

# Investing in Educational Success...

## Teacher-Led Innovation Fund Final Project Report



### **The final report for your project is an elaboration of your proposal. It describes your approach and learning.**

Support for completing this report can be found on [www.education.govt.nz/ies-teacher-led-innovation-fund](http://www.education.govt.nz/ies-teacher-led-innovation-fund).

In the first instance, the people directly involved in your project constitute the key audience for your reporting.

However, the Teacher-led Innovation Fund is particularly interested in sharing and mobilising project learning quickly across the education system, so that it benefits others. Because of this, final reports will also be made available on the Investing in Educational Success website. Use language that will engage and compel other teachers to read your report.

Final reports will be reviewed and approved by the independent selection panel before publishing. The panel may need to engage with you to ensure all of the information required is provided. You will need to describe the evidence in such a way that allows robust conclusions to be drawn by the panel.

Supporting video or media is welcomed where it is important or helpful for others to better understand the evaluation of your project/kaupapa.

### **Where do I send this form?**

Once you have completed the form, you need to upload it via the Teacher-led Innovation Fund webpage [www.education.govt.nz/ies-teacher-led-innovation-fund](http://www.education.govt.nz/ies-teacher-led-innovation-fund).

*Note: Information collected may be used by the Ministry for administrative purposes and/or research and evaluation purposes.*

**Project ID** given at project concept stage (as stated on the letter you received confirming your successful concept)

TLIF3-089

**Title of project**

A'oga Fa'a Samoa ECE Digital Toolkit Project

### **Executive Summary**

Provide a brief outline of the project concept/question you are inquiring into, methods, intended outcomes, main findings and conclusion/s. (The executive summary is usually written last).

Overall the focus for our inquiry was to improve the learning of the Samoan language in an immersion, ECE environment. More specifically, shifts in teaching and learning practices were explored with the introduction of technology.

## Methods

The use of a research framework used by the A'oga in previous research projects was selected by the faiaoga for this inquiry as the familiarity and consistency was important for the centre, curriculum and children.

Data collection methods included parent and staff surveys, daily/weekly/ad-hoc observations, and digital documentation of activities.

## Intended Outcomes

The intended outcomes included having primary school ready children who are confident, bi-lingual learners that are able to design and build with traditional resources and with digital technology. Giving them the knowledge and skills to navigate the different concepts of virtual worlds and explore and identify resources that support language acquisition and development.

## Main findings

The main findings for this project included:

- Major teaching practice shifts with the introduction of technology to complement the curriculum
- Major learning shifts with the introduction of technology for both children and faiaoga
- Significant increase in engagement with families with online communication method
- Increase in confidence in children and faiaoga trying new learning practices
- Two-way learning opportunity with children teaching/guiding faiaoga on the use of technology

## Conclusion

This TLIF project is a first of its kind. The use of technology in environments from primary school upwards is common. However, introducing technology in an ECE environment, and in addition to that, an immersion ECE centre was ambitious and unique. The findings show the positive impacts for children, faiaoga, families and wider community by using technology to complement the curriculum and current teaching and learning practices. Extending the learning of the Samoan language and culture beyond the classroom aligns with A'oga's purpose of 'nurturing positive identity in children' and benefits more than the children and faiaoga – it affects the family, which is vital for Samoan people.

## Introduction

State your inquiry/research question/s and rationale.

### Focus of Inquiry

The focus for our inquiry will be to improve the learning of the Samoan language in an immersion, ECE environment. This improvement will be achieved by complementing the current curriculum of verbal and non-verbal interaction with digital technology to drive and reinforce learning. Utilising digital technology will create greater opportunities to develop and to access Samoan language content. Digital technology will also provide greater opportunity to connect and collaborate with other students, teachers, parents and the wider community in developing Samoan language learning.

The A'oga Fa'a Samoa operates an offline computer suite for literacy and math games that are English based only. Currently, this is the only form of educational content delivered using digital media. The intent of the A'oga Fa'a Samoa is to provide an additional capability for teachers, children and their families to explore Samoan language and cultural resources by using digital technologies. It is critical for our children to understand that the Samoan language is an international language that can be transported into different environments. For many families that immigrated to New Zealand and other countries the Samoan language is often seen as a spoken language at church, in classes and for special occasions at home. Being able to access, create and utilise Samoan content digitally, for children and families will create a positive learning tool to enhance the cultural educational experience.

### Rationale

Our young children are growing in a world where technology is integrated into the environments where they play, learn, interact and rest. Ensuring that our children are able to access and utilise this technology to enable education, development and resilience is essential to nurturing lifelong learners. "Students and teachers can work together to find the most effective ways to integrate digital technologies into learning environments: removing barriers to learning, providing increased choices matched to student needs and interests, and expanding collaboration opportunities" (TKI, Inclusive Education - Digital technologies).

## Methodology

Provide information on the following making sure you comply with the ethics guidelines:

- your approach
- ethical considerations (if appropriate)
- the participants – including people involved, and collaborative approaches
- data collection tools/measures, including the voices of ākongā/students, their whānau and communities
- methods of analysis.

## Our Approach

One of the aspects of the Ministry's visions for Lifelong Learners in a Connected World 2025 is that diversity will flourish, "Using technologies, learning programmes can be tailored to identity, language, culture, location and learning needs". As a leader in many areas of ECE the A'oga Fa'a Samoa has always been at the forefront of effective teaching practice. With this opportunity we will be able to help initiate and develop innovative teaching and learning practices that are aligned with the Ministry's vision and utilise digital technologies to both enhance teacher practice and improve students understanding and connectivity to the world.

## Ethical considerations

With limited research in an immersion ECE environment, the ethical considerations for the project was underpinned by Samoan philosophy. The team needed to work with families from the beginning. Consent was needed by parents as the participants were children aged between 4-5 years old alongside their parents/caregivers. Ethical considerations were mitigated by being transparent with parents and the wider A'oga community around what the project entailed and continuously encouraged feedback and communication during the project through parent evening nights, updates, and questionnaires etc.

Another ethical point to consider was the possibility of having children included in materials for the project. This was covered with the A'oga Fa'a Samoa Cyber safety and social media policy as well as regular communication with parents and families. All material is private and closed off to the public. Access needs to be approved to join online groups and seesaw app to safeguard children and faiaoga.

## Participants

Two groups in the over two area were chosen as participants in the project. The selection criteria was based on the age (development purposes) and practical reasons; these groups are closer to transitioning into primary school where technology is heavily utilised.

## Data collection tools/measures

### Data Collection

- Notebooks
- iPad
- Learning stories- colour coding
- Parent feedback
- Videos.
- Teacher Reflections

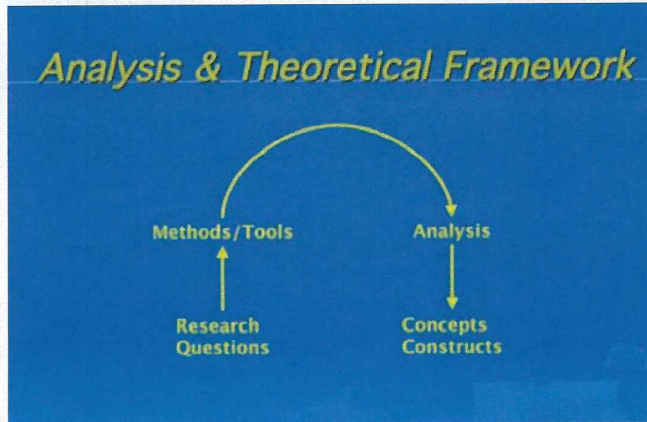
## Methods and tools

Observations Ene/Aunofu	*Regular usage/how often? *Deliberate acts of teaching using digital technology	Observations Ene/Aunofu Staff anecdotal notes	*Children's interaction with digital technology- Specifically language spoken when using it.
Weekly	<b>Observations</b> Ene/Aunofu	*Introduction of terminology *Integration of DATS using digital technology. * SEESAW app used to communicate with parents * New laptops for documentation of observations and learning stories. * Colour coding.	*Engagement with digital technology *Language used *Open ended questioning *Role modeling good language *Positive feedback to children
Daily or whenever being used	Photos	*Teachers take pictures of other staff using DT with students Children use to photograph areas of interest.	*Children using DT independently or with group Discussing photos taken and telling their stories.
Monthly	Videos	*Deliberate acts of teaching and impromptu/everyday use	*Language being used <ul style="list-style-type: none"> <li>• Shared to home.</li> <li>• Parent responses.</li> </ul>
As needed	Book creator	As projects are completed	Book library created can be read at home or at A'oga.
		Children develop books using 'Book creator'	Language resource for all.

**Methods of analysis**

**A’oga Fa’a Samoa Research Framework Framework**

Faiaoga referred to the below framework and approach as they are familiar with it, having used it previously in other research projects at the A’oga Fa’a Samoa.



Nurturing Positive Identity in Children



RESEARCH QUESTION	METHODS/TOOLS	DATA ANALYSIS	THEORETICAL ANALYSES & CONSTRUCTS
1. How now can the A’oga Fa’a Samoa extend the leaning of Samoan language to incorporate technology? (2 action research cycles)	<ul style="list-style-type: none"> <li>• Parent /teachers Surveys</li> <li>• Observations</li> <li>• SEESAW app Recording</li> <li>• Language documenting</li> <li>• Diary records</li> <li>• Language survey</li> </ul>	<ul style="list-style-type: none"> <li>• Coding, sorting and categorising</li> <li>• Coding across the strands of Te Whāriki</li> <li>• “ “ “ “ &amp; reflections</li> </ul>	<ul style="list-style-type: none"> <li>• Language continuity</li> <li>• iPad use</li> <li>• Videos</li> <li>• BWECC</li> <li>• Continuity of group</li> <li>• Continuity of teacher</li> <li>• Parent Evenings</li> <li>• Samoan language continuity &amp; development</li> </ul>
2. How can the key elements that help language continuity be implemented in practice? (3rd action research cycle)	<ul style="list-style-type: none"> <li>• Bilingual evening, teachers, parents, RRS school and community</li> <li>• Interviews with children</li> <li>• Full staff discussion</li> <li>• Meetings</li> </ul>	as above  Translation, categorising under research questions (& Te Whāriki strands) Reflections across the strands of Te Whāriki on teacher’s role	<ul style="list-style-type: none"> <li>• Aiga and as above</li> <li>• Identity and communication</li> <li>• tools and artifacts</li> <li>• scaffolding/ co-construction;</li> <li>• community of inquiry; transformation</li> </ul>

## Findings

What was the impact of your innovation on teaching practice/s and on /ākonga/students and their learning? Describe the results of your project using data/evidence to demonstrate shifts/improvements.

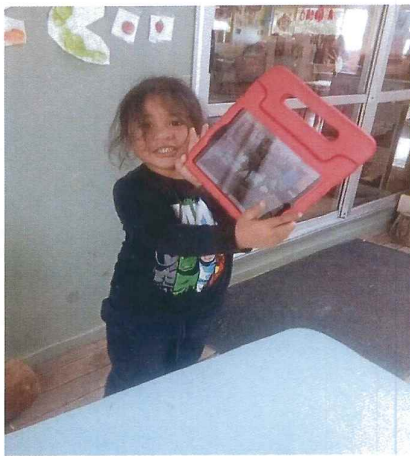
## Impact on teaching and learning practices

In this section there are examples of teaching and learning practice shifts as a result of introducing technology into the A'oga Fa'a Samoa. In some examples, the faiaoga have explained the situation/experience in Samoan and translated into English on reflection.



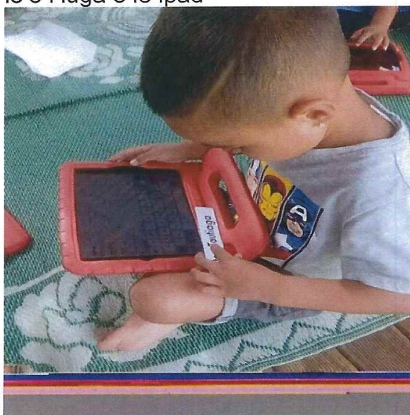
23 Aperila 2019: Ua fa'aaoga e tamaiti iPad e fai ai a latou galuega i lea aso. Na va'aia le fiafia ina ua maua le avanoa e galulue ai i iPads. Sa maituina le tau fai punonou ma ua fai lava e le tamaitiiti latou le galuega e mana'o e galue ai.

Na muamua lava fai mai M, "Fia tusi le ata i le iPad", e fai mai lava ma tago tatala le itulau e mafai ona tusi ai lana ata. Na oso mai S ma fa'apea mai, "Leai se YouTube". Na malamalama lelei S e le fa'atagaina le matamata i ata i luga o lea foi vaega. Sa tago loa ua tatala le vaega o lo'o iai ata, ma fai ai ana matamataga. "Va'aia M, o le ata o 'oe". "O fea lo'u ata?" o la'u fesili lea. "I totonu le ipad", ma fa'aali mai le ipad ia te a'u



Na tilotilo B i le galuega a S ma fa'apea mai, "I want to tusi my igoa". "Oi, e te fia mana'o e tusi lou igoa?", o la'u fesili lea e faaliliu ai le tala a B. "Ioe, fia tusi le igoa o a'u", o le toe tali mai lea a le tama.

Na savali ese loa B ma lana ipad ua nofo i luga o le fala ma fa'ataitai ai le tusiga o lona igoa e fa'aaoga ai mataitusi o lo'o i luga o le ipad



### Reflection

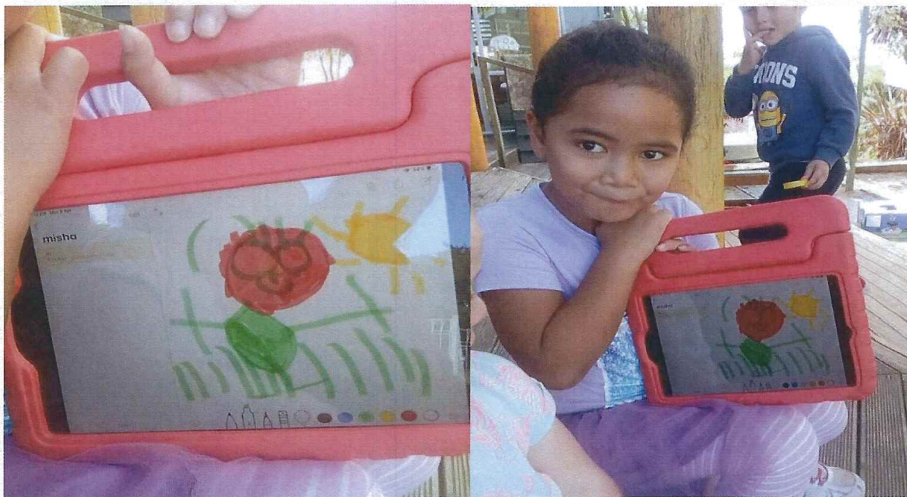
Children have different ideas on how to use ipads. They have the **confidence** to choose on what they are interested in. They have been using **lots of conversation** while working and **investigating** different apps. The use of the language has improved by **using complete sentences** and the keyboard to type **B's** name (child in above picture). Their learning has increased a lot by their knowledge of using ipads to do their work without asking the teacher for any help.

08 Aperila 2018



O se tasi lea o galuega e va'aia le fiafia tele o le teine o **M** e galue ai i taimi e aumai ai e fa'aaoga. **"Fia fai le ipad o a'u"**, o le tala lea a **M** i le faia'oga. Na tu'u loa iai le ipad na te fa'aaogaina.

O le teine lea, e ese le fiafia e tusi ata. Na punou loa ma tusi lona igoa. Ua uma ona tago lea ua fa'asino mai lona igoa. **"Fia tusi le ata o a'u"**, na toe fai ai i le faia'oga. "Ia tago e fai po'o lea lau ata manaia e fia tusi" o le tala lea a le faia'oga. Na iloa lelei lava e **M** le mea e tatau ona alu iai e tusi ai lana ata. Sa punou loa ma fai lana tusiga ata i luga o le ipad. Na ia filifili lanu mananaia ma fetauti lelei mo le ata sa tusi. **"Va'aia, o le ata o a'u le fugala'au ma le la"**, o lona tala lea ma fa'asino mai lana ata i le faia'oga. **"Manaia le ata o a'u?"**, o le fesili lea a **M**. "Ioe, oka se manaia o lanu o lau ata", na tali atu ai le faia'oga. Sa toe tali **M**, **"Ioe, o le la lanu samasama ma le fugala'au lanu mumu ma le meamata."**



**Reflection:** **M** (girl in the above picture) was so excited working on her drawing. She chose her picture to draw and some beautiful colours that goes with it. She has shown a great effort on making her picture looked so beautiful. Her communication skills and ability on drawing has improved. **Her use of the language is so rich**, knowing how to keep the conversation on the task. She is so capable **on using new words to explain her story** in a complete sentence. It was such a good talk because not only she replied back to the teacher but also she **asked some questions** to keep the sharing going. She had the **courage** to open up her thoughts and express her feelings about her work.



## Teacher Reflections

### Faiaoga - Moasina Vili

**K** used the note app on the iPad to write her name and searched for her old works on the Seesaw app. She learned some of the Samoan words from her work like **titina/tape (erase)**. She knows the Samoan name for the eraser icon on the iPad, the **maai (sharp) matatupa (blunt)**, shows her confident how to use the iPad without asking any help from the teachers.

#### Reflection:

Using iPads in my practice is a great learning for me as an Early Childhood Teacher. I have been learning alongside with the children at the same time. I have learned a lot of new things not only on using the Seesaw to communicate with parents regarding their children's learning at the Centre, but also I have gained the knowledge to create a book on a Book Creator which I found more exciting.

I have experienced things about technology and how things work to keep that close relationship with parents and their whanau. It also helps me to extend my knowledge and build up the standard of my own practice. For example; willingness to do research on a specific experiment that we do with the children, finding some new words to introduce while working with the children.

Currently, we do have some science experiment and we watched you-tube to see and find new words to explain exactly what is going to happen. Updated communication with parents is another important aspect for me. I have been sharing a book that I created on children's learning on our workshop that was presented and I was overwhelmed by the feedback that we got from people who attended. Parents were even so amazed on using the QR code that we showed them. At the centre, I am able to **share my knowledge with my colleagues and the teacher at the Primary school** since I'm taking my group for transitioning.

According to the children's learning, I have seen their interest on using the iPads in various ways. During the early times when starting to use iPads, we have to spend more time teaching them how to use it. But, now children are so capable and confident to open and use any app that they want without a help from us teachers. They have that ability to work independently and to ask when got stuck on something. **The language that they used is so rich, they created some new words.** For example; while using the Photo Booth app they came up with words like, **foliga manaia** (happy face), **foliga le manaia** (sad face), monster face, **foliga fefe** (scary face), **foliga nuanua** (rainbow face). Sometimes they use the other camera that zooms in and out, a boy said, "**tatala ma tapuni, ua tutusa, o foliga taimane ma tafatolu**", **math concept.**

By revisiting the photos, children are able to remember what has happened and they **retell their stories in their own words using our Samoan language.** They drew some lovely picture even their names, numbers and shapes using the Notes app. They were able to choose by themselves on the colours that they know is suitable for their pictures and at the same time, **talk about colours in Samoan.** They also have the knowledge on how to use Garage band app to record their own music, listening and creating their own beats using drums and piano.

For the last couple of months we've been working on a project about the life cycle of a butterfly. It was such an interesting time when we've been investigating the caterpillars turning into butterflies. Children loved talking and sharing with their friends and also their parents about what happened. **These are some of the new words that they mentioned in their conversation, minoi (moving), maualuga (higher), moega (cocoon), leai se tago (not to touch), leai se sasa o le pepe (not to smack), pepe fia alu i le fugala'au (butterfly wants to go to a flower), pepe lele (butterfly that can fly), liu (turns), alu lemu (slowly), tolotolo (crawling) as well as learning their numbers while counting caterpillars and butterflies.**

Children were learning some new Samoan songs while going on you tube as well as recording our new songs and play them during our free play so they caught up the tune so fast.

Parents are so excited while posting videos and photos of what has been going on with their child while at the centre. We got some responses straight away and even sharing more about the learning while they come in the centre.

When sending those learnings, **I always write the comments in Samoan, in that way parents would be trying to read and the iPads can translate it for them. In that way, it helps to support and keeping that language alive for both the children, their parents and whanau.**

### Learning Language through Song

#### Faiaoga - Sisamauga Maka

**A** came to school and heard a new song all the children sang during their mat time, so she just listened and saw the teacher's action and how to pronounce the words of the song. The second round she tried her best and she really wanted to know the words.

I took a video of the children and the teacher singing the new song. I sent the video on the Seesaw app on her profile and wrote all the words under the video to let her mother read and teach the new song to **A** and her too.

When she came back to school the next day, we all sat down with the babies and I started to sing the new song to the babies and I heard **A** sing the whole song two verses. I was surprised and happy when **A** sang the new song as she had just heard it from the first day she came back to the A'oga. She learnt the song all the time when her mother played the video at home on Seesaw.

Her parents were very happy when she learnt more new Samoan words from this new Samoan song and she kept

playing it on her mother's telephone at home using seesaw.

O mata e vaai o taliga e faalogo

Meaalofa a le Atua mo oe ma a'u

O mata ma taliga na la aumaia

E fesoasoani i le aso atoa

O lima e galue ma vae momo'e

### Reflection:

Using digital technology is the fastest way to communicate with other people from different places.

When the iPad was introduced in the A'oga, I thought this is a good way to communicate with the parents, and put their voice about what their children learn in the A'oga.

What I learnt using technology is to help my colleagues to learn more skills to use the ipads so we can promote our Samoan language. Learn more words to translate to Samoan to help our learning stories.

When we used the seesaw app we had a strong relationship with our parents and they also learnt a lot from their children's work when they saw on the seesaw, their feedback on their children works were amazing and they suggested that using technology is the better way for us to teach more Samoan words for their children and them too. A'oga Fa'a Samoa children learnt many new words using ipads, extended their knowledge on how to make up a Samoa sentence, word by word, and have more skills to translate English to Samoan language by learning new Samoan words.

### Learning language through reading

#### Faiaoga - Aunofo Niko

##### Reading with A:

I made a Samoan book on different cars with a Samoan title, "Ta'avale Eseeese." using **Book Creator** on the ipad. I took pictures of different cars that the children are playing with and read about in books at A'oga, and those cars that they usually see on the road every day.

I wrote simple Samoan sentences to describe the pictures of different cars underneath them.

As I was finishing the last sentence for the book, **A** came over and asked if she could use the ipad. "Faamolemole Nofo, fia mana'o i le iPad" she said in Samoan. ("Please Nofo, can I use the ipad?")

"Ioe, e mafai pe afai e te faitauina muamua le tusi lea," o la'u tala lea i le teine.

"Of course, if you are able to read this book first," I said to **A**.

'Ok" she replied.

**A** read the book all in Samoan just by looking at the pictures.

"Well done," I praised her. "Can you read the sentences please?" I asked her again. Knowing all her letters of the Samoan alphabet, she managed to read and sound every word correctly. She did not know that I was recording her.

"Brilliant," I said. After she read the book, I played back the recording to her and she was surprised to listen to her voice reading. I shared the book with the rest of the children and **A's** family.

The audio recording encouraged the children to read in Samoan whatever they read in the A'oga. Like **A**, they loved listening to their own voices, and sharing what they have read to their families.

### Reflection:

I am pleased with the new learning that I have been blessed with by using these ipads.

- Able to use the ipads to relate and share children's learning with their families everyday through "seesaw"
- The teachers' connection and good relationships with parents and families is amazing.
- Sharing of children's work from home gave the children confidence to share it with their friends and teachers in Samoan.
- Children love using ipads to record their own work, and reading in Samoan. When we share these learning to the parents, the children here are always excited to explain what they were doing at A'oga. They teach their parents new words in Samoan, from their work on seesaw.
- Teachers and children are able to connect with children on holidays in Canada or Samoa, sharing the fun they enjoy there. Sending photos on seesaw from overseas countries widen children's knowledge of the differences and similarities of such places. There come **more** Samoan words to learn.
- Using Ipads to record songs and poems learnt in A'oga and sharing it to families through seesaw gives some of the children the opportunity to learn them at home, or when they are by themselves using the ipads at A'oga. **Every child has a different learning style.**
- I as a teacher now have some knowledge of how to use an ipad. It gives me more confidence to share and build a **reciprocal relationship** with my peers as well as parents. I am still learning, but the best part of this learning curve is that, these ipads not only widen the learning of more Samoan words by the children, but by their families as well. Grandparents who live far away from their grandchildren are always looking forward to seeing their grandchildren's learning of the Samoan language and culture in A'oga through seesaw. To them,







teachers are trying to rekindle the embers of the fire, teaching our young generations to maintain our language and culture, so that these children can grow up as proud Samoans. Grandparents are always keen to share their part of teaching their children through seesaw. We wouldn't be able to do this without these ipads.

### QR Codes and Book Creator Examples

The following QR codes link to examples of the communication home to the parents, via the Seesaw app. They include songs, topics and learning conversations with the children involved in the TLIF project. Part of the use of the QR codes is to provide an extended and authentic audience for the A'oga students and teachers.

To access these if you use an iPhone just hold the phone with the photo app open, this will take you to a safari link to play the video.

If you use a Samsung or Android phone you will need to download a QR code reader, a common one is Bixby Vision app.

 <p><b>O LE TUSI I KETAPILA</b> An electronic book created recording the cycle of the Monarch Butterfly the children observed and recorded.</p>	 <p><b>Ta'avale Eseeese</b> An electronic book created about different types of vehicles</p>	 <p><b>Faamatala ana ata sa tusi I lona aiga.</b> Telling the teacher about her drawings in her book.</p>
 <p>This song is mentioned in Sisa's comments above. 'O mata e vaai, taliga e faalogo'.</p>	 <p><b>Faitau Le Tusi o upu faafeagai</b> Reading a book on opposites.</p>	 <p>Reciting numbers on the iPad.</p>

### Summary of Teaching practice shifts:

- Using ipads as part of daily learning and exploring to complement current curriculum
- Increase in communication with parents
- Using open ended questions on their recordings to increase vocabulary knowledge
- Encouraging children to use whole sentences when enquiring
- Exploring book creator to use as teaching tool
- Role modelling songs and poems for children to copy

### Teacher Summation of the Inquiry and what it has meant for teachers and children:

#### Lead Faiaoga - Ene Tapusoa

**Reflection:**

This inquiry has made teachers **aware** of a different way of teaching and learning for children and themselves. They've learnt to use these digital devices as **a tool** to enhance children's learning by using the different apps that they could access, involving the children more in their learning and **more intentional** in their planning for children especially in extending their language.

There is a shift in thinking on how digital devices can be used as tools of inquiry to extend children's learning, instead of just for entertainment.

Teachers were also excited and eager to learn how to **create new resources** to help with children's learning. They have **grown in confidence** to use ipads, by working together and sharing knowledge and skills with other staff.

Another shift is how the use of **videos and digital books** of children's learning has made it easier for teachers to capture what's happening and assist them in their **assessment** of children's learning. It is more visible to see and can be seen repeatedly if necessary.

Another shift is the **stronger relationships with parents**, through continuous communication about their children's progress and learning. This also encourages teachers to keep up with their documentation of children's learning.

**This inquiry has strengthened relationships, enhanced teaching and learning, built confidence, and most of all has helped in extending our children's learning of their Samoan language.**

**The use of digital devices provides unlimited opportunities, and our work with children can have a positive ripple effect on not only the lives of those involved but to the wider communities and beyond.**

**Where to From here?****Creating more resources**

- Create books around the children's interests and A'oga events.
- Each teacher and group of children will take part in using the ipads for exploring children's interests.
- Teacher cycle of moving with groups of children throughout their time at A'oga (key teacher – attachment theory), will enable each teacher and group of children to obtain skills with using ipads to increase language learning.
- Making books, recording songs, to develop Samoan language vocabulary.
- Encourage more input from the parents and to use the language at home
- Communication from Samoa
- Communication with Mua i Malae Unit – continued on through transition in to the school process.
- Building a book library.
- More Conference presentations
- Go global!

## Conclusion and Discussion

### Link between findings, purpose and intended outcomes

#### Purpose

The focus for our inquiry was to improve the learning of the Samoan language in an immersion, ECE environment. This improvement was researched by complementing the current curriculum of verbal and non-verbal interaction with digital technology to drive and reinforce learning.

#### Intended Outcomes

To have primary school ready children who are confident, bi-lingual learners that are able to design and build with traditional resources and with digital technology. Giving them the knowledge and skills to navigate the different concepts of virtual worlds and explore and identify resources that support language acquisition and development.

#### Main findings

The main findings for this project included:

- Major teaching practice shifts with the introduction of technology to complement the curriculum
- Learning shifts with the introduction of technology
- Significant increase in engagement with families with online communication methods
- Increase in confidence in children and faiaoga trying new learning practices
- Two – way learning opportunity with children teaching/guiding faiaoga on use of technology

The purpose and intended outcomes focused heavily on improving learning. Although learning shifts were experienced by the children in this project (as outlined in this report and the previous checkpoint reports, the faiaoga also experienced major learning outcomes. The finding of an increase in confidence in children aligns with the intended outcome to have primary school ready children who are confident, bi-lingual learners. With the introduction of technology teaching practices shifted significantly which is reflected in the accounts from the faiaoga. This outcome was not explicitly outlined in the project purpose. However, an inquiry into improving the learning of the Samoan language is dependent on teaching practices.

#### Lessons learnt? Discuss the unintended consequences

- The importance of bringing a team together who are aware of how their experience and expertise are able to contribute to the intended outcomes and objectives
- The importance of understanding how current practices and environment work in order to plan effectively and manage expectations for all involved
- The initial stages of a project is vital in order to set a strong foundation. Therefore allocating more time to this phase when planning is recommended.

#### Discuss the role/s of experts, and the value they added to the teacher-led innovation

Having experts in different areas within the project team meant they were able to contribute and offer advice when needed for certain parts of the research. Similar to the technology complementing the curriculum, the lead expert worked closely with the faiaoga throughout the project to complement their expertise and teaching practices with suggestions and direction. Spending time to build relationships and provide guidance and support added immense value to the faiaoga and research as maintaining trust and reciprocal relationships is of utmost importance in Samoan culture.

#### Discuss the implications, including the application to other education settings

The implications of this project is massive in regard to children's learning, teaching, and the Samoan community. Introducing technology to complement the curriculum in a full immersion Samoan ECE has shown the positive effects within and beyond the classroom.

As outlined in the above sections and previous checkpoint reports, extending the learning of the Samoan language beyond the A'oga Fa'a Samoa is now possible with technology. Families are better connected with the use of technology and more engaged in comparison to existing practices. This is evident in the examples and feedback

provided by parents and extended family in the surveys and informally through conversations over the duration of the project.

The application of this teaching and learning approach may also be used in primary school settings, especially in the transition from A'oga Fa'a Samoa to Mua I Mulae as technology is being used in their classrooms and will provide a consistent experience for the children.

Teachers from other immersion ECE centre's also attended our presentation evenings (along with Richmond Road Primary School Principal, DP and families) to learn how technology could be applied to extend the Samoan language in their school environments.

The parent sharing evening consisted of an interactive power point presentation demonstrating:

- language gains of children and parents
- book making
- learning through song

QR Codes were displayed around the hall and parents were able to use either the ipads or their phones on the codes, to watch and listen to their children taking part in various activities.

Parents were amazed at the content of the presentation and loved the QR codes sharing with each other their children's learning.

#### **Some parts of the presentation:**

#### **Soifua Laulelei- Sao - So'otaga- Feso'otaiga- Ola Su'esu'e (Belonging, wellbeing, contribution, communication, exploration)**

Learning to see Samoan language in written form and have digital experiences using Samoan language assists in valuing Samoan as a global language.

When language is recognised and valued children will learn positively. Language is culture and cultural knowledge informs every part of "who I am".

#### **Survey – Parents Thoughts Beyond The Classroom.**

- Very effective, access to resources will benefit the entire family.
- Access to digital resources on line will be invaluable in the learning and retention of our culture and language.

#### **Learning and Teaching**

- I believe very effective as they are growing up in a digital age.
- Not only effective but vital in transitioning into primary school where digital technologies are already in use

#### **Professional Learning.**

- Upskilling opportunities for teachers will ultimately benefit our children
- Seeing and hearing themselves on screen is a positive it helps with cultural identity understanding

#### **Digital Technology:**

Our wondering was about how digital technologies could help?

- Idea of using video, images and sound to share with parents and aiga
- Ipads as an easy to use tool?
- Important for teachers to be comfortable
- "If you can use a smartphone you can use an iPad."
- One teacher was familiar with ipads and became the resident expert.
- All took them home and played!

#### **Parents Reaction to videos and stories.**

"We're loving this so much especially the videos where we see T. interacting in class and being taught. It is helpful to see the teaching method in Samoan so that I can use it at home with T.

From the grandparents, Great to see T. interacting and singing Samoan songs and reciting Samoan poems.

A. - We love watching videos and looking at her work on Seesaw. A. loves explaining what she was doing and showing it to her sisters too.

Al. - I really enjoy the videos that you are posting on Seesaw! It is wonderful to see the curriculum in practice.  
N. -Sings her Samoan songs around the house and she uses Samoan words in her conversation with us.

## References

List any existing research you used while developing, or implementing, your project/kaupapa. To be consistent, use the APA style at this site [www.apastyle.org/learn/index.aspx](http://www.apastyle.org/learn/index.aspx) or alternatively user friendly guidance at this site [owl.massey.ac.nz/referencing/apa-style.php](http://owl.massey.ac.nz/referencing/apa-style.php).

## Funding

Because the project is using public money, you will need to account for the use of funding by describing briefly that you used the funds for the approved purpose. Any variance/s will need to be explained; for example, fewer teacher release days were required than originally anticipated. Copies of receipts should be retained for auditing purposes.

Total funding received	Total spent
<b>\$ 49200</b>	<b>\$ 44791</b>

Brief explanation of variance/s

Projected but not completed (actuals) at this time include the following expenses: Total \$14,000

- A projector: \$2,000
- Community and ECE Events: \$2,000
- Conferences to discuss, share and learn about the appropriate application of technology in ECE: \$5,000
- Equipment support and app subscriptions: \$5,000

## Use of the funding

Expenditure spent on teacher release time

**\$ 2000**

Comment if required

Between August 2017 and July 2019 the faia'oga (teachers and caregivers) contributed time and content to the TLIF project. For full days this time was accounted for. However, a significant portion of this time was combined with caregiving time. This was particularly the case where interactions, trials with the technology and recording was required.

Expenditure spent on experts

**\$ 15180**

Comment if required



CORE Education billed throughout the project. However, some initial planning sessions and presentations were contributed for free. For example, the work and presentation from Dr. Rae Si'ilata "on the theories behind the importance of being a bilingual child learning Samoan for the first 10 years of their life."

Expenditure spent on resources/rauemi/taputapu

\$ 23086

Comment if required

Expenditure spent on other (as agreed in proposal)

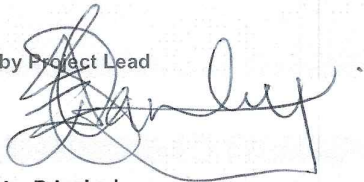
\$ 4525

Comment if required

This category is made up of the following items:

- Food (event catering)
- Conference Attendance (education and presenting)
- Miscellaneous (event and meeting supplies)

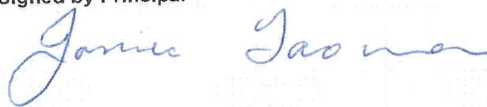
Signed by Project Lead



Date

29/07/2019

Signed by Principal



Date

29/7/2019