents. I often find myself asking them, “Do you know what robotics is all about? Do you know how it works?” We strongly encourage more parents to get involved.”*

*“I’ve also shared about this programme with other parents, and they are very excited.”*

Recognising the need for a more inclusive approach, parents emphasised that future initiatives should involve a wider range of community members, including local leaders, to maximize impact.

*“I’d love to see more parental and community involvement in the future. It’s important to include both working and non-working parents. As long as they are interested, they should be encouraged to join.”*

*“Sometimes, working and non-working parents tend to form two different social groups. However, this programme creates an inclusive space where anyone can participate. There are parents who may feel shy or hesitant to mingle with others, but a programme like this helps bridge that gap.”*

These efforts, as noted by a participating community leader, could be further strengthened by engaging local leaders and community groups, who can offer valuable on-the-ground support.

*“If possible, involve the Persatuan Cakna Pendidikan Orang Asli in future programmes. They can provide manpower and support.”*

*All “penghulu” (village heads) and JKKK representatives should be invited to learn about the programme. Their involvement, especially from those with experience, can help spread awareness and encourage more participation.”*

## **Orang Asli Children’s Talent Development and Future Growth**

Another important insight relates to parents’ observation on their children’s talent development and future growth. As reported in the feedback session, parents observed notable changes in their children’s attitudes towards learning. They noted increased motivation, enthusiasm, and confidence in academic engagement. The hands-on experience of robotics, for example, not only made learning more enjoyable but also sparked creativity and problem-solving skills in students.

*“This programme is great because it makes students excited to go to school. They look forward to the programme and are eager to learn something new.”*

*“My children have also developed an interest in learning. They were never interested in these kinds of things before, but thanks to IDEAS, both my children and I had the chance to explore something new. It has opened our minds and helped us connect with others.”*

A major highlight for parents was seeing their children participate in competitions, including those at national and international levels. Parents felt immense pride in their children’s achievements, especially given the limited exposure Orang Asli students typically have to such opportunities.

*"I also feel proud that our Orang Asli children were able to work with the tools and materials provided. They created and experimented with different things."*

Moving forward, parents emphasised the importance of sustaining and expanding similar initiatives for both students and parents. They also highlighted the value of the entrepreneurial and soft skills taught in USIM's programmes and expressed a desire to see these skills expanded alongside the STEM exposure their children were receiving.

*"In the USIM programme, there was a focus on entrepreneurship. In today's world, we can't solely rely on formal employment. Many university graduates struggle to find jobs, so entrepreneurship skills are crucial. Not everyone can secure government or corporate jobs, so learning how to create opportunities for themselves is essential."*

However, the programme also recognised the potential challenges faced by some parents, especially those living in the interiors as the following section elaborates further on.

## 4.2 Challenges and Areas for Improvement

### Barriers to Parental Involvement

Parents who lived far from the schools faced significant transportation challenges, which made it difficult for them to attend important meetings, workshops, and events. These logistical issues not only hindered their ability to engage in their children's education but also limited their opportunity to interact with programme organisers, teachers, and other parents. As a result, many parents were excluded from actively contributing to their children's academic environment. In particular, there was a noticeable gap in the involvement of fathers, who were found to be less engaged in educational programs compared to mothers. This disparity could be attributed to various social and cultural factors, including traditional gender roles that often assign mothers as the primary caregivers, or a lack of targeted outreach to fathers. Recognising this, there was a growing call among parents and educators to expand parental involvement in these programmes, with an emphasis on increasing the participation of fathers. Suggestions included organising more flexible, inclusive activities in the evenings or on weekends that could accommodate the diverse schedules and responsibilities of fathers whose days revolved around work. Such efforts could help break down the barriers to engagement and foster a more balanced, supportive environment for children's education.

*"Providing an allowance to cover transport might be a good incentive for parents to join; more events that directly involve parents could also encourage greater participation from parents, especially the fathers."*

## Need for Diversified Programmes

While the robotics programme was highly successful, some parents felt that it catered more to academically inclined students who were already interested in or skilled at STEM subjects. The science-based nature of the program, while exciting for many, could be intimidating for students who are not inherently passionate about these topics, despite being quick learners. For these students, the focus on robotics and other technical subjects might have felt more like a challenge to their interests rather than an opportunity to excel. As a result, some parents felt that these students, who had potential in other areas, might not have been fully engaged or able to explore their strengths outside of traditional academic disciplines. To address this, several parents suggested introducing programs catered to these students that focused on entrepreneurship, vocational skills, and other non-STEM fields. One parent from SMK A emphasised the importance of providing opportunities that align more closely with the diverse talents and aspirations of all students, and as a result schools could ensure that all students had the chance to thrive in areas that truly inspired them, ultimately fostering a more inclusive and well-rounded experience.

## Strengthening School-Community Relationships

Parents emphasised the need for better communication and collaboration between schools and the surrounding community. They suggested organising more meetings and activities outside the traditional school environment—such as community gatherings, cultural events, and local workshops—where trust could be built more effectively between educators and families and strengthen their relationship. This approach would help align the school's objectives with the community's values, ensuring that both parties are working towards shared goals in a way that respects and acknowledges local traditions, cultural practices, and the unique needs of the Orang Asli students. When communities are actively involved in shaping the educational experience, the programmes can be tailored in a more holistic, culturally sensitive manner, ensuring that the curriculum and activities are not only academically enriching but also relevant to the students' lives and cultural backgrounds. This collaborative approach can lead to greater success in both the academic and social development of the Orang Asli children, providing them with the support they need to thrive.

### 4.3 Reflections from Programme Implementers

This section presents key learnings highlighted from the programme implementers' perspectives, captured through their monitoring and evaluation reports, as well as an online focus group discussion conducted during the post-implementation period. Their reflections provided insights into the successes, challenges, and recommendations for future initiatives.

## **Student Development and Achievement**

The implementers noted significant progress among the students, particularly in their confidence and technical skills. For example, students from SMK A won a gold medal in the Techlympic competition, showcasing their capabilities in robotics. The programmes also sparked interest in STEM among students, with some expressing a desire to pursue engineering and IT at the university level.

## **Community Engagement**

The involvement of parents and community leaders was a key success factor. Implementers observed that parents became more supportive of their children's education and actively participated in programme activities. The programmes helped bridge the gap between schools and the community, promoting a sense of collaboration and shared responsibility for students' success.

## **Culturally Responsive Approaches**

The implementers emphasised the importance of integrating indigenous pedagogies and cultural values into the programmes. This approach ensured that the programmes were relevant and meaningful to the Orang Asli community. For example, students proposed projects such as a water filtration system and solar-powered lighting, which addressed community needs and reflected their cultural context.

## **4.4 Challenges and Lessons Learned by Implementers**

### **Logistical and Administrative Barriers**

Implementers faced challenges in obtaining permissions to bring students out of school for competitions and workshops. The bureaucratic process often delayed programme activities and required significant effort to navigate. Implementers highlighted the need for better coordination with the Ministry of Education (MoE) and state education departments to streamline administrative processes.

### **Limited Parental Involvement**

Despite efforts to engage parents, logistical issues such as distance and transportation limited their participation. Implementers acknowledged the need for more creative solutions to involve parents, such as organising community-based workshops. Implementers from USIM suggested that future programmes should focus on reaching out to parents directly in their communities, rather than relying solely on school-based activities.

---

## Sustainability and Continuity

The implementers expressed concerns about the sustainability of the programmes beyond the project timeline. They emphasised the need for long-term funding and support to ensure continuity and scalability. Implementers from IIUM proposed replicating the programme in other schools and expanding its scope to include more advanced STEM activities.

## 5. Conclusion and Recommendations

From its inception, this project has been designed in line with the United Nations' Sustainable Development Goal #4, which is to ensure inclusive and equitable education and promote lifelong learning opportunities for all. The Lessons from the Ground report has provided a comprehensive analysis of the challenges, successes, and lessons learned from the implementation of educational programmes tailored to the needs of the Orang Asli students. Through the collaborative efforts of the Orang Asli students, community members, teachers, implementers (USIM and IIUM), and key stakeholders, the project sought to bridge the gap between policy recommendations and their practical application at the grassroots level. This final section synthesises the key findings from the pre-implementation, implementation, and post-implementation phases, offering actionable recommendations to enhance future initiatives and contribute to the broader goal of sustainable development and social equity for the Orang Asli community.

In line with the intention to incorporate policy recommendations from IDEAS' previous policy papers, the strategies employed are summarised below:

**Table 3: Strategies incorporated based on policy recommendations**

Policy recommendation	Strategies incorporated
There must be a greater focus on learning and addressing underlying challenges instead of symptomatic issues	A series of consultations with students, parents, community members, and teachers at the participating schools in addition to public sector stakeholders and civil society were conducted to identify the root challenges faced by Orang Asli students. Based on the insights gathered, the intervention programmes were designed to target these deeper issues, moving beyond short-term fixes and addressing systemic barriers.
Existing programmes must be monitored and evaluated to ensure their efficient and effective delivery and implementation	Monitoring and evaluation were embedded into the intervention phase from the outset. This included capacity-building for all stakeholders involved and the development of a comprehensive M&E plan by implementers that clearly outlined key performance indicators KPIs and evaluation processes prior to programme implementation. The Orang Asli community members also utilised their community engagement toolkit throughout the programme.
Trust and collaboration between schools and Orang Asli communities needs to be built as Orang Asli parents (and by extension their communities) are important partners in education	A platform was created to enable a more equitable sharing of decision-making power among programme implementers, schools, and Orang Asli parents and communities. A key strategy involves the active and meaningful participation of four community representatives in the implementation of the intervention programs. This deliberate inclusion aims to foster collaboration and ensure more equity in the decision-making processes of the project, reflecting the broader intention to promote self-determination of the Orang Asli communities wherever possible. Parents have expressed their joy in being able to engage more with school teachers through their participation in programmes conducted with their children.
Orang Asli communities should be empowered to be their own agents of change and participate in the process of Orang Asli-related policies	Four Orang Asli parents who were also active community members took part in the programmes as active members of the project network. Their roles include guiding non-Orang Asli stakeholders in a two-way learning process that focuses on improving cultural competencies of all stakeholders involves, deciding the elements of the local cultures and history to be integrated into the programme designs, supporting teachers in the implementation of the programmes and providing feedback for monitoring and evaluation purposes and potentially evaluating aspects of the programmes related to the integration of local Orang Asli knowledge.
A positive or strength-based discourse should be created to shift away from the deficit discourse on Orang Asli	The intervention programmes were designed to highlight and nurture the unique talents and strengths of Orang Asli students, going beyond conventional academic assessments. For example, Programme 1 (Robotics Makerspace Club by IIUM) successfully identified students' potential in robotics and sparked their interest in STEM. Similarly, Programme 2 (I-Skilled Competencies Enhancement by USIM) demonstrated the Orang Asli students' digital and entrepreneurial skills.

Based on the lessons learned, the following recommendations are proposed to optimise the effectiveness, design, and sustainability of the implemented programmes, as well as any future initiatives for the Orang Asli community:

## **5.1 Strengthening the Existing Multi-stakeholder Network through Continuous Trust-building Efforts**

Building on the foundations laid during this 2-year project, a key strategy to ensure the sustainability of the intervention programmes involves strengthening the multi-stakeholder partnerships that have emerged from the intervention programmes. The established multi-stakeholder network (see Figure 1) could be further expanded beyond its current scope. In the next stage, new stakeholders who are interested in working with preschools, Community Learning Centers (*Pusat Didikan Komuniti*) and teacher training institutes can also be invited to collaborate on interventions which are not directly addressed in this 2-year initiative. This strategic expansion aims to foster collaboration, resource-sharing, and co-creation, ensuring the continuity of positive outcomes across diverse contexts. To achieve this, it is important to delineate the specific roles and responsibilities of all entities involved in this multi-stakeholder network. Building from the lessons learnt from this 2-year project, Table 4 below proposes the broad areas of responsibilities that stakeholders could play. As demonstrated in the table, all areas could be shared by at least two different parties, a deliberate strategy to establish shared accountability. Sustaining and expanding this network through continuous trust-building and clearly defined, shared responsibilities will be key to scaling meaningful, community-led impact across Orang Asli education initiatives.

Table 4: Partner Roles and Responsibilities for Shared Accountability

	Subject-matter expert/ advisor	Programme design & implementation	Programme funding	Budget management	M&E	Stakeholder engagement	Quality assurance & compliance
Orang Asli parents and communities	✓	✓			✓	✓	
School leaders and teachers	✓	✓			✓	✓	
Programme implementers	✓	✓		✓	✓	✓	
Funders			✓				✓
Government agencies/ ministries/ institutions						✓	✓
Non-government agencies					✓	✓	✓
Individual experts	✓					✓	

## 5.2 Sustaining Efforts through Culturally Grounded Planning

Another important strategy for ensuring the sustainability of the intervention programmes is to prioritise strategic and agile planning centred around Orang Asli aspirations and agenda. In this context, an agile plan offers increased flexibility and adaptability, catering to the evolving needs of stakeholders. Moreover, a plan that is framed within relevant Orang Asli aspirations and agenda will help to keep the initiatives relevant and culturally responsive. Essential elements that need to be prioritised in this planning include:

- A comprehensive monitoring and evaluation plan for continuous oversight and assessment of programme implementation and outcomes
- Rigorous impact evaluation strategies to enhance accountability, measure effectiveness of the programmes and eventually provides credible evidence to inform decision making and policies
- Strategies for sustainable fundings, which may include social enterprise development, long-term partnerships with various agencies and school-community ownership
- Strategies for effective communication and advocacy through impactful storytelling

Taken together, these elements provide a flexible yet grounded foundation for sustaining meaningful, community-driven change in Orang Asli education.

## 5.3 Capacity Building of Funders, Policy-makers, Programme Implementers, Teachers and Orang Asli Parents / Communities

In this 2-year project, capacity building of stakeholders at the grassroots level who were directly involved in the implementation of the programmes was paramount. Moving forward, this Training of Trainers (ToT) model for capacity building could be led by the initial participants (specifically teachers and Orang Asli parents/community members) to reach more teachers and Orang Asli community members. Moreover, this capacity building activity could also incorporate elements of professional learning communities (PLC) to encourage continuous learning and knowledge sharing amongst stakeholders as they proceed with their own learning journeys.

## 5.4 Adopt a Holistic Approach to Address Systemic Challenges

Improving Orang Asli education outcomes requires a holistic approach that addresses broader systemic challenges such as poverty, infrastructure gaps, policy constraints, and cultural disconnects. Future initiatives should aim to address not only educational but also social barriers. Collaborating with government agencies and NGOs to tackle these systemic issues will enhance the overall impact of educational programmes.

The Seed Community for Orang Asli Education, established by IDEAS in 2024, offers a promising model for this. Made up of Orang Asli representatives, academics, NGOs, and foundations, the community provides a platform for shared learning, collective advocacy, and cross-sector collaboration. Insights from its members highlight the importance of trust, cultural understanding, and sustained engagement for designing responsive and relevant education programmes. By drawing on the Seed Community's lived expertise and advocacy potential, future efforts can be better equipped to navigate structural challenges and push for change that is both systemic and community-driven.

## **5.5 Leveraging Technology for Meaningful Engagement and Communication**

A key insight from this project has been the potential use of simple, accessible technologies to strengthen communication and community involvement particularly with Orang Asli parents and guardians. For example, the current paper exemplified the importance of accessibility and familiarity as WhatsApp was used as one of the primary platforms for communication of Orang Asli parents. Through Whatsapp, parents submitted their journal reflections, audio messages or snapshots, allowing for genuine, real-time input without placing additional burdens on participants. This approach not only deepened parental involvement, but also served as a valuable monitoring and evaluation mechanism by capturing lived experiences and evolving perceptions over time. Parents expressed appreciation for the opportunity to contribute meaningfully in an accessible manner, and several shared a desire to continue participating in school initiatives, highlighting the importance of sustained, technology-enabled dialogue that is culturally respectful and community-led.

In conclusion, education is a powerful tool for social transformation, and the Orang Asli community deserves access to quality education that respects and reflects their cultural identity. While challenges remain, this project offers recommendations for future efforts. IDEAS remains committed to advancing this vision and invites all stakeholders to join in this collective effort. Through shared commitment, every Orang Asli child can be given the opportunity to learn, grow, and contribute to the sustainable development of their communities and the nation as a whole.

## References:

- Gibbs. G. (1988). *Learning by Doing: A guide to teaching and learning methods*. Further Education Unit. Oxford Polytechnic.
- Jabatan Kemajuan Orang Asli. (2018). *Keciciran Pelajar Orang Asli Mengikut Negeri* [Data set]. [https://archive.data.gov.my/data/ms\\_MY/dataset/keciciran-pelajar-orang-asli-mengikut-negeri-mac-2018](https://archive.data.gov.my/data/ms_MY/dataset/keciciran-pelajar-orang-asli-mengikut-negeri-mac-2018)
- Ministry of Education. (2018). *Laporan Tahunan 2018: Pelan Pembangunan Pendidikan Malaysia 2013-2025*. <https://www.moe.gov.my/storage/files/shares/Dasar/PPPM/PPPM%20Laporan%20Tahunan%202018.pdf>
- Nordin, R., Hassan@Yahya, M.S., Fern, V.W.R., & Cherley, M. (2020). Indigenous education for the Orang Asli : Legal perspectives and best practices. *Journal of Nusantara Studies*, 5(2), 365–383. <https://doi.org/10.24200/jonus.vol5iss2pp365-383>
- Othman, I. W. (2022). Educating Orang Asli students: The challenges towards achieving the Malaysian sustainable education agenda. *Jurnal Intelek*, 17(1), 1. <https://doi.org/10.24191/ji.v17i1.15845>
- Rosnon, M. R., & Abu Talib, M. (2019). Indigenous education rights: The Malaysian Case. *International Journal of Academic Research in Business and Social Sciences*, 9(10), 149–167. <https://doi.org/10.6007/IJARBS/v9-i10/6470>
- Suruhanjaya Hak Asasi Manusia Malaysia (SUHAKAM). (2010). *Laporan Status Hak Pendidikan Kanak-Kanak Orang Asli*.
- Wan, Y. S. (2020) *Policy Ideas No. 66-Education Policies in Overcoming Barriers faced by Orang Asli Children: Education for All*. IDEAS Policy Research Berhad.
- Wan, Y .S. & Idrus, R. (2021) *Contextualising Education Policy to Empower Orang Asli Children*. IDEAS Policy Research Berhad.





The Institute for Democracy and Economic Affairs (IDEAS) is a nonprofit research institute based in Malaysia dedicated to promoting solutions to public policy challenges. Our vision is :

**“A Malaysia that upholds the principles of liberty and justice”**

Our mission at IDEAS is to improve the level of understanding and acceptance of public policies based on the principles of rule of law, limited government, competitive markets and free individuals. Our work is independent of vested interests and partisan influences. We have also expanded our work into new areas focussing on our three overarching missions – advancing a competitive economy, ensuring trust in institutions and promoting an inclusive Malaysia. We act as an intellectual centre creating space for cross partisan principles-centric and results-oriented dialogue.

**We achieve this by:**

- Publishing cutting-edge research
- Initiating dialogues with government, lawmakers, businesses and civil society
  - Providing thought leadership
- Facilitating networking between like-minded individuals
- Organising educational programmes

Please support us by making a donation. You can make a contribution by cheque payable to “IDEAS Policy Research Berhad” or by transfer to our account CIMB 8008852042. We can only survive with your support.

© 2025 IDEAS. All rights reserved.

IDEAS Policy Research Berhad  
The Lower Penthouse  
Wisma Hang Sam, 1, Jalan Hang Lekir 50000 Kuala Lumpur

[www.ideas.org.my](http://www.ideas.org.my)  
Reg No.: 1219187-V

## Selection of IDEAS' Publications (2024 - 2025)

---

### Policy Ideas

Policy Ideas No. 82 – Voices from the Ground: Towards Strength-Based and Culturally Responsive Education for Orang Asli Children by Suria Selasih Angit, Durrah Sharifah Ahmad Azlan, Yvonne Tan and Melanie Chan (April 2025)

Policy Ideas No. 81 – Effective Reporting and Disclosure of Political Finance: Guidelines, Best Practices, Challenges and Lessons for Malaysia by Fernando Casal Bértoa and Sri Murniati Yusuf (April 2025)

Policy Ideas No. 80 – Fiscal Responsibility During Political Transitions: the use of the Vote on Account in Malaysia by Alissa Marianne Rode (August 2024)

Policy Ideas No. 79 – Asserting Climate Change Leadership in ASEAN: Carbon Pricing for the Malaysian Steel Industry by Assoc Prof Dr Renato Lima de Oliveira, Dr. Pieter Stek and Raymond Phang (April 2024)

### Brief Ideas

Brief IDEAS No. 43 – Actors on the Ground: Mapping Orang Asli Education Stakeholders by Durrah Sharifah Ahmad Azlan, Sabrina Firdaus Aloysius, and Suria Selasih Angit (April 2025)

Brief IDEAS No. 42 – Malaysia Open Budget Index 2024 by Nischal Ranjinath Muniandy and Alissa Marianne Rode (July 2024)

Brief IDEAS No. 41 – Semiconductors: Navigating Supply Chain Resilience and Trade by Imran Said Shamsunahar, Alissa Marianne Rode and Sharanyah Nair (July 2024)

### Report

ASEAN Integration Report 2024 – Inclusive Trade: Perspectives on Regulatory Challenges for MSMEs in ASEAN by Sharmila Suntherasegarun, Meisha Lukman and Sharanyah Nair (November 2024)

### Roadmap

Reforming Our Institutions: Blueprint for Reforms (February 2024)

Policy IDEAS are IDEAS' regular publications that introduce and propose ideas for policy reforms based on analysis of existing policies or best practices.

Institute for Democracy and Economic Affairs (IDEAS)  
The Lower Penthouse, Wisma Hang Sam, 1, Jalan Hang Lekir 50000  
Kuala Lumpur