The International Education Journal: Comparative Perspectives Vol. 21, No 1, 2022
http://iejcomparative.org

Implementing sustainable EdTech projects in small island developing states: Strategies, challenges and reflections

Artila Devi
Catalpa International, Fiji: *artila@catalpa.io*
Ligia Guterres
Catalpa International, Timor-Leste: *ligia@catalpa.io*

This paper discusses issues involved in trying to make foreign aid-funded education technology (EdTech) projects sustainable in the context of Small Island Developing States. Using two EdTech projects, the paper shares the authors' experiences in working towards sustainability by involving local stakeholders through collaborative design and implementation processes and other strategies. The paper also highlights challenges faced and how they were overcome, such as changes in local ministry staff and restrictions on travel during the coronavirus pandemic. The strategies, lessons and recommendations shared in the paper are intended to assist other practitioners in the area and contribute to collaborative learning through sharing practitioner experiences. While designing a foreign aid-funded project that is sustainable is not easy, this paper concludes that by sharing experiences and working collaboratively with local stakeholders, project teams can develop successful strategies to enhance sustainability.

Keywords: EdTech; sustainability; eLearning; foreign aid; education development; Small Island Developing States (SIDS)

INTRODUCTION

Foreign aid-funded development projects contribute to the education technology (EdTech) sector of Small Island Developing States (SIDS) of the Pacific and South-East Asia region in significant ways. The objectives of these projects include, but are not limited to, the following: providing Information and Communications Technology (ICT) infrastructure; introducing new pedagogical knowledge and skills; providing capacity strengthening; and increasing access to education in remote and marginalised communities.

As foreign aid support in the EdTech area grows, so does the need for program sustainability. Sustainability is the ability of an activity or system to persist and is widely regarded as an important criterion of development projects (Dempster, 1998). That is, it is important to consider ways in which the main outcomes of the projects can be sustained past the date of a development partner's contractual agreement. However, implementing sustainability is quite a challenge in some EdTech projects, for example:

> Initially, the Ministry of Education, Sports, and Culture (MESC) did not have strong project ownership . . . MESC perceived it as purely an ICT project. (Asian Development Bank [ADB], 2019)

> The One Laptop Per Child (OLPC) initiative can improve its success rate by letting go of its Western ideals and adapting its laptops to the appropriate needs of the children who are using them in developing countries. (Shah, 2021)

> Technology is important, but its use is dependent on, and not a substitute for, teachers using student-centred pedagogy. (ADB, 2018)

Findings like the above are important in that they make practitioners aware of what they need to account for when trying to make projects sustainable. These findings from earlier projects were important for us as designers and implementers of two EdTech projects in informing our efforts to make EdTech projects sustainable.

In this article, we share our experiences as "insider" practitioners working to implement sustainability in two EdTech projects, Eskola and Pacific eLearning Programme, currently being conducted in SIDS in South-East Asia and the Pacific regions. The Eskola project is being run in Timor-Leste while the Pacific eLearning Programme is being carried out in the Cook Islands, Samoa, Solomon Islands and Vanuatu.

Author 1 is from Fiji and has a background in education and stakeholder engagement. She has over a decade of experience working in the Pacific with local stakeholders. She is currently the Team Leader for the Pacific eLearning Programme. Author 2 is from Timor-Leste. She has a background in using technology for education and has been working closely with Timor-Leste's Ministry of Education for the past six years. She is currently the Education Technology Manager for the Eskola Project.

This article will share our experiences and learning from implementing the projects. Using Eskola and Pacific eLearning Programmes as examples, this article discusses how sustainability was included in the design as well as in the implementation phase throughout the projects. It is hoped that the strategies, challenges and lessons learned as part of these programmes will help inform other EdTech projects.

Context and background of Eskola and Pacific eLearning Programme

Eskola is a tablet-based application, designed as a key component of the Professional Learning and Mentoring Programme also known as ALMA (*Apoiu Lideransa liuhosi Mentoría no Aprendizajen*). ALMA is a foreign aid-funded education development programme in Timor-Leste, jointly funded by the Timor-Leste's Ministry of Education, Youth and Sports and the Australian Government Department of Foreign Affairs and Trade (DFAT). Starting in 2016, Eskola has worked closely with school leaders and school inspectors to improve school leaders' professional development and teachers' pedagogical skills through training and mentoring, peer learning group activities and classroom observations, and to drive positive change in schools.

Designed to work in a low or no internet connectivity environment, the platform also provides access to education resources and performance data that helps regional and national education leaders provide targeted support to schools. A chat function allows users to connect with each other and engage in communities of practice. It is designed with an automated notification system, displays information in a dashboard with easy-to-read interactive graphs, and includes an issue tracking system that allows hardware

and software problems to be effectively addressed. To date, Eskola has resulted in collecting more than 46,000 classroom observations, 1,600 peer learning group activities, and has had high engagement with 1.3 million messages recorded as having been sent by principals.

The Pacific eLearning Programme is a foreign aid-funded education development programme running since 2020 in the Cook Islands, Samoa, Solomon Islands, and Vanuatu. It is funded by New Zealand's Ministry of Foreign Affairs and Trade (MFAT) and works in partnership with local Ministries of Education in the four respective countries. This programme designs contextualised science eLearning activities based on the local Ministry of Education's curriculum and provides job-embedded professional development for teachers to provide them access to anywhere, anytime learning. Using a mobile-first approach, the programme makes learning science interactive and accessible to teachers and students in remote locations with limited internet connectivity. At the time of writing this article, the project was in its initial stage of implementation.

Both Eskola and Pacific eLearning Programme aim to achieve sustainability through considering the complex, dynamic and interconnected system of Edtech, putting people at the centre of the process and thinking critically. This approach is guided by Human-Centred Design (HCD) methodology and seeks to engage stakeholders in both the design and implementation of programmes, so that they can sustain them in the future.

THE HUMAN-CENTRED DESIGN METHODOLOGY

The HCD methodology focuses on collaboration and designing with local stakeholders; not a top-down or isolated approach where outside "experts" design for the local people. HCD is a creative approach to problem-solving that involves the user from the very beginning and places them at the centre of the design process. Users are defined as the community of stakeholders who will be using whatever is designed, for example, teachers, school leaders and ministries. In our experience, involving stakeholders in the design process from the beginning gives a sense of ownership and helps create programmes and content that is contextualised and localised.

HCD, as IDEO's Tim Brown (2010) explains, is a repeatable, creative approach to problem-solving. It is a process that starts with the people you design with and ends with new solutions that are purpose-built to suit their needs. HCD is about cultivating deep empathy, generating ideas, building prototypes, sharing and putting innovative solutions out in the world. It brings together human desirable with technologically feasible and economically viable. The process for problem-solving itself consists of three phases: the inspiration phase, the ideation phase and the implementation phase (Brown & Wyatt, 2010; IDEO.org, 2015).

We have found that the HCD approach best fits the contexts we work in as these communities have very little experience with using EdTech either at the school or ministry level. In such contexts, it is not appropriate to use an "off the shelf" product or assume that what has worked in different contexts in other countries, such as Australia or US, will work in Timor-Leste and the Pacific. As project designers and implementers, we bring tools and some knowledge about ICTs and EdTech but rely on local stakeholders' knowledge and expertise as to what will work in their context.

Hence HCD is suitable because it puts the stakeholders at the core of the design process. Their ideas and contributions were taken on board and they are part of the process from design to implementation. We worked closely with stakeholders and designed with the community to understand their context and needs, learn with them and design relevant programme structures and learning content as well as procure appropriate ICT equipment.

STRATEGIES TO PROMOTE SUSTAINABILITY

Based on the HCD methods, we used the following strategies to help make our EdTech projects sustainable.

Co-design and engagement with stakeholders

The Pacific eLearning Programme and Eskola teams work with the core value of designing with people not for them. Consistent and committed engagements with local stakeholders throughout the programme involved teachers, school leaders and the Ministries of Education. Some ways in which such engagement occurs include one-to-one interviews, regularly scheduled meetings, workshops, *talanoa*, *tok stori* and discussion sessions, user-testing, feedback sessions, and being responsive. These different approaches kept the lines of communication open between the local stakeholders and the project team, and facilitated effective, informed and timely decisions as the project progresses.

Co-designing involved communities and helped us understand their needs and context. Co-designing during the coronavirus pandemic was challenging, but we managed to engage a community of local science experts and teachers through virtual activities. The group of local community science experts, who we call Pacific Science Fellows, worked together with our science content designers as a virtual regional group. Ranging from experienced science teachers to a Scientist to a Brewmaster, the group had a diverse range of experience and expertise from different countries. Together, they engaged in co-design by reviewing content, giving feedback and suggesting examples, case studies and approaches that were relevant and contextualised to the Pacific through comments in Google docs and monthly group virtual meetings. We sought to compliment the feedback from this group with the viewpoint of a wider range of science teachers in remote and rural contexts. Thus, “photo journals” were used to enhance the human-centred design process. Science teachers were sent a series of SMS prompts that encouraged them to take photos of their daily lives and teaching experiences. The photo journals gave us a window into the everyday lives of teachers and follow-up interviews allowed us to use the photos to ask deeper questions about what they were proud of, challenges they were facing in terms of access to materials and ICTs, and how they taught in the classroom. This gave us valuable insights into with whom we were designing even when travel prevented us from meeting them face-to-face.

Understand local contexts

Crossley (2010) highlights that greater attention should be paid to contextual factors in educational research and international development cooperation. Keeping Crossley’s insight in mind, we broaden the boundaries of our context to include physical, socio-

economic and, to some extent, the political environment. For example, we found out that the staff of some ministries of education would not be available during national elections and, therefore, we had to reschedule some meetings and adapt some of our plans to work with this.

Locals understand their context, challenges, and opportunities the best. To understand the context, we use the snowball technique when it comes to introductions and interviews. For example, while talking to the Ministry of Education staff from a department, we ask them to introduce us to the staff of other departments whom they think would be good for us to talk to. This snowball technique introduced us to personnel we might not have met otherwise and provided more information. Learning from earlier projects is also important, so some time was allocated to reading reports of EdTech projects that had been completed in project countries. We learned about the achievements of these projects, their objectives and the challenges they faced. We also asked the local stakeholders, such as Ministry personnel who were part of these earlier projects, to relate their experiences and perceptions. Their perspectives helped us understand what the do's and the don'ts were and what we needed to pay attention to.

Taking an open-minded approach and an empathy-based mindset by being adaptive in our approach to implementation helped us understand the reality on the ground and respond to it. Most of what we learned through this approach centred on the concern that projects were implemented without understanding the challenges and the unique context of the people it is being designed for, and with limited engagement from those who will be participating in the project. We are working towards changing that through co-designing and ongoing engagement.

Promote local ownership

In our experience, to encourage engagement in project activities, it is important that local stakeholders feel ownership of the project at all levels. For example, some of the local stakeholders we talked to during the inception phase of our projects expressed disappointment that some foreign aid-funded education development projects only hire expatriates and that decisions are made by project implementers and the donor. This leaves local stakeholders feeling like participants instead of partners. Promoting ownership allows local stakeholders, for example, Ministries of Education, to have a say in the project and contribute meaningfully as well as understand the inner workings of the project so they can be engaged in the long-term maintenance of the project.

In both the Eskola and Pacific eLearning Programme, local stakeholders are part of project staff and governance structures. In both projects, deliberate efforts are made to engage locally based staff in key project positions and draw on expertise within the countries where the projects are implemented. We have locally based staff in project leadership and management roles, such as ourselves, as well as in implementation roles embedded within our partner ministries (discussed further below) to contribute to strengthening capacity within countries/regions. At the governance level, ministries of education are part of steering committees that make all the key decisions about the project alongside donors and implementers.

Another key way that both Pacific eLearning Programme and Eskola promote ownership is by involving stakeholders in the design, testing and implementation processes. In the case of the Pacific eLearning Programme, our Pacific Science Fellows

helped co-design the initial science elearning content which will be shared with local teachers for feedback. Upon the completion of the project, the content will be an open education resource. Ministries will be able to adapt the content using the training provided by the project team.

In the case of Eskola, local stakeholders were involved in user experience testing of the Eskola platform—an online application. User experience emphasises that when we design products, we are impacting real people (i.e., users) who may or may not be happy with the result (Notess, 2001). User experience testing for Eskola was done using semi-scripted protocols with the ministry focal points, donors and users (i.e., school leaders and teachers) to test the product's ease of use and navigation and to provide suggestions for a better user experience.

These approaches to encourage local ownership can also lead to regional ownership between governments, for example, south-south collaboration in the Pacific. It will support the region to take greater ownership of the projects as well as develop a community of practice to share information. This will provide a more enabling environment for SIDS to grow in the area of EdTech.

Use cost-effective, scalable and robust software and infrastructure options

Cost-effective, scalable and robust systems ensure that the EdTech software and devices are long-lasting, durable and can be easily replaced if damaged.

When purchasing EdTech infrastructure, we have found it to be important to consider which items are available and can be procured locally. That way, repairs or spare parts can still be sourced locally after the end of the project, and broken equipment can be easily replaced. Buying locally also supports the local economy. This, however, might not always be possible and there is always a balancing act between procuring locally and ensuring the most appropriate equipment for the context.

For the software, both our EdTech projects developed online platforms using open-source software which can be adapted based on ministries' and users' requirements over time. Both platforms used for Pacific eLearning Programme and Eskola are simple and easy to use, with offline capability and general stability. It ensures data quality, system efficiency, effectiveness and data security. The data is stored on a cloud server with backup and the database has the capability to enable robust data analysis and reporting. These technologies are secure and scalable, hence easy to maintain and sustain. Implementing such systems will encourage the ministries to continue the project as the resources are accessible and affordable.

Strengthen capacity

Capacity strengthening can range from policy development to staff training to budgeting. Capacity strengthening enables the development of processes, skills and knowledge.

Our approach towards capacity strengthening is to help where help was needed (instead of a one-size-fits-all approach) and to provide support so Ministry personnel learn skills that are transferable to other projects. One approach taken by the Pacific eLearning Programme is to understand where ministries needed help was through locally

appropriate indigenous engagement methodologies such as *tok stori* and *talanoa*. *Tok stori* is a Melanesian expression of commitment to togetherness manifest through engagement in *stori*, a shared narrative that dialogically constructs reality (Sanga et al. 2019) while *talanoa* is a personal encounter where people story their issues, their realities and aspirations (Vaioleti, 2013). The *tok stori* and *talanoa* sessions held with the staff from different sections of the Ministry, for example, the ICT Department, and Planning Section, were used to come up with a list of skills, workshops and training the ministries preferred to help them execute EdTech projects in their contexts.

In both our EdTech projects, we contributed to capacity strengthening by producing manuals, guidelines and video-based tutorials in close partnership and consultation with the Ministry to respond to the needs of our partners. We worked to avoid designing guidelines and manuals in isolation and simply handing them over to the ministries, which, in our experience, often results in them sitting on shelves and never being used. Instead, we take a collaborative approach where we involve the Ministry in creating the guidelines, engaging particularly the staff of the Planning Department and the ICT Department as well as other relevant departments in each context.

In Timor-Leste, the Eskola project team provides ongoing training and mentoring to the Ministry focal points from selected Ministry units to ensure they can manage the entire technology system independently.

Another strategy we employ for strengthening capacity is to embed staff in the Ministry. These staff train the Ministry's staff, facilitate coordination between stakeholders and provide other technical assistance. In both the Eskola and Pacific eLearning Programme, we have ICT staff based at the Ministries of Education. The ICT specialists assist and provide capacity strengthening to the relevant department and users in addressing device and application issues. Capacity strengthening helps implement the project better, allows for sharing of knowledge and skills, and supports local ownership of the project.

CHALLENGES

Having discussed some of the strategies we use to contribute to the sustainability of EdTech projects, we now share reflections on some of the key challenges we met in our projects.

The coronavirus pandemic

Factors that are challenging under normal circumstances such as the difficult to navigate terrain, unpredictable and extreme weather, lack of resources and absence of robust ICT infrastructure, were magnified by the worldwide COVID-19 pandemic. Travelling is restricted, resources are stretched and Ministry of Education personnel are focused on finding solutions to continue the education of their students during school closure and, thus, have limited time to pay attention to EdTech projects. Under these circumstances, foreign aid-funded education development projects, such as the ones we are involved in, become even more challenging to implement as donor priorities and timelines don't necessarily align with the emerging needs of our partner ministries.

In the case of the Pacific eLearning Programme, the project has been carried out remotely since its inception date due to travel restrictions. It was difficult to coordinate with the ministries of education from four different countries without ever having met in person. It took time to build rapport and working relationships with partnerships. Despite the help of technologies, face-to-face meetings are culturally important for building strong relationships, having a more focused and productive partnership, and clearly communicating goals.

In the Eskola project in Timor-Leste, school leaders were unable to continue their daily learning activities and submit their reports due to the coronavirus pandemic. Schools were closed nationwide from March to June 2020. And from March to July 2021, the Timor-Leste Government announced another state of emergency and school closures in some areas. As a result, there was a disruption to the regular school visits by inspectors and mentors during this period and they could not observe or fully support school leaders.

Such situations result in delays in meeting project milestone deadlines. It also impacts the successful implementation of the project. To help overcome this challenge, we took the adaptive management approach—we changed and implemented new strategies where needed. For example, in the Pacific eLearning Programme, we conducted online workshops instead of in-country workshops, investing significant time in ensuring these workshops were engaging, interactive, and inclusive of everyone, even where technology was challenging. In Eskola, regular school contact was maintained with school leaders through phone calls and online meetings via Jitsi Meet or Zoom from the Dili-based project team, who were unable to travel domestically.

Changes in staff and loss of expertise

Another challenge faced by foreign aid-funded education development programs is changes in partner Ministry of Education staff and personnel, as well as the partner government in general. Cornell (2013) suggested that high turnover rates in the public administrations of aid-recipient countries present a challenge to the implementation of democratic governance aid.

In the case of Timor-Leste, the government in general and especially the Ministry of Education personnel have changed three times since the implementation of the Eskola programme in April 2016. The Ministry of Education has been restructured from the Ministry of Education to the Ministry of Education and Culture to the current Ministry of Education, Youth and Sport. These changes affected the implementation of the programme to a large extent, especially concerning the decisions taken to determine the sustainable future and continuation of the programme. For example, the new Minister and the Vice Minister needed to be persuaded to continue allocating budgets and supporting the implementation of the programme that was started by the previous Minister from a different political party.

Also, having only one contact person at a Ministry department can become a big challenge. The focal point can be replaced if there are changes to the organisational structure of this Ministry or if they pursue another job. The Pacific eLearning Programme, for example, saw a contact person resign from the Ministry to take up another role. In Eskola, one of the contact points at the Ministry was transferred to another department.

This poses a challenge for the project as more training needs to be done to ensure the new focal point is familiar with the technology systems and ways of working and can manage the tools and processes before the end of the programme. To overcome these challenges, we now ensure that more than one person is knowledgeable and has the skills needed to support the project at the ministries. This way, it will not be necessary to start all over again if someone leaves.

Constraints faced by ministries and Ministry staff

In our experience, ministries are often involved in more than one foreign aid-funded education development programme and face challenges accommodating additional project work on top of the current workload. Ministries are also sometimes short-staffed due to a range of human resource challenges, including lower than market-rate salaries and strict hiring rules. As a result, the assigned staff might not be able to commit as much time as needed for the successful implementation of the project. In both the Pacific eLearning Programme and Eskola, key personnel are sometimes not able to attend scheduled meetings because something urgent happens or they have a conflicting appointment or they are assigned other tasks as per the needs of the Ministry. This causes some delay in implementation, such as verifying information or discussing the next steps.

Also, as is with most departments, some documents and processes need to be endorsed by the senior management team of the ministry. Due to the large amount of work they have, some of these endorsements take a few weeks longer than expected. In some instances, these delays cause a domino effect, delaying other steps of the project.

To cope with these challenges and make the projects sustainable and productive, both Pacific eLearning Programme and Eskola build in extra time to account for delays. Also, tasks are organised so that other parts of work can continue while signatures are being gathered. Both projects have also aligned with ministry procedures, such as approval processes, co-created guidelines which provided the project as well as the ministry with a clear outline of procedures and held regular meetings at a co-decided time so that nothing was left for too long.

Users' digital literacy competency and perceptions

Digital literacies are an integral part of EdTech projects. Teachers in the Pacific eLearning Programme are expected to use projectors and smartphones while school leaders in Eskola are expected to use tablets. While all stakeholders were initially excited about the projects, we have discovered that some teachers and school leaders are not comfortable using these devices. Some individuals have never used a smart device before, some worry that they will damage expensive equipment and some think it is beyond their competency and are hesitant to use the device.

To help remedy this challenge Pacific eLearning Programme and Eskola teams run regular, highly interactive and practical training for teachers and school leaders. Both teams also create instructional videos and pamphlets for users on practical things, such as how to check how much internet data is left in their quota and how to use headphones. Teachers who are hesitant to use technology or who have low digital literacy are paired with a teacher who has good digital literacy skills so that they have

support. Since people can sometimes get more focused on the device, the project team members always share and emphasise the objectives and benefits of the programme for the teachers, school leaders and students. These steps help improve digital literacy and encourage the use of ICTs in education.

REFLECTIONS

While we are still implementing our projects and learning more every day, here are some recommendations based on our learning so far that we hope will be useful for others working in this field.

Have empathy

Most EdTech projects sit with the ministries of education of the project countries. Busy at the best of times, often these ministries have more than one foreign aid-funded education development project going on at the same time. As a practice, they assign some staff as contact points for the foreign aid projects. It's important to remember that some staff are given responsibility for being part of the project in addition to their regular workload. As such, they might not be able to respond to emails or complete required tasks on our schedule. Having empathy helps avoid setting unrealistic expectations and to be more understanding of the overall context local stakeholders are working in.

Share findings

Sharing and reporting on both positive and negative findings through meetings, conferences, journal publications, blogs and social media throughout the lifetime of the project contributes to the literature in the field and helps others who may embark on similar projects. Sharing findings gathered from monitoring and evaluation as well as the local community norms and practices will help other foreign aid-funded education development projects as they won't have to reinvent the proverbial wheel or start their research from scratch. They can, instead, build on the information provided, strengthen their projects and explore the shortcomings or lessons learned by an earlier project. In sharing the findings, the local community will also benefit from the knowledge in terms of identifying what they want future projects to focus on, to what extent existing projects help their community, and if they want to invest in sustaining the long-term benefits of the project. To make findings more accessible to locals, they should be written in local languages. While it is often tempting to report on successes, it is important to remember that there's a lot of learning from mistakes or challenges, albeit most of what we share in this article are the lessons we learned and the challenges we faced.

Connect with other foreign aid-funded education development projects

Partnerships are critical for foreign aid-funded education development projects, but time constraints, unforeseen challenges and the ever-impending deadlines make it tempting to complete projects and not get involved in "making things complicated" by liaising with other projects and potential partners. However, these partnerships and conversations are important. In our conversations with some other foreign aid-funded

education development projects, we discovered that some were not aware of similar projects being carried out in the region. For example, we extended our discussions to the Commonwealth of Learning, World Bank, UNICEF, CARE International, the Pacific Community, and the University of the South Pacific. These conversations made us aware of other EdTech projects being conducted in the Pacific and South-East Asia region as well as their approaches. It prevented us from duplicating efforts and in spaces where more than one project was run in a country, we discussed how we could all achieve the outcomes of our projects without duplicating efforts and without overburdening our partner ministries and schools. This helps in efficiency and streamlining our efforts.

Be adaptive

Projects often have a range of plans ranging from annual work plans to transition plans. However, things don't always go to plan. Sometimes things do not work out as planned due to unexpected social, cultural, political and economic factors, which may influence positive or negative changes. An adaptive management approach helps deal better with these changes.

One of the strategies we use as part of our adaptive management process is called the '*stop*, *start*, *continue*' activity. Filling in a simple form consisting of three columns labelled "stop", "start" and "continue" allows us to reflect on our activities, such as *stop* doing counterproductive activities and identify process gaps that reduce effectiveness; *start* generating new and creative solutions to solve problems; and *continue* doing what has been done right.

Adaptive management is a framework that can support a project's implementation, activities, and budget. The specific steps taken to be adaptive vary by project. Sometimes, the project needs to adapt as a result of a request by the donor or the Ministry of Education. Other times it's necessitated by the context or driven by political and leadership style. For example, there could be a change in government and the project might have to be presented to a new Minister of Education to convince them to continue supporting the project. In the case of the recent coronavirus pandemic, adaptive management meant extending deadlines and working on projects remotely. All these responses and adaptations are part of adaptive management which is about being aware of the changes happening around the project and responding to them appropriately so that the core objective of the project continues to be fulfilled.

CONCLUSION

EdTech projects are gaining momentum in the SIDS in the Pacific and South-East Asia regions. Hence, it has become even more important to ensure that educational technology projects implemented at present help set up pathways for SIDS to use as a steppingstone to expand their education systems.

Our work with the Pacific eLearning Programme and Eskola has always included both a component of transferring knowledge and skills to local stakeholders and learning from the knowledge of local stakeholders through our HCD approach. These acts of transferring knowledge and learning from and together contribute to the sustainability of the programme. Both projects are being implemented with the intention that the

respective countries, ministries, teachers, school leaders and school inspectors are equipped with the skills and knowledge to allow them to continue and expand the programme even after the international aid funding draws to an end.

In this paper, we've shared our experience with conducting EdTech projects in the Pacific and South-East Asia regions. We've shared our strategies of implementing sustainable projects as well as the challenges we face in doing so. In this journey, in addition to our strategies, we implemented some recommended best practices and lessons from other earlier foreign aid-funded education development. Along the way, we've learned some lessons which are presented as reflections. The strategies, lessons and reflections shared are by no means an exhaustive list. We hope that the information provided in this paper will help someone and we hope that other development aid project practitioners will be able to share their design methodologies, implement strategies and add to the list.

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