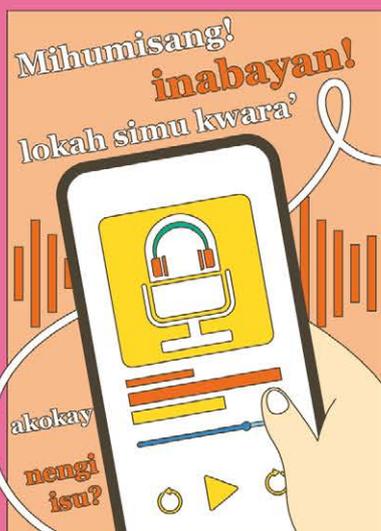


tousvusvutu

November 2023

Issue 3



Using Technology to Promote Multilingual Learning:
Challenges and Opportunities

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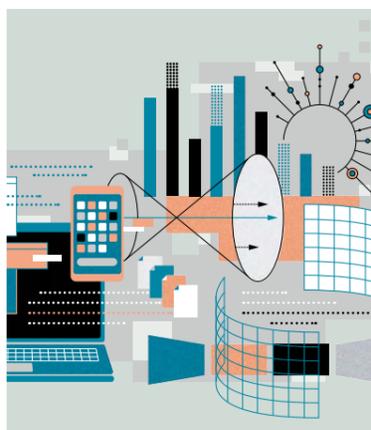
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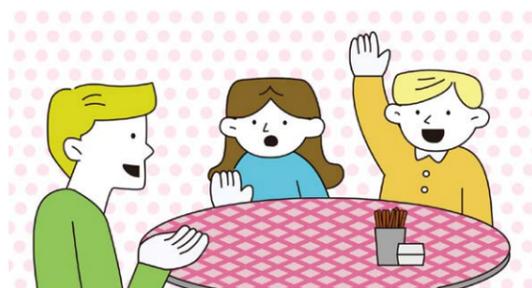
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Indigenous Languages and Technology¹: What New Possibilities Can They Bring?



Pasawalian 'Amis



Advanced Level



Listening to
Indigenous
Languages

Time flies. We will be publishing the third issue of “tousvusutu Talks” very soon.

During this period, the world has undergone many changes. The **sudden emergence**² of generative AI tool, ChatGPT, which not only is able to translate, summarize text, write code, and write novels, bring people to AI technology up close, but also sparkles new ideas for the application of AI and technology in indigenous languages. As such, the theme of this issue explores the integration and application of Taiwan’s Indigenous languages (henceforth referred to as indigenous languages) and technology.

Long before the advent of ChatGPT, the ILRDF has already actively used various **medium**³s and **digital**⁴ tools to promote indigenous languages. For example, after taking over the organization of the Indigenous Language Proficiency Certification Test, the Foundation launched the “Online Simulation Test for Indigenous Language Proficiency Certification” practice program in 2021, which resulted in a record-breaking overall passing rate of over 78% in this year’s certification test.

This year marks the tenth anniversary of the establishment of the “Taiwan-Austronesian Indigenous Words and Narrations” **website**⁵. The ILRDF has been assisting in its operation for over three years since 2020. It is gratifying to see that the monthly views of the website have exceeded one million since February, once again highlighting the importance and indispensability of the website for online

learning in indigenous languages. Moreover, the Indigenous Language Corpus continues to enrich oral and written language resources, not only preserving valuable data, but also laying a comprehensive foundation for subsequent applications such as AI speech recognition, synthesis, and translation.

In addition to websites and **platform**⁶s, we have also witnessed the power of multimedia, as demonstrated by Laha Mebow, the winner of Best Director at the 59th Golden Horse Awards, and a vocal group, “O.S.T-Offspring Tayal.” They have brought indigenous languages and cultures to different fields and countries through movies, music, and other media. The achievements of AI and technology in the application of Mandarin, Taiwanese Hokkien, and Taiwanese Hakka are equally worth emulating and learning from. Hopefully, AI learning resources suitable for indigenous languages can be developed as a result. In this issue, we will **share**⁷ experiences of integrating technology with language to serve people, as well as experiences and reflections of educators and learners of Indigenous languages in using digital tools.

Indeed, the continuous innovation and practical application of technology to enhance efficiency, improve lives, and preserve culture are truly exciting. However, as emphasized by several interviewees in this issue, when combining



technology with language and launching related applications, a “people-centered” approach should always be adopted. Services should be designed based on the users’ circumstances and experiences, rather than being developed simply for the sake of “using technology.”

In the future, we will continuously uphold this **goal**⁸ and make greater use of technology in promoting indigenous languages. This includes

enriching online simulated tests, content, and **features**⁹ of the Taiwan-Austronesian Indigenous Words and Narrations website, collecting more language data for the Indigenous Language Corpus, and exploring more possibilities for combining the **database**¹⁰ with AI. We hope that, with the power of technology, we can create a new landscape for the preservation, promotion, augmentation, and revitalization of indigenous languages.

Vocabulary

- | | |
|----------------------------|---------------------|
| 1. Technology | 6. Platform |
| 2. Sudden emergence | 7. Share |
| 3. Medium | 8. Goal |
| 4. Digital | 9. Features |
| 5. Website | 10. Database |

Example Sentences

1. **Technology**
Technology has made our lives more fast-paced, more convenient, and more diverse.
2. **Medium**
The ILRDF utilizes various mediums to promote and provide channels for learning indigenous languages.
3. **Sharing**
The Amis are the most generous at sharing spoils in their daily lives.

Our Team



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Kumud
Chairman

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Lowking
Nowbucyang
CEO



Education and Promotion Division



Administrative Management Division

Certification and Testing Division



Research and



Development Division

Yami



Advanced Level



Listening to Indigenous Languages



Taiwan-Austronesian Indigenous Words and Narrations

Foundation of AI Development: Building Indigenous Language Corpus

Active preservation of indigenous language data is one of the most important missions of the Indigenous Languages Research and Development Foundation (ILRDF) . As such, in 2022, the ILRDF **establish**¹ed the “Indigenous Language Corpus” to properly preserve, utilize, and promote indigenous languages in Taiwan. Let us delve into the dedication and efforts put in the **collection**² of language data through an interview with Akiw, the Deputy Director of the Research and Development Division.



|an Amis from Sa'aniwan Tribe in Taitung County|

Akiw

Akiw is the Deputy Director of the Research and Development Division at ILRDF, who is responsible for tasks related to the Indigenous Language Corpus, Indigenous Language Human Resource System, and the development of indigenous language AI applications.



Q: What kind of data is currently included in the Indigenous Language Corpus? How is the data typically collected?

A: The Indigenous Language Corpus contains oral language data, written language data, and archival materials. Oral language data consists of audio and video recordings of conversations and natural speech. Currently, the main sources of these recordings are from language promotion personnel of various regions and promotion organizations for 16 indigenous languages. Based on projects funded by the Council of Indigenous Peoples (CIP), spoken language of the elders is documented. The process involves interviewing, editing, creating and translating indigenous language transcripts into Mandarin.

Written language data is sourced from indigenous language publications, literary works, and bilingual official documents, primarily in written form. It includes parallel corpus in both indigenous languages and Mandarin. In response to the CIP's "Bilingual Official Document Writing Subsidy Program," we have also revised the "Indigenous Language Official Document Writing Manual" and developed the "Indigenous Language Official Document System." These measures facilitate the promotion of indigenous language official document writing by local governments. The system not only provides basic templates and formats for **reference**³, but also allows direct translation of indigenous language official documents, thus achieving the benefits of document data collection, automatic formatting, and data statistics.

Archival materials refer to raw language data that has not been processed, such as a batch of indigenous language cassette tapes from early surveys. We categorize and **archive**⁴ these materials after they are digitized but before they are further transcribed or translated. We encourage interested parties to apply to use these data for academic research and educational purposes, and contribute the results back to the **database**⁵ so that these language resources can be further revitalized.

Q: Why is it important to build the Indigenous Language Corpus?

A: In 2009, according to the "Atlas of the World's Languages in Danger" published by UNESCO, Taiwan's indigenous languages were classified somewhere in between "vulnerable" and "definitely endangered." Therefore, preserving indigenous languages is an urgent matter.

When we watch the language recordings, we can see the elders sharing their **life stories**⁶, tribal histories, legendary tales, songs, dances, rituals, economic livelihoods, and various other themes. We also witness the practical impartation of traditional skills, such as the preparation of "siraw" (salted pork) and alcohol brewing. Language promoters have shared that sometimes elders would suddenly use difficult vocabulary, some of which they themselves have almost forgotten. Meanwhile, some elders might not even live long enough to share these words again. Therefore, building an indigenous language database and recording our language materials are truly a race against time.

Q: What are some of the more memorable experiences during the planning and development of the Indigenous Language Corpus?

A: During the planning and development of the Indigenous Language Corpus, many indigenous people, experts, and scholars generously provided their opinions, which vastly benefited us. One of the most memorable experiences was visiting Professor Lifok 'Oteng (who passed away in 2019) in Taitung and Professor Lin Ching-Tsai of National Taitung University.

Professor Lifok 'Oteng was an honorary doctor at the College of Humanities of the National Taitung University. During our visit, he mentioned the difficulties he faced in organizing data and finding original manuscripts and audio files due to his **physical**⁷ limitations. As an expert in indigenous musicology, Professor Lin

Ching-Tsai, reminded us that a comprehensive **authorization**⁸ mechanism should be established for language data preservation. He also cautioned potential issues such as hard disk failures and disc damage.

Through these interviews, I feel strongly the urgency and importance of language data collection and preservation. I also come to understand that language data preservation should be like flowing water. That is, it is important to ensure that the data collected is not simply stored and forgotten, but rather made available for further applications. However, informed consent or complete authorization was not obtained for many early surveys. Therefore, if we need to incorporate the related language materials now, we may have problem obtaining reauthorization. This is an on-going issue to be considered with regard to the Indigenous Language Corpus.



Professor Lin Ching-Tsai's data archiving and management.

Q: With technology continuously progressing, what are some of the plans for integrating technology into the use of Indigenous Language Corpus?

A: Since the release of ChatGPT in late November last year, there has been increasing attention in terms of the application of AI in indigenous languages. After consulting with academia and industry on multiple occasions, we have decided to focus the direction of the Indigenous Language Corpus on “collecting a large amount of language data,” especially spoken language data that includes audio, indigenous language transcripts, and Mandarin translations, so as to facilitate AI applications and development.

This year, we have initiated research and development in indigenous language **speech**¹⁰ recognition and speech synthesis technologies. This allows spoken language data to be automatically transcribed into indigenous language text, and written language data to be generated into audio files. This allows manual effort to be focused on data collection and verification, thereby enhancing data processing capacity. Once there is a sufficient amount of language data, we can collaborate with other organizations to stimulate more AI applications in indigenous languages, such as indigenous language AI translation and indigenous language ChatGPT.



Late Professor Lifok 'Oteng shared his experiences in field surveys.



Oral language data contained in the Indigenous Language Corpus.

Vocabulary

- | | |
|------------------------|--------------------------------|
| 1. Establish | 6. Life stories |
| 2. Collection | 7. Physical |
| 3. Reference, examples | 8. Authorization, verification |
| 4. Archive, storage | 9. Progress, ever changing |
| 5. Database | 10. Sound, speech, intonation |

Example Sentences

- | | |
|---------------------------------------|---|
| 1. Collection | In the past, we heard songs, stories, and life histories that passed down from the elders. Now, these materials should be collected, recorded, and revitalized. |
| 2. Archive, storage | Many photos and traditional dances from various tribes have already been stored on our computers. |
| 3. Authorization, verification | They have agreed to lend us cassette tapes with traditional songs for educational purposes, and therefore authorization is already in place. |

Education and



Promotion Division



Takibakha Bunun

◆◆◆◆◆
Advanced Level



Listening to Indigenous Languages



Taiwan-Austronesian Indigenous Words and Narrations



Maital Manghuhu Tanapima

|Bunun|

A researcher in the Education and Promotion Division of the ILRDF, responsible for indigenous language courses, teaching materials, and educational research.

Taiwan-Austronesian Indigenous Words and Narrations Works Hand in Hand with Users Towards Sharing Mutual Benefits

This year¹ marks the tenth anniversary of the Taiwan-Austronesian Indigenous Words and Narrations website (henceforth referred to as the E-learning website), as well as the third year since the Indigenous **Language**²'s Research and Development Foundation (ILRDF) **took over**³ the website operation in 2020.

During the three years period, what **adjust**⁴ments and improvements has the ILRDF made to the E-learning website in terms of features and contents? How has it been utilized? What are the future plans? Let's hear from Maital, a researcher from the ILRDF's Education and Promotion Division.



Q: After the ILRDF took over the operation of the E-learning website in 2020, what changes has it brought to the website?

A: The ILRDF's goal for taking over the E-learning website was to go beyond basic maintenance and to systematically sort, organize, and promote it in stages, with the aim of achieving **information**⁵ transparency.

In the actual operation, during the first year, because it was transferred to us by the Council of Indigenous Peoples, we had about half a year left to carry out the related tasks. So, we focused on thoroughly examining the website's functions and pages to ensure **stable**⁶ daily operations. In the second and third years, building on the initial foundation, we **expand**⁷ed and revised the **teaching materials**⁸, responded to user needs, promoted information transparency and content sharing (Creative Commons, also known as CC licenses), and gradually incorporated research and development.

For example, when designing the introductory, intermediate, and intermediate-high teaching modules, we assessed the learning content and teaching methods appropriate for different levels. We also considered how to interact with learners when these modules were ready for online **use**⁹. Once the overall modules took shape, we then translated them into 42 language varieties and made the contents available online for teachers and learners.

Our annual work plans are based on evaluations of feedback received from learners and educators, government policies, and statistical data.

In reality, the ILRDF's role is in the "research and development of indigenous languages," and our approach often involves action research and design research. We formulate strategic guidelines through practical actions to identify and evaluate issues. Next, we implement these strategies, evaluate their execution, and provide feedback and recommendations. Finally, we use this information to propose new strategies.

Such work model is repeated in the hope of combining theory and practice from the perspective and feedback of the indigenous communities to address real issues and needs. We can in turn, provide related suggestions for their teaching and learning of indigenous languages. Ultimately, it helps construct knowledge and methodology suitable for indigenous language teaching and learning.



On-site photo: Photo shooting for the Taiwan Austronesian Languages Series - Introduction to Atayal Grammar

Q: How has the E-learning website been utilized since its establishment?

A: From 2014 to 2019, the website had an average site visits of about 240,000 annually. From 2020, when the ILRDF took over, until 2022, the average site visits reached about 730,000 annually. Since February of this year, the monthly site visits of the website has exceeded one million, meaning that there has been an increased demand for the website usage in recent years. It is highly visible and has been used by more people.

Q: During the operation and optimization of the E-learning website, have there been any memorable events?

A: What impresses me deeply and touches my heart was "how everyone treated the E-learning website as their own." The editors and teachers I have worked with are very dedicated to developing the E-learning website. For example, when it comes to the reading texts, we often only ask the editors to provide one template, but they would go above and beyond by offering various examples that cater to different perspectives and needs.

The teachers involving in writing, proofreading, and recording also tirelessly assist with all aspects of the website's work. They often say that they would spare no effort for the sake



Develop the learning contents of family communication in indigenous languages.

of the next generation learning indigenous languages. As a result, I come to realize that the E-learning website is not just a platform, but a place where everyone comes together to share, support each other, and work together to promote indigenous languages.

Q: On the tenth anniversary of the E-learning website, what new plans do you have for the next phase of development?

A: In the first three years, we implemented online courses and developed various learning materials, which resulted in a steady increase of the number of users utilizing the E-learning website year after year. Now, building on

previous efforts and foundation, we are committed to gradually paving the way for the future of the E-learning website.

Since the user base of the website is diverse, including indigenous language teachers, students preparing for exams, and adults learning the languages for purposes other than exams, we aim to tailor the contents to meet the needs of users of different ages, language abilities, and contexts. We aspire to transform the E-learning website into a comprehensive, systematic, inclusive, and versatile platform for indigenous language learning, similar to platforms like TutorABC, FUNDAY, and HelloTalk.

Some of the enhancements we envision include adding online courses, matching learners with indigenous language mentors or language partners, and creating personal learning progress records. We may even **create**¹⁰ an online digital and social network dedicated to indigenous languages.

Our ultimate goal is to make indigenous language learning accessible and integrated into everyday life, without being subject to geographical or environmental constraints.



Lesson at Taiwan-Austronesian Indigenous Words and Narrations E-Learning Worksho.

Vocabulary

- | | |
|----------------|-----------------------|
| 1. Year | 6. Smooth, stable |
| 2. Language | 7. Expand |
| 3. Take over | 8. Teaching materials |
| 4. Adjust | 9. Use |
| 5. Information | 10. Create, design |

Example Sentences

- | | |
|-------------------|---|
| 1. Adjust | We adjusted the order of the articles to facilitate reading. |
| 2. Expand | Feel free to expand upon your written content. |
| 3. Smooth, stable | The teaching materials you have created online (with computer) are very stable. |

Diverse Contents of Taiwan-Austronesian Indigenous Words and Narrations Works: User-centered, Close to Real-life¹ Situations

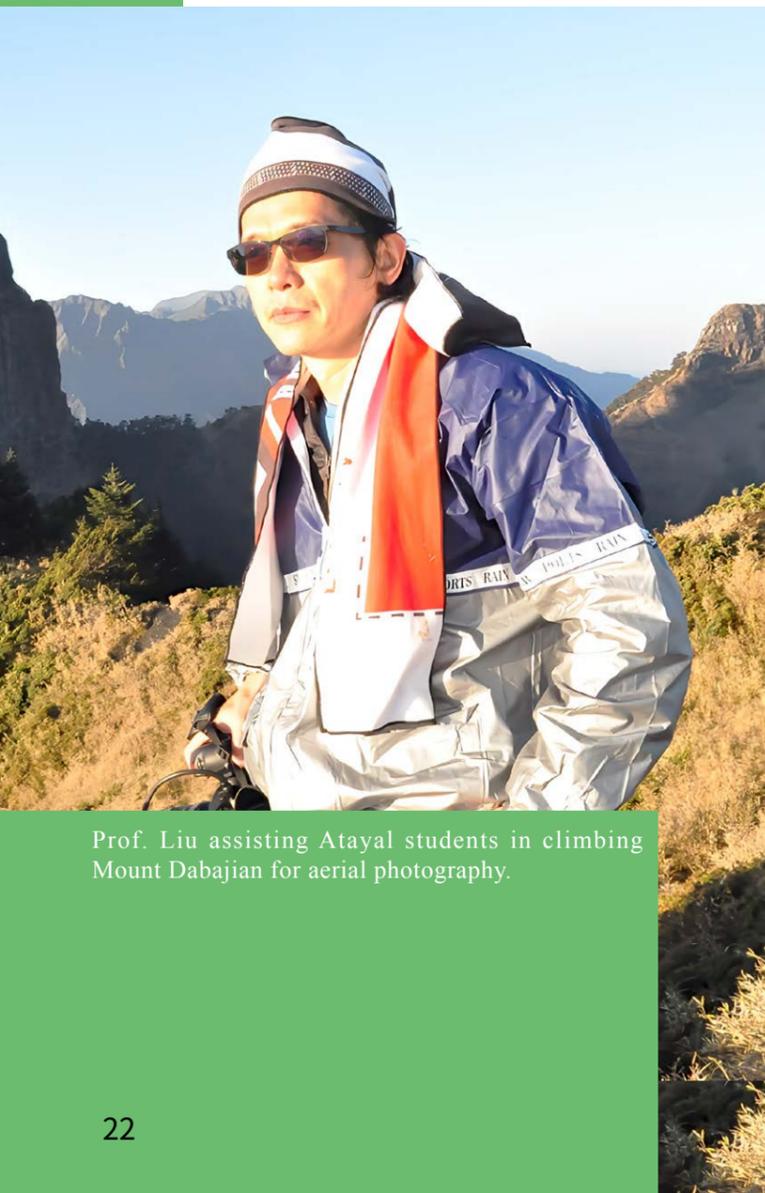
Taiwan’s Indigenous Languages E-Learning Paradise (hereinafter referred to as the E-learning website) has been in operation for ten years since its establishment in 2013. Whether it is for teachers’ lesson preparation or students’ preparation for certification exam, the E-learning website has been an **indispensable²** help.

The force driving continuous adjustment and expansion of contents **over³** the ten-year period is Associate Professor Liu Yu-Yang, Director of the Department of Learning and Materials Design at University of Taipei.

Designing Website Contents and Features Based on User Scenarios and Experiences

Witnessing the development of the E-learning website, Prof. Liu pointed out that a careful **comparison⁴** of contents from its early days to those of today would reveal a significant difference. In the beginning, the primary task of the website was to digitize the nine-level

teaching materials. It was not until later that **other⁵** additional contents were gradually **add⁶**ed. “However, regardless of how the website changes, we have only one principle, i.e., to design contents and features that **center on⁷** user scenarios and experiences.”



Prof. Liu assisting Atayal students in climbing Mount Dabajian for aerial photography.

Tsou
 ◆◆◆◆◆
 Advanced Level

Listening to Indigenous Languages

Taiwan-Austronesian Indigenous Words and Narrations





Professor Liu Yu-Yang

Associate Professor and Director of the Department of Learning and Materials Design at University of Taipei.

Specialize in interactive multimedia design, multimedia information systems, and proficient in indigenous languages. He holds intermediate-high certification in Amis and plays a crucial role in promoting the E-learning website.



He explained that since the main user groups of the website are indigenous language teachers and those preparing for indigenous language certification examinations, the interface, features, and contents should **appropriate**⁸ly cater to their needs.

For example, in the section featuring songs, music recordings in 16 indigenous languages and 42 language varieties are now available. These recordings have been rearranged and re-recorded by Prof. Liu and his team, and are **divide**⁹d into two versions: one for singing along and another without vocals. The reason for this design is to cater to the needs of teachers during their classes.

Navigating Teaching Environments and Workshops to Understand Language Learning Needs

According to Prof. Liu, to better understand the needs of indigenous language learners and to explore new software interactions and features, he continually travels to indigenous language teaching environments, workshops, and various tribal communities to interact with teachers and elders. Based on the feedback received, he makes adjustments to the website contents.

Students could first learn to sing along with the vocal version, while the instrumental version without vocals was created as a useful tool for students to practice singing on their own. Meanwhile, these songs not only can be played directly on the website, but can also be downloaded in mp3 format. The reason is that sometimes teachers may want to take students outdoor to learn indigenous languages through singing and dancing. So, having mp3 files that can be stored on a **portable device**¹⁰ and played on a portable speaker is very convenient.

This approach allows him to generate new results and see new possibilities each year, thus forming a positive feedback loop. In recent years, the features introduced by the E-learning website, such as the picture book platform, online indigenous language classrooms, and situational language learning, have been well-received and well aligned with the needs of users.

As for new plans for the E-learning website, Prof. Liu mentioned that since the advent of generative AI tool ChatGPT in late November last year, whose abilities in writing text, producing code, and translation has left everyone in awe, thereby raising expectation for the application of AI in language learning.

Currently, Prof. Liu is working on integrating AI into indigenous language learning, including speech recognition and speech synthesis software, which may give rise to potential development.

However, he reiterated that tools like ChatGPT, while refreshing, must ultimately be aligned with user experiences and scenarios, and should not deviate from their learning needs. “As the number of indigenous language learners continues to grow, the long-term goal of the E-learning website is to make learning more convenient and enjoyable,” he said.

Vocabulary

- | | |
|---|--|
| 1. Life | 6. Add, increase, gradually increase |
| 2. Indispensable | 7. Center on, stick close to somebody |
| 3. over | 8. Appropriate |
| 4. Compare, comparison, contrast, equate | 9. Divide, sort |
| 5. Other | 10. Portable device |

Example Sentences

- Divide, sort**
Inguyu (female name) divides the tomatoes into different sizes.
- Compare, comparison, contrast, equate**
'Avai (male name), please compare our fish traps with the Amis tribe's fish traps.
- Center on, stick close to somebody**
Afraid of thunder, my uncle's dog stuck close to his feet.

1 Filming of teaching video clips of the Taiwan · Atayal Grammar.

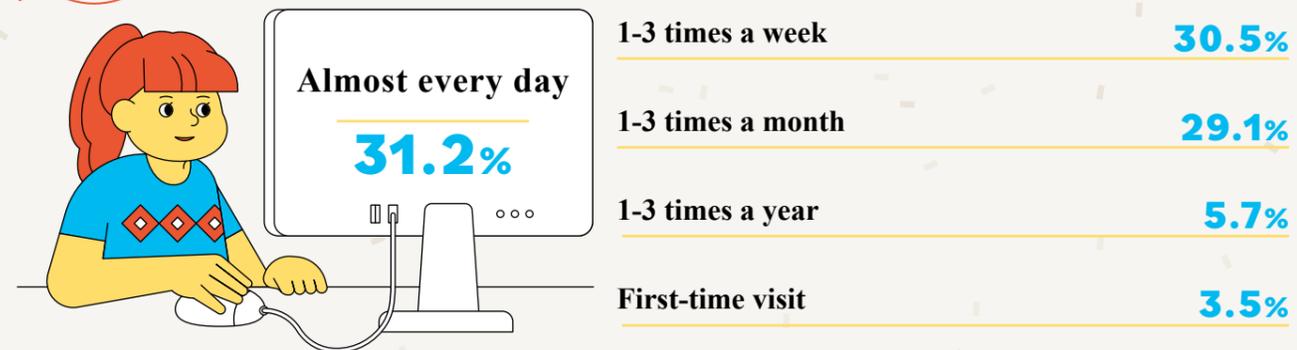
2 Recording of the Indigenous Peoples' Day Grand Choir.

Taiwan-Austronesian Indigenous Words and Narrations Works - Know the Numbers

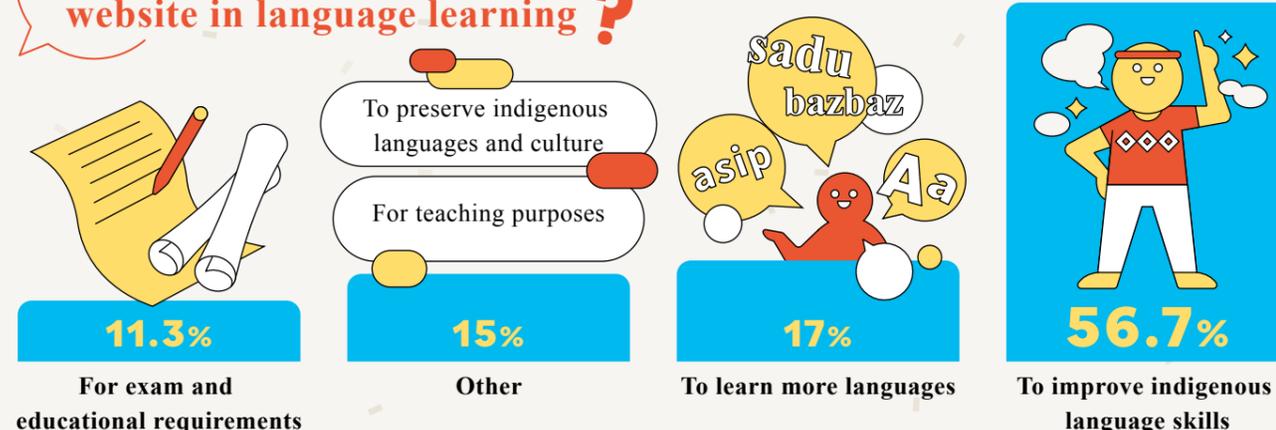
Site Visit Statistics from 2014 to 2023 (as of June 2023)



How often do users visit the E-learning website ?

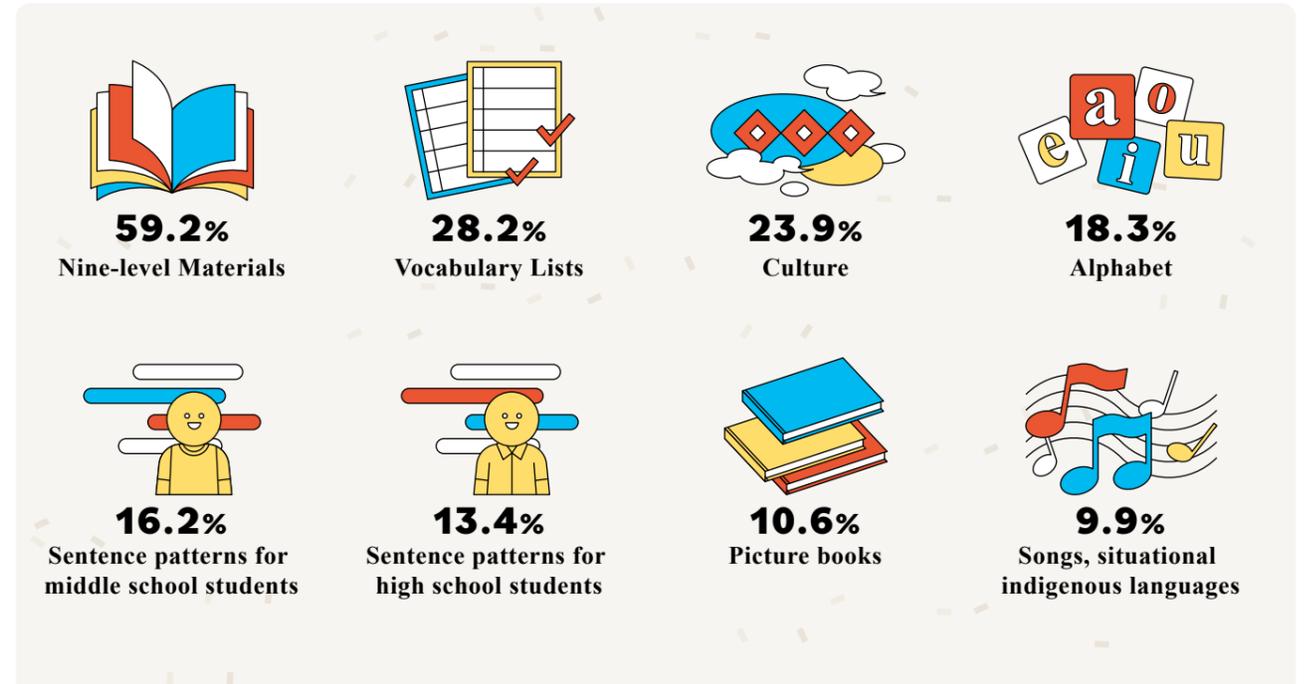


What are the reasons for using the E-learning website in language learning ?



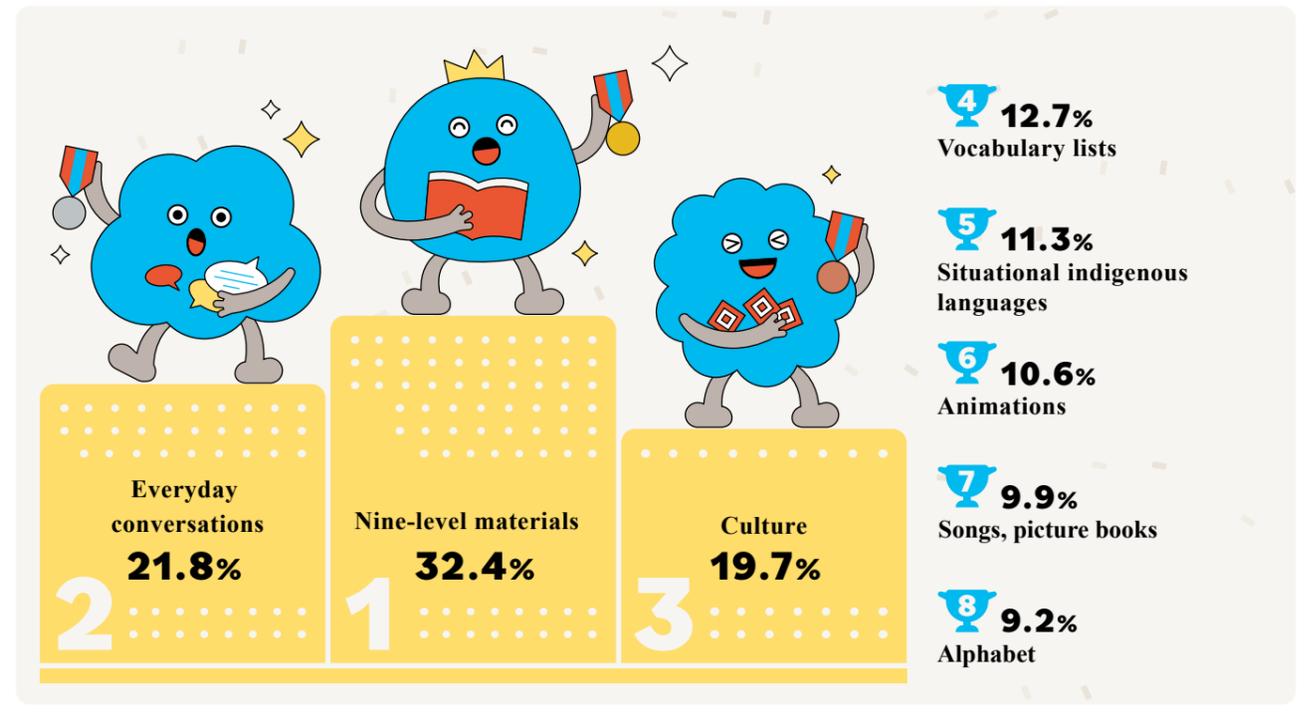
What are the top eight materials (platforms) most frequently used on the E-learning website?

(Multiple choices allowed)



What are the top eight materials (platforms) most liked by users on the E-learning website?

(Multiple choices allowed)



Source: 2022 E-learning website user survey
English Translation by: Linguitronics

Certification and



Hla'alua
◆◆◆◆◆
Advanced Level



Listening to Indigenous Languages

Indigenous Language Proficiency Certification Test Online Practice Program (ILPCT Online Practice Program)

Testing Division



Taetalre

Assistant Researcher in the Certification and Testing Division of ILRDF, responsible for the certification test affairs, and maintenance and optimization of the test official website and online practice program. He also works as an indigenous language teacher.

|Rukai|

ILPCT Online Practice Program: Ultimate Aid for Teachers, Examination Candidates!

In 2020, the Indigenous Language Proficiency Certification Test¹ (ILPCT) was officially entrusted to the Indigenous Languages Research and Development Foundation (ILRDF). With the goal of revitalizing Taiwan's indigenous languages (henceforth referred to as indigenous languages), the ILRDF recognized the need to familiarize candidates with the examination environment and test procedures, as well as alleviating test anxiety.

As a result, in November 2021, the "Indigenous Language Proficiency Certification Test Online Practice Program" (ILPCT Online Practice Program) was launched to reduce obstacles in learning indigenous languages and taking the certification test.

After more than two years, the online practice program has become an essential tool for indigenous language teachers and examination candidates in preparing for the test. In this report, we invited Taetalre, an Assistant Researcher from the Certification Test Division of the ILRDF to share some insights into the online practice program.



Q: Please introduce the ILPCT Online Practice Program and tell us a little bit about the reasons for its development.

A: The ILPCT has been held since 2001, with more than 20 years of history (with a hiatus in 2005-2006 due to SARS). Over the years, the content and levels of the certification test have been gradually adjusted and **digitize**²d for the purpose of making the revitalization of indigenous languages more comprehensive.

In 2020, the certification test was taken over by the ILRDF, and we found that both the candidates for the test and indigenous language teachers on the front lines were not familiar with the actual test environment and process.

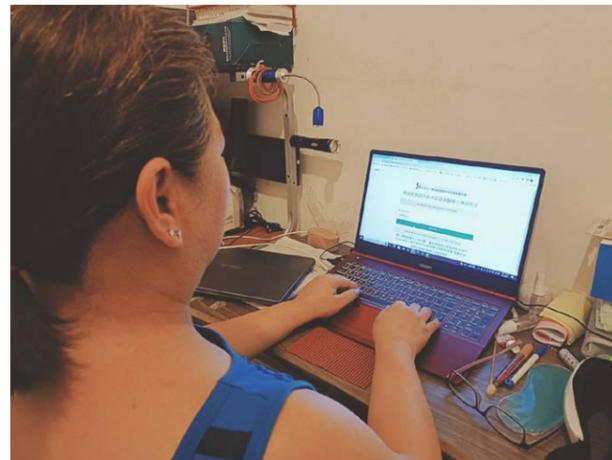
Many well-versed candidates, especially the elderly, would return frustrated due to their **unfamiliar**³ity with the environment and question types. This also alienated young and willing candidates from learning indigenous languages. The situation was undoubtedly a setback to the revitalization of indigenous languages and an issue that needed to be addressed.

Therefore, we decided to create a **simulation system**⁴ for candidates to familiarize themselves with the test environment and question types in advance. It can also facilitate the classroom setting of indigenous language teachers. As such, the “ILPCT Online Practice Program” was launched in November 2021.

Now, candidates can access the online practice program on the ILPCT **official website**⁵ (lokahsu.org.tw) and the Taiwan-Austronesian

Indigenous Words and Narrations website. The program offers a comprehensive simulated environment for the four proficiency levels: **introductory**⁶, **intermediate**⁷, **intermediate-high**⁸, and **advanced**⁹ levels, covering 42 language varieties from 16 Indigenous groups.

Through this program, indigenous language teachers can directly access and analyze the test question types. Meanwhile, candidates can practice on their own to enhance their familiarity with the test environment so that they can perform to their full potential during the actual test.



Indigenous Language Proficiency Certification Test Online Practice Program (ILPCT Online Practice Program).

Q: What achievements and feedback have been obtained since the launch of the ILPCT Online Practice Program?

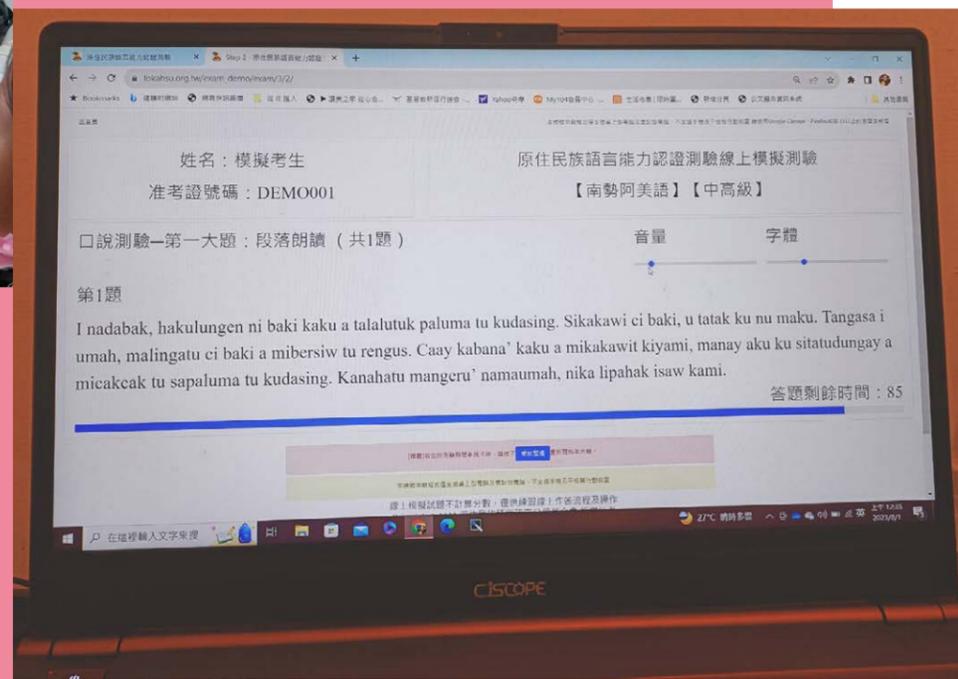
A: As of the end of June this year, the click-through rate of the program has reached nearly 11.3 million, with a total of 60,000 non-repetitive visitors. At the same time, according to statistics, the overall passing rate of the ILPCT was 44% in 2020, 52% in 2021, and a breakthrough growth to 78% in the first half of this year, the highest in history.

In the feedback mechanism of the system, candidates left positive comments, emphasizing that the online practice program has been of great help in familiarizing themselves with the test environment and questions. The result is proven to be in line with our original intention in building the program.

Q: Have there been any memorable incidents during the regular optimization and maintenance of the ILPCT Online Practice Program?

A: During our communication sessions with the vendor building the online practice program, they told me that they initially thought all indigenous people, like the Hokkien and Hakka ethnic groups, spoke the same language. They were surprised to learn that there are as many as 16 indigenous peoples and 42 language varieties in Taiwan and said that we should cherish such cultural diversity.

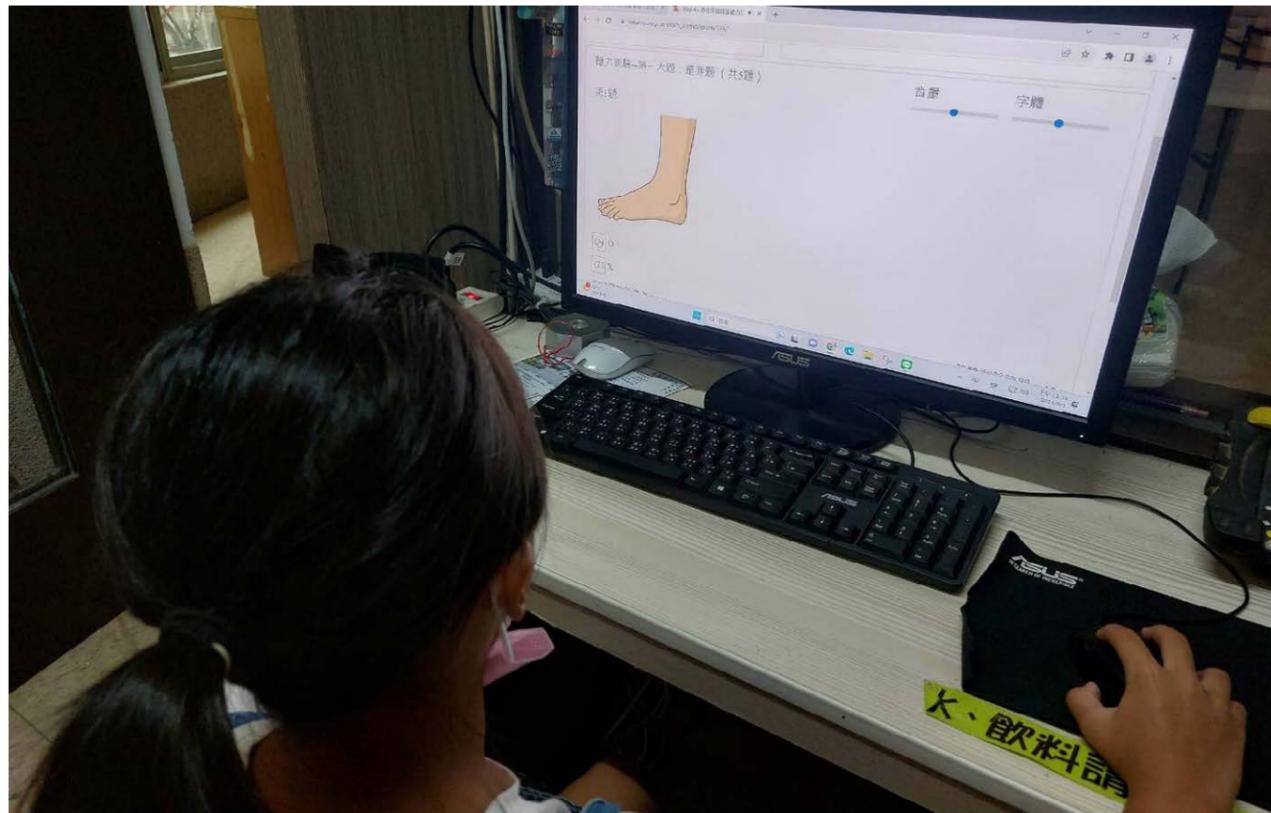
This revelation deeply moved us and served as a strong inspiration and a reminder of our significant responsibility. Promoting the ILPCT is indeed an important way to revitalize indigenous language and preserve the culture of indigenous people. Our goal and commitment is to continuously improve and refine the online practice program to better meet public expectation.



Q: What are the upcoming plans for the optimization of the ILPCT Online Practice Program?

A: The online practice program closely simulates the actual computer operating environment of the ILPCT. If candidates get distracted for a moment, the test may be over before they know it. Therefore, many users of the online practice program have asked for a “**pause**”¹⁰ mechanism.

In the future, we will introduce a “segmented practice” mode based on the practice needs of candidates. This mode will feature a “pause” mechanism and an “answer diagnosis” function so that candidates can gradually familiarize themselves with the test environment and question types of various levels.



Indigenous Language Proficiency Certification Test Online Practice Program (ILPCT Online Practice Program) .

Furthermore, after achieving the milestone of “making candidates familiar with the test,” we also plan to implement a “random question generation” mechanism in the online practice program. This will make the simulated test more dynamic and ensure that indigenous people who intend to take the ILPCT no

longer need to worry or feel anxious due to unfamiliarity with the test environment and computer operations. Through continuous practice, candidates will be better prepared to demonstrate their true abilities in the official certification test.

Vocabulary

- | | |
|------------------------------|----------------------|
| 1. Test, examination | 6. Low, introductory |
| 2. Digitalization, digitize | 7. Intermediate |
| 3. Unfamiliar | 8. Intermediate-high |
| 4. Simulation system | 9. Advanced, high |
| 5. Official website, network | 10. Pause |

Example Sentences

- Test, examination**
I took the Indigenous Language Proficiency Certification Test today.
- Official website, network**
If you want to check your scores, you can visit the official website.
- Advanced, high**
The certification test for advanced level this year was really difficult.

Indigenous Language Hotline

Phone Scenario: **Daily Conversation** 📞

Sakizaya

◆◆◆◆◆
Intermediate-High Level



1 **Daily Use - Making a Call**

A: Hello, I am _____. Is _____ there?

B: Please hold on.

B: He/She is not here. May I know who's calling? Would you like to leave your contact information? I will ask him/her to call you back.

B: There is no such person here. You might have dialed the **wrong**¹ number.



2 **Daily Use - Receiving a Call from Child at Work**

A: Hello, Mom, what are you doing?

B: We just had dinner. **Have you had**² yours?

A: Not yet, I just got off work and I'm on my way home.

B: Don't eat too late. **Take care of**³ your health.

A: How are you all doing today?

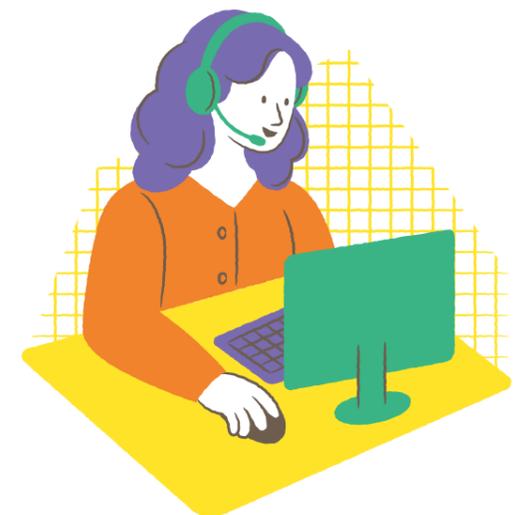
B: We are fine. Call us when you **get**⁴ home.

A: Okay. Well, then. Bye!



3 **Workplace - Answering a Call from the Public**

- (Company/Department) Hello, how may I **help**⁵ you?
- Please hold on, let me **check**⁶ (transfer your call).
- Regarding the issue you mentioned, I will check and get back to you.
- Thank you for calling.



4 Making a Reservation - Ordering Drinks

A: Hello, I'd like to **order**⁷ some drinks. I'd like to have five cups of black tea and two cups of pearl **milk**⁸ tea.

B: How much ice do you need? Also, how **sweet**⁹ do you want them to be?

A: For the black tea, no sugar and no ice.

For the pearl milk tea, normal sugar and ice.

B: Would you like to pick them up (self-pickup) later or have them delivered?

A: I will come to pick them up later. I will need a bag.

B: The bag costs NT\$1. You can pick them up at two o'clock.



Vocabulary

- | | |
|--------------------------------------|-----------------|
| 1. Wrong, incorrect | 6. Check |
| 2. have you had dinner/lunch? | 7. Order |
| 3. Be careful, take care of | 8. Milk |
| 4. Arrive at, get | 9. Sweet |
| 5. Help | 10. Loud |

5 Other Sentences for Phone Use

- I'm sorry, I couldn't hear you very well. Could you please say that again?
- Can you speak a bit **loud**¹⁰er?
- Did you get in touch with him/her?
- My phone is running out of battery.
- I'm busy right now. I'll call you back later!
- I have poor reception here.



Example Sentences

1. **Wrong, incorrect**
You took the wrong medicine.
2. **Be careful, watch out**
Be careful when you are walking in the bush.
3. **Sweet**
Don't take too much sugar. Eat in moderation.

naubaq?!

Thaw



Intermediate-High Level



Listening to
Indigenous
Languages

In the Thao **language**¹, which of the metaphors **below**² does the word 'naubaq' **apply**³ to?

1. Someone with a **rigid**⁴ and **inflexible**⁵ mindset.
2. Someone with an **empty**⁶ **heart**⁷, and lacking depth.
3. Someone with a **narrow**⁸-minded and petty attitude.

Do you know the answer? Let's read along and learn together!

In the Thao language, "naubaq" refers to the **hollow grain**⁹s of rice ears, that is, there is no rice inside. It is metaphorically used for describing something hollow and insubstantial. When describing a person, "naubaq a thou" implies that his/her heart is empty, like a hollow rice grain that nobody needs, lacking depth and substance. It can also refer to a person who considers themselves insignificant, whose words carry no weight, and whose opinion is not **respected**¹⁰ by others. Additionally, "naubaq" can also denote someone who lacks money, status, ability, and is looked down upon.

Therefore, our elders encourage us to work hard and enrich ourselves, so we don't become a "naubaq a thou"!

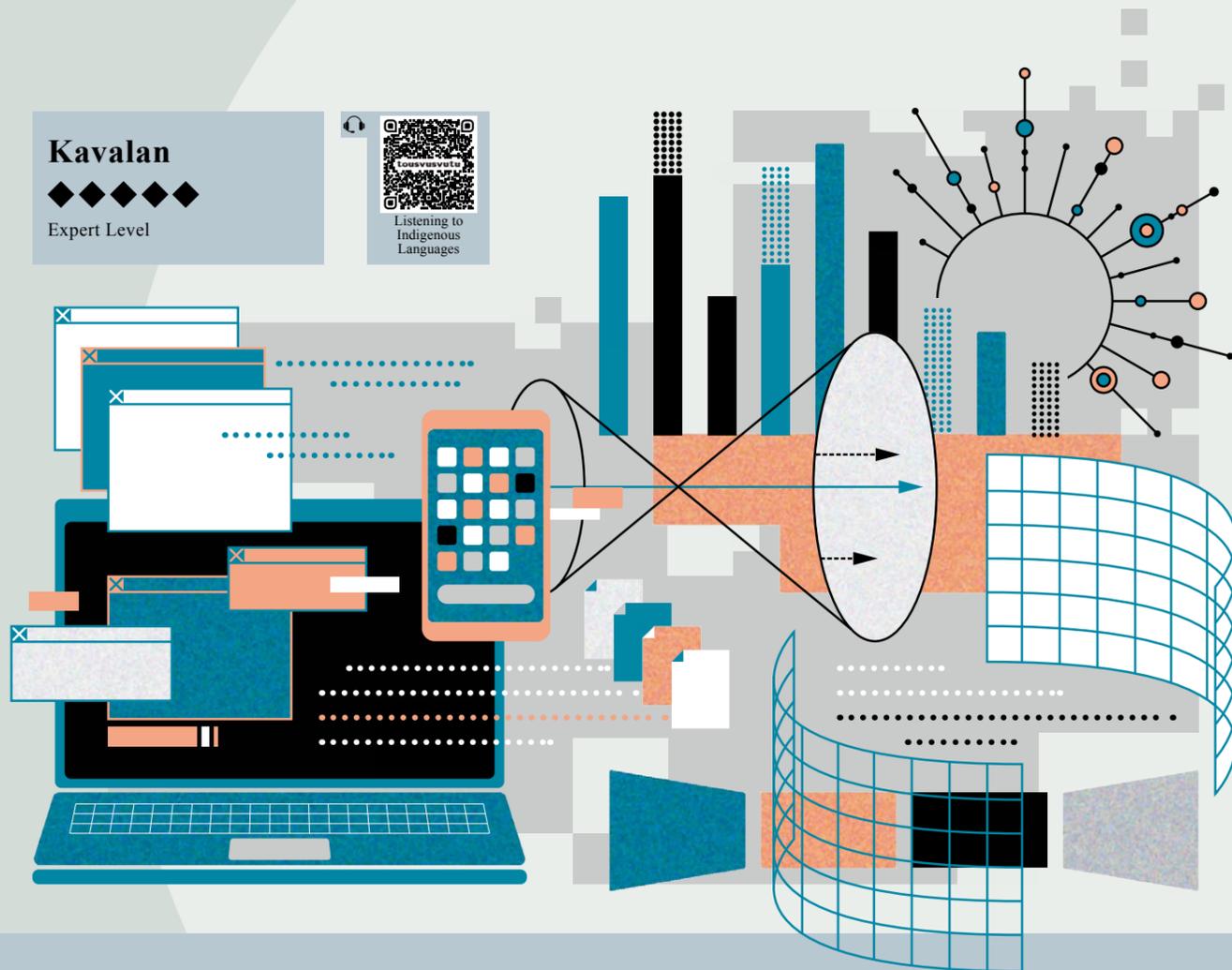
Vocabulary

- | | |
|-------------------------------|------------------------------------|
| 1. Words, language | 6. Empty, without substance |
| 2. Below, down there | 7. Heart |
| 3. Apply | 8. Narrow |
| 4. Rigid mindset | 9. Hollow grain |
| 5. Foolish, inflexible | 10. Respected |

Example Sentences

- | | |
|-----------------------------|--|
| 1. Below, down there | Don't let the stones roll down! Someone might be down there. |
| 2. Apply | The temperature of the water is just right. |
| 3. Narrow | The suspension bridge is high and narrow. |

Artificial Intelligence¹ and Indigenous Language² Revitalization



Yedda Palemeq

A Paiwan from the Pungudan tribe in Mudan Township, Pingtung County, Yedda Palemeq holds a Bachelor's degree in Department of Foreign Languages and Literatures from National Taiwan University, and Bachelor's and Master's degrees in Institute for History from Leiden University in the Netherlands. Formerly worked at the Council of Indigenous Peoples, the Indigenous Language Research and Development Center, and Indigenous Peoples Cultural Foundation, Palemeq currently works as the Procurement Team Leader at WorldVeg and is a master's student in the Graduate Institute of Linguistics at National Taiwan University.



For the 21st-century human society, artificial intelligence (AI) has become an inevitable trend. Whether it is applied in personal devices like smartphones and computers or for the public domain such as image recognition and surveillance, AI has gone beyond our previous imagination. Due to its ability to handle vast amounts of data and **re**³petitive tasks, it is widely applied in various aspects of human life and industries.

Moreover, AI technology continues to **develop**⁴ rapidly. From weak AI that could only solve specific problems in its early stages, it has gradually evolved into strong AI capable of performing self-learning, **communication**⁵, as well as multiple intelligent tasks. Headquartered in California, OpenAI **claims to**⁶ be dedicated to developing AI products that are friendly to humans, with one of its products being the frequently mentioned chatbot program, **Chat**⁷GPT.

Indigenous communities have not overlooked this wave of technological advancements. Numerous experimental actions worldwide are integrating AI into indigenous language revitalization. For example, the Kwakwaka'wakw people in northern Vancouver Island, Canada, collaborate with a doctoral student, Caroline Running Wolf from the University of British Columbia, to research on immersive indigenous language learning software and sleep mask headphone. These allow learners from distant places to enter a virtual tribal world, which enhances the enjoyment and effectiveness of indigenous language learning.

Danielle Boyer, an Ojibwa tribal member, started a business in Michigan, USA. She

combines AI to develop a customizable, **portable**⁸, and interactive language robot called Skobot for indigenous youth. This has started a trend of encouraging young people to learn their native languages.

Although most indigenous languages are polysynthetic and not fully compatible with current automatic speech recognition and transcription systems designed for inflected languages in the Indo-European language family, Professor Hussein Abbas of the University of New South Wales discovered that Jingulu, an aboriginal language spoken in the Northern Territory of Australia, can be directly transformed into various AI commands due to its focus on three **function**⁹ verbs or light verbs—come, go, and do—in the syntax. This discovery has allowed the research team to further develop cross-disciplinary applications, while highlighting the **significance**¹⁰ of an indigenous language in human technology.

AI has brought new opportunities for indigenous language revitalization. Michael Running Wolf, a Cheyenne tribal member in the United States with a Ph.D. in computer science,



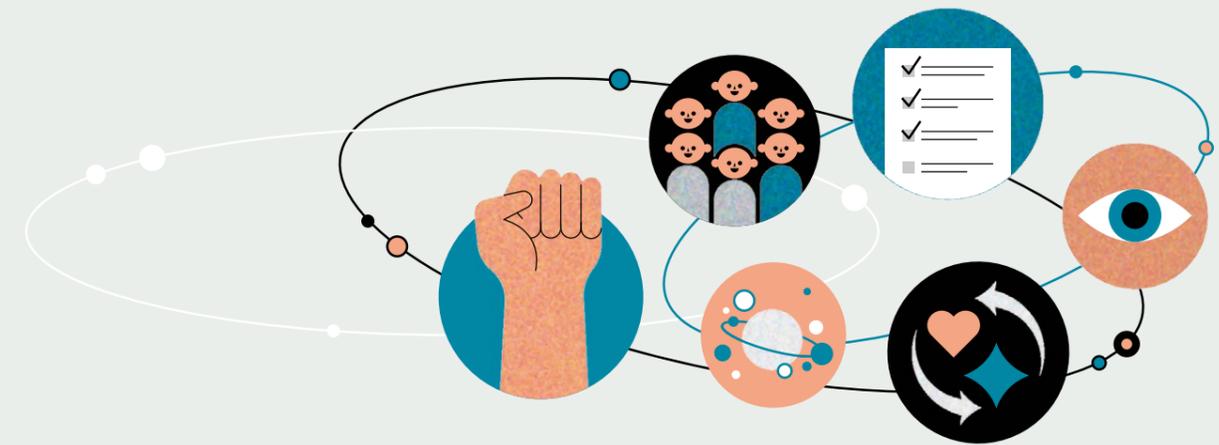
believes that AI can facilitate faster and better transmission of indigenous languages and therefore, urges governments to actively invest in related efforts.

At the same time, multiple Māori in New Zealand have called attention to advanced technologies which may contain hidden exploitation of extractive colonialism. The application of AI relies on vast amount of natural language data. Even if online speech-to-text systems provided by multinational technology companies include indigenous languages, they often lack information about the sources of language data and participation from indigenous people or linguists in proofreading.

This can result in outputs that not only fail to meet pragmatic requirements, which may even be nonsensical, but also lead to intellectual property infringement and stigmatization of indigenous cultures.

Considering indigenous languages are the cultural foundation of every indigenous group, technology companies or universities should use such input as the resources of their research when it comes to the development of artificial intelligence products. Te Mana Raraunga, or the Māori Data Sovereignty Network, drafted the “Principles of Māori Data Sovereignty” in October 2018, redefining the framework, ethics, accountability, legislation, and policy mechanisms for using digital indigenous language materials across six key dimensions: power, kinship, obligations, collective interests, reciprocity, and regulatory authority. The initiative begins with the indigenous people and is for the indigenous people.

From these international examples of practice, the lesson is clear: as we embrace the progress of modern society, we must consciously refuse to repeat the injustices of history. Only through such synchronized approach can we truly continue the life of these ethnic groups.



Vocabulary

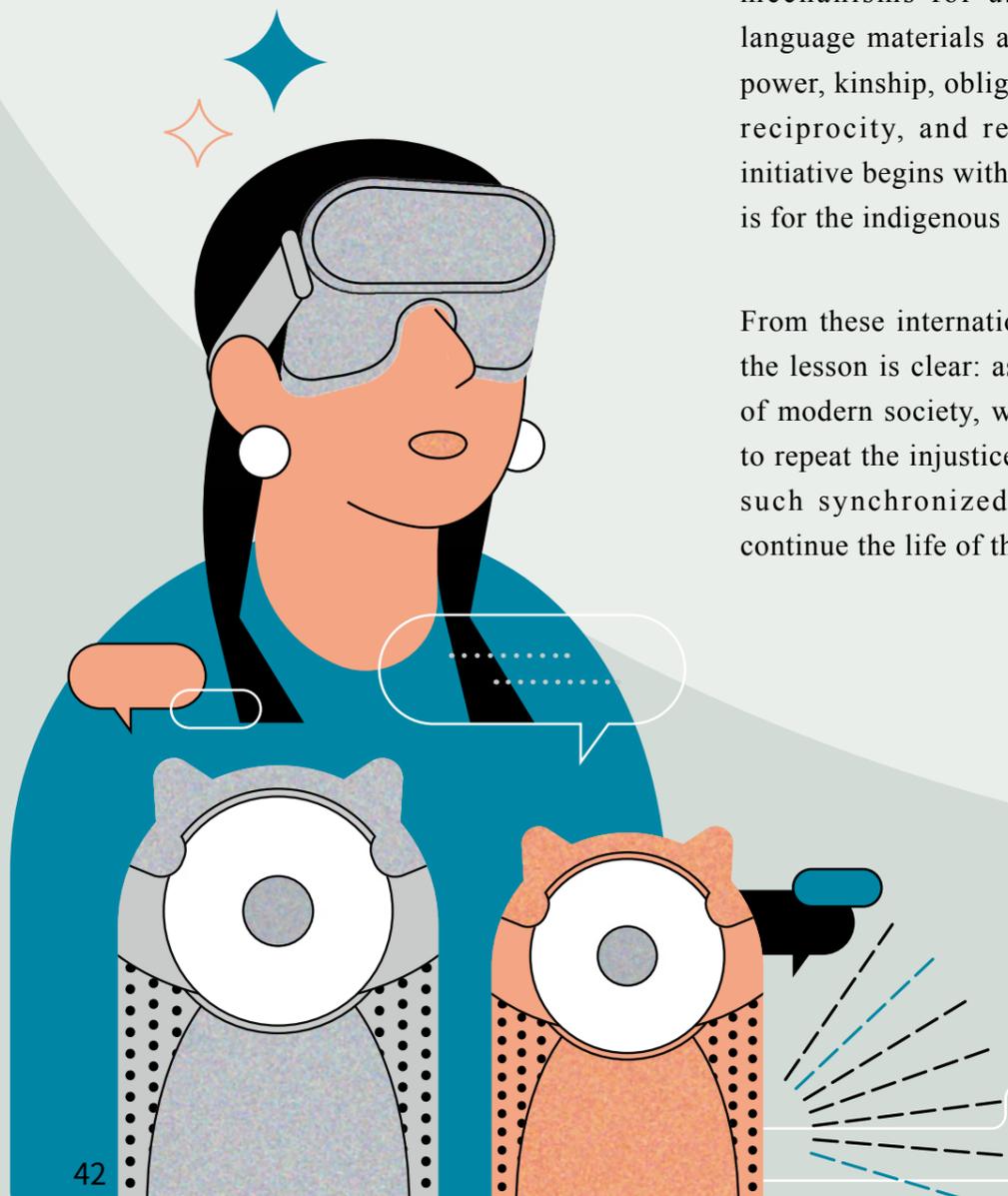
- | | |
|-------------------------|--------------------------------------|
| 1. Intelligence | 6. claims to |
| 2. Language | 7. Keep someone company, chat |
| 3. Re- | 8. Portable |
| 4. Develop | 9. Function |
| 5. Communication | 10. Significance |

Example Sentences

- | | |
|--------------------------------------|---|
| 1. Communication | Let's communicate and not argue. |
| 2. Language | We must not forget our ancestors' language. |
| 3. Keep someone company, chat | I often keep my grandmother company. |

Reference :

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<https://ia.acs.org.au/article/2022/australian-indigenous-language-used-in-ai-breakthrough.html>
- How AI and immersive technology are being used to revitalize indigenous languages**
<https://www.cbc.ca/amp/1.6332285>
- Skobots: A Wearable Language Revitalization Robot for Indigenous Youths**
<https://www.steamconnection.org/skobots>
- OpenAI' s Whisper is another case study in Colonialism**
<https://blog.papareo.nz/whisper-is-another-case-study-in-colonisation/>
- Principles of Maori Data Sovereignty**
<chrome-extension://efaidnbmninnibpcjpcglclefindmkaj/https://static1.squarespace.com/static/58e9b10f9de4bb8d1fb5ebbc/t/5bda208b4ae237cd89ee16e9/1541021836126/TMR+Ma%CC%84ori+Data+Sovereignty+Principles+Oct+2018.pdf>



ÌTHUÂN KHOKI Puts People First, Promotes Communication with “AI + Indigenous Language¹s”

With the continuous **advancement**² of **technology**³, can **collect**⁴ing data and training **AI**⁵ for speech **recognition**⁶, synthesis, and translation be beneficial for indigenous language learning and promotion? The answer is undoubtedly yes.

Established in 2017, ÌTHUÂN KHOKI (henceforth referred to as ÌTHUÂN) aims to meet the needs of language **learner**⁷s and **bring people closer**⁸ together through products and **service**⁹s related to Taiwan’s indigenous languages, Taiwanese Hakka, and Taiwanese Hokkien (henceforth the Taiwanese language).

Taking a closer look, ÌTHUÂN’s products consist of the “Fire Dictionary of Indigenous Languages,” Taiwanese and Hakka input methods, Taiwanese language LINE AI chatbot, and Taiwanese Romanization converter, among others.

Among them, ÌTHUÂN’s “Fire Dictionary of Indigenous Languages” is a dictionary for Amis, Saisiyat, Bunun, and Atayal languages. Once users input text in these languages, the computer will automatically enunciate the text for them. This is an exemplification of AI text-to-speech technology.



Sîng-hông Sih

CTO of ÌTHUÂN KHOKI, holds a Master’s degree from the Institute of Computer Science and Engineering at National Yang Ming Chiao Tung University, proficient in Taiwanese Hokkien, with intermediate certifications in Amis, Truku, and Hakka.

Truku



Expert Level



Listening to Indigenous Languages

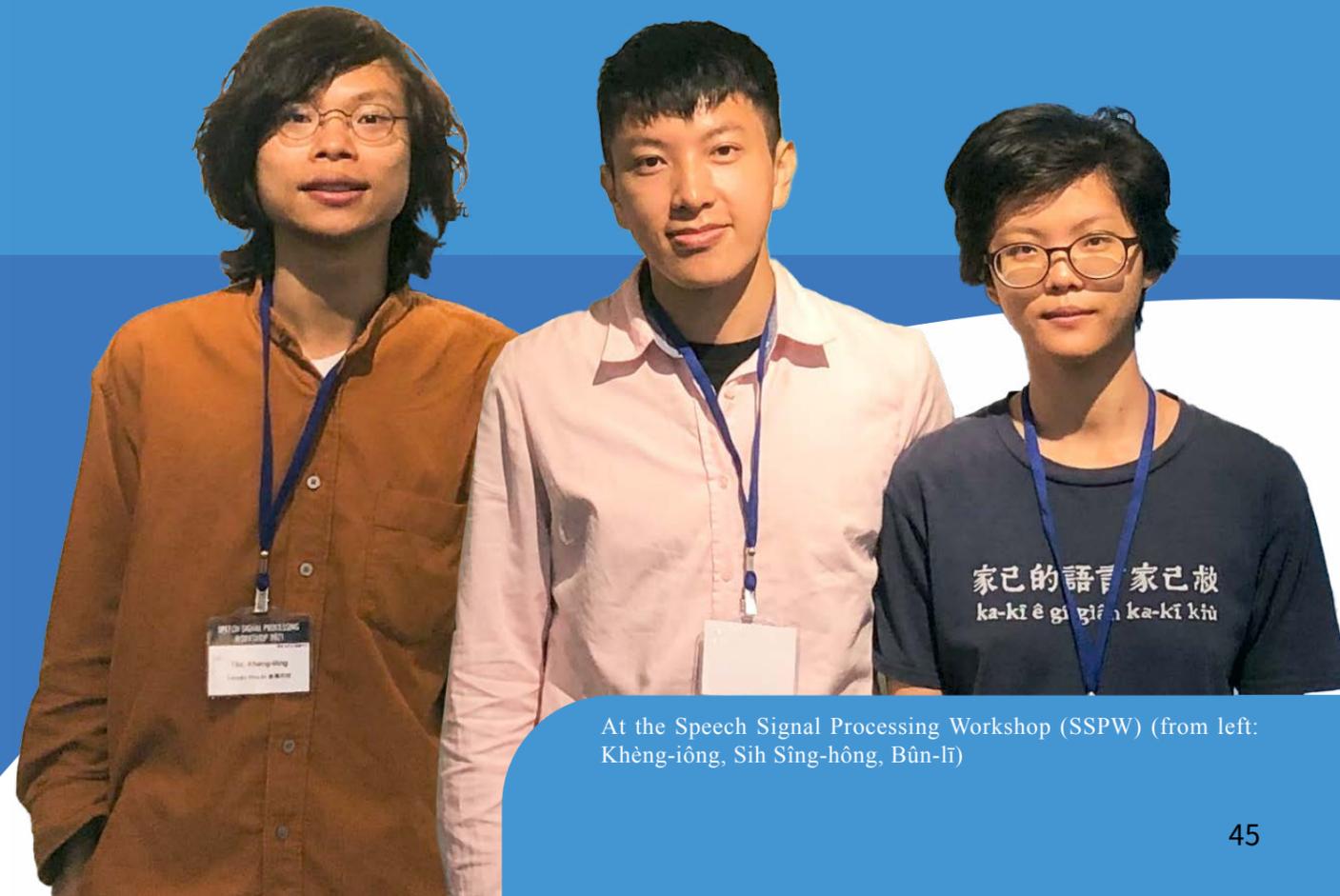


ÌTHUÂN KHOKI

Language Expression Brings People Closer

Explaining the rationale behind these Taiwanese languages services, CTO of ÌTHUÂN, Sih Sîng-hông, who graduated from the Institute of Computer Science and Engineering at National Yang Ming Chiao Tung University and has a background in natural language processing and linguistics, said that apart from his team’s expertise in AI speech recognition and synthesis, his belief in the “power of language” is the main motivation.

“Language is a tool for expressing emotions, and using it effectively can bring people closer together.” Sih, who is proficient in Taiwanese Hokkien and holds intermediate certifications in Amis, Truku, and the Hakka language, shared an anecdote about his experience in Yilan’s Nanao Township, where he greeted an Atayal child with the phrase “lokah su’ga?” (How are you?). After a moment of **astonishment**¹⁰, the child was pleasantly surprised and asked,



At the Speech Signal Processing Workshop (SSPW) (from left: Khèng-iông, Sih Sîng-hông, Bùn-lī)

do you know to speak my language?” The child then stayed with him and they visited the Taiwan-Austronesian Indigenous Words and Narrations website, to recite numbers in Atayal.

Believing in the power of language, in its early days, ÌTHUÂN focused on using AI technology as the core of their intuitive services, such as the Fire Dictionary of Indigenous Languages, and Taiwanese and Hakka input methods, to promote Taiwan’s languages. However, over time, when people asked what ÌTHUÂN was doing, Sih often found it difficult to explain, as he could only bring up AI and speech synthesis.

He then came to realize that in addition to technology, they needed to align their products with social and market demands. He emphasized that technology is not the problem since services like Siri and VoiceOver are currently applied to dominant languages such as English and Mandarin. The same can be done for indigenous languages. “The key is to ‘put people first.’ We should provide more comprehensive services like educational software and apps to assist indigenous language instructors and learners in communicating effectively with others.”

Starting from Everyday Life: Creating an “Amis Oral Practice App”

At the end of this year, ÌTHUÂN plans to launch a new app called “Amis Oral Practice App.” The team will translate 2,000 daily Mandarin conversations, such as “Have you eaten?” and “Where are you going?” into Amis. After having teachers proofread and record the translations, the data will be collected and processed for speech recognition and synthesis using AI.

Sih explained that the team can create a basic AI model for 42 different language varieties of the 16 indigenous peoples. Then, based on usage in various scenarios and contexts for each variety, they can fine-tune the model accordingly. Since Amis is currently the most widely spoken indigenous language, it will be their primary focus.

Furthermore, focusing on daily conversations is a result of extensive surveys conducted on language learners’ needs. They found that language should be integrated into daily life, such as conversing about one another’s well-being or work, which are usually the most common topics.

Therefore, in the future, the app will have the Amis translation for phrases like “What are you having for dinner tonight?” and “How have you been lately?” After learners repeat the phrases, the app will assess the accuracy and provide scores, allowing learners to continue practicing.

Sih intends to personally test the app to see if it can enhance Amis language learning and, in turn, influence others. “When people feel warm and touched speaking indigenous languages, they will have the motivation to learn. This will encourage others to take up the language as well, which will truly demonstrate the value of applying AI to language.”

Vocabulary

- | | |
|--|--|
| 1. Words, discover, language, discourse | 6. Recognition, bias |
| 2. Advance, advancement | 7. Learner |
| 3. Technology | 8. Bring (people) closer, approach |
| 4. Collect, accumulate | 9. Service |
| 5. AI, artificial intelligence | 10. Astonished, astonishment, stunned |

Example Sentences

- | | |
|---|---|
| 1. Technology | My son/daughter works at a technology company. |
| 2. Recognition, bias | Artificial intelligence (AI) can accurately recognize and synthesize speech of various ethnicities. |
| 3. Astonished, astonishment, stunned | When the child heard AI speaking the indigenous language, he/she was astonished. |



Coordinating with the sound engineer and voice artist (from left: Sound engineer Chen Lei, Instructor Lin Jin-Cherng, Sih Sîng-hông)

Taking Cue from “Taiwanese and Mandarin Karaoke” App: Leveraging Technology to Promote Sustainability of Indigenous Languages!

Kanakanavu



Expert Level



Listening to
Indigenous
Languages



Taiwanese
and Mandarin
Karaoke App

“Mom, you take care too!” Holding a smartphone, an old man enunciates the title of his favorite song in Taiwanese Hokkien (henceforth referred to as the Taiwanese language) into the app. Shortly after, the YouTube video of Mom, you take care too! **appear**¹s on the screen. His friends and family around immediately start singing along, celebrating a joyous moment.

This is the “Taiwanese and Mandarin Karaoke” app developed using AI speech recognition technology by a team led by Professor Lu Wen-Hsiang from the Department of Computer Science and Information Engineering at the National Cheng Kung University. Users only need to **say**² the name of a song to the app, whether in Mandarin or the Taiwanese language, and they can find their favorite song with an accuracy rate of up to 90%. The app currently contains over 10,000 Mandarin songs and 8,000 Taiwanese songs.

Believing in Power of Sound: Cultivating Natural Language Processing

“I developed these services for my father, who had a stroke and has been bedridden for many years ago. He is now 95 years old and can only speak the Taiwanese language,” Professor Lu revealed the reason behind launching these applications.

In fact, Professor Lu has long been dedicated to fields such as natural language processing, multilingual speech recognition, and machine translation. He always believes that “sound” is the fundamental way for people to express themselves. “Everyone starts with a ‘wawa’ sound when they are born, announcing their arrival using their voice. Expressing hunger or discomfort is also done through sound. Combining sound with one’s mother tongue is the most **intuitive way to express**³ emotions and thoughts.”

As sound can be used to issue commands and convey needs, Professor Lu understands that the combination of language, sound, and technology must go back to the original intention of meeting people’s needs. Services such as the “Taiwanese and Mandarin Karaoke” app, the “Multilingual Real-time Speech Translation” app, and the “Taiwanese Language Companion Robot” he developed are designed to meet physiological, psychological, and spiritual needs based on Maslow’s hierarchy of needs.

Nowadays, Taiwan’s society is facing the dual challenge of an aging population and a low birth rate. Furthermore, caregivers of the elderly are often foreign migrant workers. Nevertheless, communication between elderly people who speak the Taiwanese language, and migrant workers who speak the Indonesian or Vietnamese language is



Ru-Uun-Siang

Professor in the Department of Computer Science and Information Engineering at National Cheng Kung University, specializing in natural language processing, multilingual speech recognition, machine translation, and related fields, leading a team in developing services such as the Taiwanese and Mandarin Karaoke app, multilingual speech translation, and a Taiwanese language companion robot.



Minister of Culture, Shih Che (right) appreciating the team’s results at the “2023 International Mother Language Day - National Language Life Festival.”

undoubtedly challenging. The “Multilingual Real-time Speech Translation” app provides instant mutual translation between Mandarin, Taiwanese, Taiwanese Hakka (referred to as the Hakka language), English, and Indonesian. Elderly people can simply speak in the Taiwanese language to the app, and it will immediately **translate**⁴ their speech into the Indonesian language to communicate their needs to Indonesian caregivers. The “Taiwanese and Mandarin Karaoke” app targets the psychological level, i.e., **satisfy**⁵ing daily entertainment needs. Utilizing AI speech recognition and synthesis technology, the Taiwanese Language Companion Robot can chat with the elderly, provide health education, and lift their spirit.

As Mandarin, Taiwanese, and Hakka AI speech recognition, synthesis, and translation services continue to produce results, can AI also help preserve and revitalize Taiwan’s indigenous languages (referred to as indigenous languages)? In the future, will we get to see services like the “Indigenous Language Karaoke App,” “Indigenous Language Translation,” and “Indigenous Language Companion Robot”?

Web 2.0 Social Media Era: Easier Collection of Language Data

“Of course!” Professor Lu emphasized. First of all, the development of the Internet and technological advancements make it easier to collect language data. Especially in this day and age where people are immersed in Web 2.0 social **media**⁶, it has become relatively easier to produce indigenous language data. Self-media, such as YouTubers, can easily showcase themselves on the Internet and produce various content, including music and videos in indigenous languages, which serve as sources of language data for AI training and learning.

He specifically mentioned that although it may seem complex with 16 indigenous peoples and 42 language varieties, once a basic model is established, it can be further **fine-tune**⁷d and adjusted for different language variations. For example, the Indonesian and Malay languages share an 80% similarity. As such, Professor Lu used the Indonesian recognition system to test the Malay language, and it worked well.

Similarly, the Indonesian and indigenous languages belong to the Austronesian language family, so Professor Lu can **first**⁸ establish a basic AI model based on the Indonesian language, before gradually fine-tuning it for each variety. “So, the **key**⁹ still lies in

collect¹⁰ing language data. Once there are enough materials and indigenous language resources available, AI can proceed with further training and learning, and then applications and services can be developed based on users’ needs.”

Professor Lu believes that technological progress makes it easier to collect language data, and when combined with AI speech recognition, synthesis, and translation technology, it will undoubtedly contribute to the sustainable development of indigenous languages.



In September 2022, the team was invited to participate in the Tainan City Public Health Bureau’s “Health Carnival,” where they demonstrated the “Taiwanese and Mandarin Karaoke” and “Multilingual Real-time Speech Translation” app services.

Vocabulary

- | | |
|------------------------------------|--|
| 1. Appear, arrive | 6. Media (borrowed from Japanese) |
| 2. Say | 7. Fine-tune, adjus |
| 3. Intuitive way to express | 8. First |
| 4. Translate/translation | 9. Key |
| 5. Satisfy | 10. Collect, gather |

Example Sentences

- | | |
|-------------------------------|--|
| 1. Direct, go straight | Go straight this way and you will arrive at the church. |
| 2. Satisfy | Singing can satisfy the daily entertainment needs. |
| 3. Flip over, flipped | The corn isn’t dry yet, so don’t flip it over right now. |



How to Say¹ “No” in SaySiyat?

SaySiyat

Intermediate-High Level



Listening to
Indigenous
Languages



lalo' biyae'

Lalo' Biyae' (Yeh Mei-li) holds a Bachelor's degree from National Chengchi University, a Master's degree from the Institute of Linguistics, National Tsing Hua University, and a Ph.D. from the Department of English, National Taiwan Normal University. She is teaching at the NTHU Institute of Taiwan Languages and Language Teaching and authored books such as “Introduction to SaySiyat Grammar” and “Parts of Speech and Teaching in SaySiyat.”

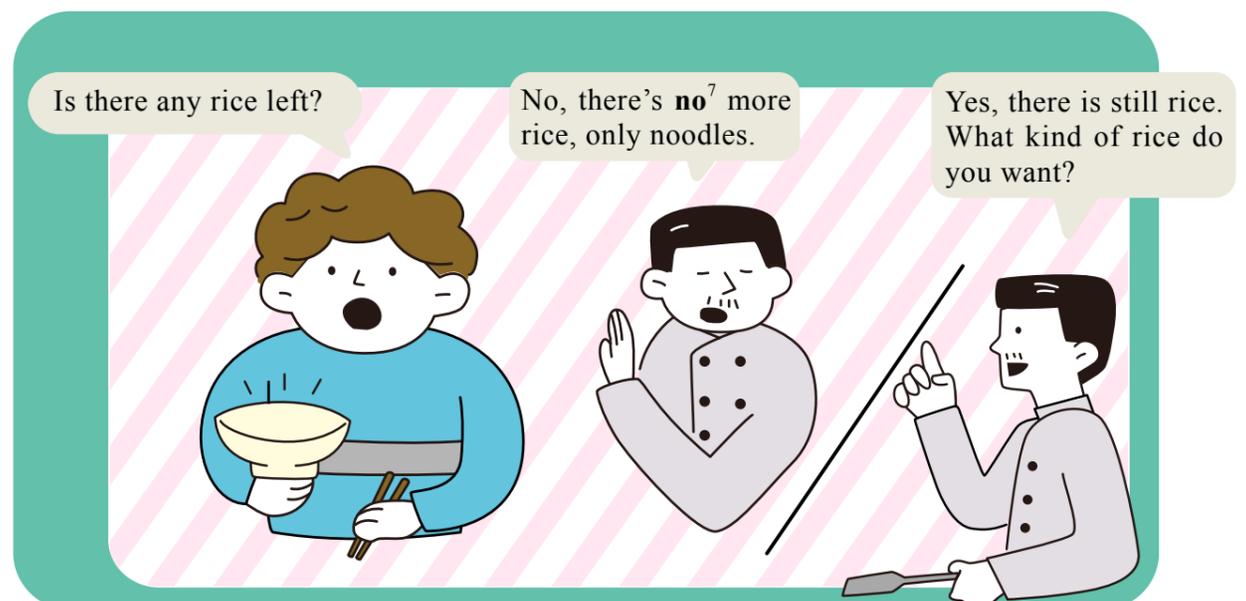
'okik

“'okik” is generally used in the context of stating a situation (e.g., not knowing), describing something (e.g., not fat), or contradicting a person or thing (e.g., not him).



'oka'

1. “'oka” indicates “**not having**”³ and is used for contradicting the existence of something (e.g., there are no vegetables in the refrigerator), or expressing the lack of possession (e.g., I **don't**⁴ have that book).
2. “'oka” is used as a negative **response**⁵ to a yes-no question. (**Note**⁶: When responding to yes/no questions, you can use “'ihi” for “yes” and “'oka” for “no.”)



'okay

“okay” is used for denying the **occurrence**⁸ of an event or action.

**kayni'**

“kayni” is used for indicating the lack of will or intent.

**'i'ini'**

“i'ini” is used for events, situations, or states that have not yet occurred or have not been completed.

**Vocabulary**

- | | |
|------------------------------|----------------------------------|
| 1. Say | 6. Note (for information) |
| 2. Hungry | 7. Don't have, no |
| 3. Not having/without | 8. Occurrence |
| 4. Do not | 9. Don't want |
| 5. Response, answer | 10. Have, eat |

Example Sentences

- Say**
The teacher told me not to waste time and to study hard.
- Answer**
Why didn't you answer the teacher?
- Occurrence**
The machine is not working. It's broken.

'izi'

“izi” is used for indicating prohibition, refusal of a request, or for advising against doing something.



Indigenous Language Learning Knows No Bound: Start Learning Now



Labuwan Rukai



Advanced Level



Listening to
Indigenous
Languages



Taiwan-Austronesian
Indigenous Words
and Narrations



Dredrase Paulithi

A Rukai. She previously participated in the part-time apprenticeship of the endangered language revitalization program, and successfully obtained the advanced certification in the Kongadavane Rukai language. She is currently serving as a nurse at the Maolin District Public Health Center.



Momoni Paulithi

A Rukai. She previously participated in the part-time apprenticeship of the endangered language revitalization program, and successfully obtained the advanced certification in the Kongadavane Rukai language. She is currently serving as a teacher in the Kongadavane Elementary School.

Even though Dredrase Paulithi and Momoni Paulithi, who are a pair of **sisters**¹, have already obtained advanced certification in Kongadavane Rukai language, they still find it quite meaningful to have participated in the part-time apprenticeship of the endangered language revitalization program.

Starting from August 2018, both sisters dedicated their time to the part-time **apprenticeship program**² every Monday to Friday from 6 to 9 p.m. to immerse themselves in two years of learning.

Interactive Use of the E-learning Website for In-class Learning, Pre-class Preparation, Post-class Revision

Looking closely at the learning journey of the sisters, regardless of which classes they were in, the “Taiwan-Austronesian Indigenous Words and Narrations” website (hereinafter referred to as the E-learning **web**³site) was considered an important learning tool and used interactively for in-class learning, pre-class preparation, and post-class revision purposes.

As explained by Dredrase Paulithi, a single sentence in a Taiwan’s indigenous language (henceforth referred to as indigenous language) can have several variations. For example, in a text entitled *The Rising Sun*, there could be multiple ways of expression. She would first look up the text and vocabulary on the website, and then ask the teacher **about**⁴ pronunciation, intonation, and usage in the class.

Momoni Paulithi, on the other hand, would first look at the scope of the intermediate-high, and advanced-level tests, before exploring the content of Sentence Patterns for middle and

The classes were organized in small groups, with students assigned to either Class A or Class B based on their abilities. Class A were for students with better listening and speaking abilities, aiming for obtaining advanced certification. On the other hand, Class B are for students aiming for obtaining intermediate-high certification, who start by enhancing their writing skills. However, the eventual goal for both classes was to obtain advanced certification.

high school students, Culture, and the Nine-level Materials on the website, to familiarize herself with vocabulary and sentence patterns. As for cultivating oral speaking skills, she explained that the E-learning website would intentionally slow down the speed when pronouncing vocabulary and reading example sentences, which might not necessarily reflect the normal speech intonation. As a result, she preferred to record the teachers’ speech and adjusted her own intonation and rhythm based on that. “But when no teacher is not around, the website becomes a helpful tool for understanding pronunciation.”

When the teaching materials on the E-learning website were limited, but they wanted to increase the difficulty level of learning content, they had to search for materials from their daily life. For example, they would structure their learning by themes, such as “body organs” and “surrounding environment,” which motivated teachers themselves to find out pronunciations of more internal organs.

What impressed the two sisters the most was the mutual learning between teachers and students, as well as the exploration of diverse learning methods. For instance, Class A allowed “student **teach**⁵ing,” where students could teach on the podium themselves and receive feedback from their peers. The “joint class” learning activities between Class A and Class B involved games like word quizzes, which not only added fun, but also yielded **result**⁶s in a subtle way.

The sisters emphasized that although it was physically and mentally **taxing**⁷ to allocate time for learning when they both had a full-time job,

Continuing Learning Beyond Classes: Expanding Indigenous Language Knowledge

For instance, they enrolled in the Indigenous Language Credit Class at the Indigenous Education and Research Center in Pingtung to expand their knowledge of grammar and linguistic structure. They also served as teachers in the indigenous language summer camp held by Kongadavane Elementary School to gain a deeper understanding of the language through different experiences.

Additionally, they visited cultural health stations to speak the indigenous language with elders. “Language is meant to be used and spoken. Even though the elders may find our speech funny, it still brings them joy and **reassurance**⁸ to see the younger generation learning the mother tongue.” Dredrase Paulithi candidly said that learning the indigenous language knows no bounds. To this day, she

fortunately, all the students were quite motivated to learn. They would therefore, encourage each other to improve their indigenous language proficiency together.

Recognizing the significant differences in terms of difficulty between the intermediate, intermediate-high, and advanced level tests, the two sisters would also proactively look for various resources in addition to classroom learning and utilizing the E-learning website for revision during their participation in the part-time apprenticeship.

insists on speaking the indigenous language every day and also works as an editor and proofreader of indigenous language teaching materials. “The key is to take action if you want to learn, not just thinking about it.”

Momoni Paulithi believes that a wide variety of resources are now available for learning indigenous languages. The E-learning website is a great tool. Meanwhile, there are language promoters, indigenous language teachers, and elders in the tribe as well. As long as one is **will**⁹ing and takes the initiative to converse in the indigenous language with others, the result will never **disappoint**¹⁰. “Learning is about taking action first before influencing those around you.”



My tips for learning indigenous languages



1. A wide variety of learning resources for indigenous languages are readily available. The key is to be motivated and willing to learn.
2. If you want to learn, start immediately. Even learning just one word a day can make a difference.
3. Make good use of the E-learning website for pre-class preparation, and post-class revision. During class, engage in conversations with your teacher and peers in the indigenous language.
4. Adopt a thematic learning approach, such as focusing on topics like “body organs” or “surrounding environment.”
5. Be brave in speaking indigenous languages. Encourage your family and friends to respond in indigenous languages as well.
6. If you’re interested in participating in the apprenticeship program, make sure you have basic proficiency in indigenous languages before joining.

Vocabulary

- | | |
|----------------------------------|-------------------------------|
| 1. Sisters or brothers | 6. Result |
| 2. Apprenticeship program | 7. Taxing |
| 3. Web | 8. Reassurance |
| 4. About, regarding | 9. Determination, will |
| 5. Teach | 10. Disappoint |

Example Sentences

- | | |
|--|--|
| 1. About, regarding | Regarding tribal affairs, the government is very much concerned. |
| 2. Suffer loss, at a disadvantage | With good intentions, you will never be at a disadvantage. |
| 3. Burden; responsibility | Preserving indigenous languages is the responsibility of each and every one of us. |

Online and Offline Immersive¹ Learning: Making Indigenous Languages Part of Life

Eastern Paiwan

◆◆◆◆◆
Advanced Level



Listening to
Indigenous
Languages



Taiwan-Austronesian
Indigenous Words
and Narrations



Happiness comes in pairs for Shi Yi-Hung this year (2023.) Not only did he just obtain a Master's degree from the Department of Social Development at National Pingtung University, after studying in the Indigenous Language Credit Class at the Indigenous Education and Research Center in Pingtung for an extended period, he also passed the advanced certification of the Northern Paiwan language, despite not being of indigenous descent.

"I consider myself very **fortunate**² in my journey of learning Taiwan's indigenous languages!" he said. He highlighted that apart from his enlightening mentor, a renowned indigenous language teacher, Kaleskes Malivayan from Jiaping Village in Taiwu Township, Pingtung, he also had the "Taiwan-Austronesian Indigenous Words and Narrations" website (hereinafter referred to as the E-learning website) as his greatest aid in his learning

journey. "Because I am not of the indigenous community and didn't grow up in the tribe, it was like starting from scratch for me. I had relatively limited access to indigenous language learning resources, so the E-learning website has been an important **platform**⁴ for me to develop a **language sense**⁵ and practice pronunciation."



Shi Yi-Hung with teachers, Kaleskes Malivayan and Kedre Kedr.

Building Language Sense, Cultural Knowledge Through Recitation, Writing

In fact, Shi made **steady**⁶ progress through the website's Alphabet, Picture Book, Reading and Writing, and Culture sections, which led him to consistently pass the elementary, intermediate, intermediate-high, and advanced levels of the Indigenous Language **Proficiency Certification Test**⁷. In particular, Malivayan emphasized the importance of "writing." She opined that through the process of **recitation**⁸ and writing, one can accelerate word recognition, **understand**⁹ pronunciation, and build a sense of language and cultural knowledge.

Shi further elaborated that as the difficulty levels of the elementary and intermediate

tests were similar, he would spend 30 to 60 minutes each day studying examination materials, including Sentence Patterns, Nine-level Materials, Everyday Conversations, and Reading and Writing sections.

As he prepared for the intermediate-high test, not only did the difficulty level increase significantly, the focus also shifted to speaking ability. Therefore, his teachers would require him to repeatedly read aloud, transcribe extensively, and memorize the online content from the E-learning website to build a language sense, as well as conversing with him in the

Teaching at Tjuru'aladju (Nanhe) Elementary School.



Shi Yi-Hung

Shi holds a master's degree from the Department of Social Development at National Pingtung University. He has learned Northern Paiwan as a **non-indigenous**³ person for over two years and has passed advanced certification in the indigenous language. He is on his way to becoming an indigenous language teacher.

indigenous language so that he could directly applied what he had learned. “It’s okay to make mistakes. My teachers would help me adjust, and the next time I would know how to say it correctly.”

During the preparation for the advanced test, Shi increased his study time to approximately two hours per day, immersing himself in the indigenous language. Apart from continuous use of the E-learning website, he revealed, most of his time was spent discussing various topics with teachers in the indigenous language during class.

For example, a teacher would ask him to write down his views on “identity issues.” After assisting him revising, the teacher would require him to memorize the entire passage. Subsequently, he would be tested randomly to cultivate his language sense and organizational skills. “In the advanced level, you’re expected to be able to speak and write to clearly express your own viewpoint.” It was through this cycle of practice that Shi’s **courage**¹⁰ in speaking the indigenous language was developed.



International Mother Language Day event

Speaking Indigenous Language with Elders, Peers More Constantly to Sustain Learning Motivation

In addition to learning online and attending classes, Shi also seized the opportunity to converse with the elders in the indigenous language and sought out other peers to discuss matters related to the indigenous language when he visited the cultural health station in the tribe for other courses on weekdays. He emphasized the importance of finding learning partners as language learning should be centered around communication. It did not matter if they came from different ethnic groups. “The key is to motivate each other and maintain learning momentum.”

In his journey of learning the indigenous language, unknowingly, Shi discovered that his friends and mentors who have had the deepest influence on him are all indigenous people. They are also the people who continuously strive to promote indigenous culture and language. This gave him an idea of “becoming an indigenous language teacher.” Gratefully, he said, “These people have made the indigenous language a part of my life. Through their selfless sharing and guidance, I also hope to pass on the culture and language I have come to know and learned.”



My tips for learning the indigenous language



1. Spend at least 30 to 60 minutes learning the indigenous language every day.
2. Set learning goals for each lesson, such as mastering essential vocabulary and understanding the content.
3. When reading, understand the main idea of the article first. Then, read the segmented paragraphs provided by the E-learning website in detail.
4. Make good use of indigenous language dictionaries and other tools to look up vocabulary.
5. Familiarize yourself with sentence structures by copying down and practicing sentences and phrases from articles.
6. Listen and repeat the lesson content repeatedly to become familiar with pronunciation, intonation, and comprehension.
7. Practice sentence making and speaking aloud.
8. Engage in conversations with indigenous language teachers and learning partners to use the language in daily life.

Vocabulary

- | | |
|--------------------------------------|---|
| 1. Immersive, habitual, daily | 6. Steady, practical |
| 2. Fortunate | 7. Proficiency Certification Test |
| 3. Non-indigenous, non-local | 8. Recitation |
| 4. Platform | 9. Have a clear understanding of, understand |
| 5. Language sense | 10. Courage |

Example Sentences

1. **Proficiency Certification Test**
Indigenous language proficiency certification.
2. **Platform**
We can listen to indigenous language stories through online platforms.
3. **Have a clear understanding of, understand**
Do you understand the precautions for taking medication?

Expanding Reach of Indigenous Language Learning through Livestream Co-learning

Tgdaya Seediq

◆◆◆◆◆
Advanced Level



Listening to Indigenous Languages



Indigenous Language Livestream Co-learning Platform

At 8:25 a.m. in the morning, Aking Nawi, a Seediq Tgdaya language teacher, looked at the clock, **punctually**¹ **turned on**² her computer, **go online**³, and accessed the Indigenous Language Livestream Co-learning Platform to start her online teaching session.

Aking Nawi used to be a physical education teacher at Nantou Puli Junior High School. After retiring, she devoted herself to the teaching of Taiwan's indigenous languages. She became an indigenous language teacher

Aking Nawi



Aking Nawi used to teach physical education at Nantou Puli Junior High School. After retirement, she has been serving as an indigenous language teacher since 2004, teaching the Seediq Tgdaya language. She joined livestream teaching in 2018.

officially in 2004, specializing in the Seediq Tgdaya language. Recognizing advancement in technology and increasing diversity of educational models, in 2018, she courageously embraced a new endeavor and joined the livestream co-learn⁴ing program organized

by the Council of Indigenous Peoples as an indigenous language teacher.

Greatest Advantage of Livestream: Ensuring Everyone's Right to Education

Regarding livestream teaching, Aking Nawi believes that as long as issues like unstable internet connection and hardware equipment can be overcome, the greatest advantage of livestreaming is its ability to cater to everyone's right to education, making learning accessible regardless of location. Even though she is based in Nantou, she can still impart knowledge to students in various places such as Taipei and Pingtung.

She fondly recalled her experience with the livestream co-learning program in Taoyuan, where a student felt frustrated during the learning process. The organizing school later encouraged the student to focus on learning

the indigenous language and **become**⁵ “an indigenous language teacher” in the future. After discussing and evaluating with the parents, the student, and the school, the principal and parents requested Aking Nawi to conduct distance teaching for the student. Surprisingly, the student became more interested in learning, and is still learning the indigenous language. Aking Nawi smiled and said, “**If it wasn't for**⁶ the livestream co-learning program in Taoyuan, **I wouldn't have**⁶ experienced this valuable teaching experience.”

However, there are pros and cons to everything. Livestream teaching also has quite a few challenges that need to be overcome. As a teacher, Aking Nawi has to learn how to effectively make presentations and use tools such as Wordwall to enliven her teaching and familiarize herself with various software operations. More importantly, she often has to contemplate how to handle students' **learning situations**⁷ so that they can stay focused on the lesson.



Tips for indigenous language teaching

1. Make good use of presentation tools, Wordwall, etc., to make teaching more engaging.
2. Collaborate with accompanying teachers for pre-class and post-class communication.
3. Tailor teaching plans according to specific problems.
4. Participate in workshops and activities to enhance teaching skills.
5. Discuss and exchange ideas with other teachers for mutual improvement.

She once encountered a mixed-age livestream class, where students of different ages and learning abilities were all in the same class. As such, she had to think about how to pay attention to students of different levels. She also had to think about how she could monitor the learning process and teaching effectiveness when she could not meet students face-to-face. To address these **troubling issues**⁸ in her past experiences, over the years, through reflection, participation in capacity-building workshops, and discussions with different teachers, Aking Nawi comes to a conclusion that understanding students' learning levels and appropriate class grouping should be the main teaching considerations.

In addition, during “oral language teaching,” although she could see the students' lip movements for pronunciation, critical sounds like “t” and “d,” “x” and “h,” “q” and “k,” can still be unclear when transmitted electronically. In such cases, Aking Nawi would ask students to not only speak, but also write down what they heard to ensure that they could truly

Gathering Ideas with Other Teachers to Empower Teaching

During the pandemic, what made Aking Nawi particularly happy was her experience in guiding a student at the Indigenous Language Taipei Learning Center who had a linguistic background and was proficient in five languages. The student was actually a high school English teacher. Although teaching the student Seediq, Aking Nawi also gets to learn from the teaching process as well. “Brainstorming with other teachers can enhance teaching abilities!”

remember the spelling and pronunciation. **Before the lesson ends**⁹, she will ask students to say which words and sentences they have learned that day to encourage speaking practice. She will also guide students to use various resources such as audio and video files and online dictionaries on the “Taiwan-Austronesian Indigenous Words and Narrations” website according to their own levels to strengthen independent learning.

The **accompanying**¹⁰ teachers in the livestream co-learning classes also provided great assistance. Aking Nawi pointed out that compared to the on-screen Indigenous language teachers, some students rely more on the accompanying teacher next to them. Therefore, both parties are required to devise a learning plan before class and review the class process afterwards. Sometimes, if an accompanying teacher becomes too involved in the class and answers questions more eagerly than the students, Aking Nawi would encourage the students not to lose to the teacher and “motivate them so as to stimulate their learning motivation.”

The student was adept at using various online resources and tools, and often finding new information on the Internet before seeking her guidance. Through their interactions, both the student and Aking Nawi gained different insights into indigenous language teaching. “We often encourage students to utilize digital resources to learn indigenous languages. However, facing with the new livestreaming model, teachers also need to continue learning to create excellent teaching quality and outcomes.”



Students learning through the livestream co-learning platform

Vocabulary

- | | |
|----------------------|--|
| 1. Punctually | 6. If it wasn't for..., I wouldn't have |
| 2. Turn on | 7. Learning situations |
| 3. Go online | 8. troubling issues |
| 4. Learn | 9. Before the lesson ends |
| 5. Become | 10. Accompanying |

Example Sentences

- Go online**
Go online to connect to the livestream platform is necessary for teaching.
- Learn**
Don't miss out learning time to see the learning scope.
- Accompanying**
Having an accompanying teacher to assist in learning is something that makes students happy.

Enhance Joy of Learning Taiwanese Hokkien with Apps, Animation, Music Videos

Kasavakan Puyuma

◆◆◆◆◆
Advanced Level



Listening to
Indigenous
Languages

DaiDai
Friends
Facebook

DaiDai
Friends
Youtube

DAIDAI FRIENDS



When you go on the “DaiDai Friends” channel on YouTube and watch an animation series called Taiwanese Cuisine Rescue Team, join the main characters such as A-kng the **Dog**¹, A-soat the Sheep, A-goat-á the Cat, and A-chháu the Rabbit as they solve various missions. Before you know it, you would be able to speak Taiwanese Hokkien (hereinafter referred to as the Taiwanese language) and get to know the Taiwanese culture.

DaiDai Friends is an original IP product **created**² by LiRise Games in 2016. With delight, the designer of DaiDai Friends, Wang Shao-Yu, introduced LiRise Games. Established in 2011 and based in Tainan, LiRise Games focuses on software development in business, education, and **gaming**³. When DaiDai Friends was first designed, it was an educational app for Mandarin and English learning. However,

as the market was already saturated with similar learning resources, it did not have **much product differentiation**⁴.

In contrast, digital resources for learning the Taiwanese language were relatively scarce. Consequently, in 2018, LiRise Games decided to shift its focus to Taiwanese content, releasing the first Taiwanese audiobook app, “DaiDai Storybook.” This marked their official transformation into a children’s brand dedicated to creating content for “Taiwanese gín-á (children).”

Wang chuckled, revealing that after creating the audiobook app, they discovered that some parents did not like their children staring at a small phone screen for an extended period. Therefore, the team expanded the character features of Dai Dai Friends, crafting animated videos with plots and characters that could be played on a larger screen. “Because there are many characters in Dai Dai Friends, we can create plots from various aspects and themes like festivals and food, thereby achieving our goal of ‘accompanying children to learn a language happily.’”



Wang Shao-Yu

With a background in software engineering and industrial design, after joining LiRise Games, Wang designed the IP product, Dai Dai Friends, and started writing stories, producing animations, and learning the Taiwanese language.

Currently, DaiDai Friends targets children under ten years old and has **release⁵** various digital resources **one after another⁵**, such as the audiobook app “DaiDai Storybook,” an animated series Taiwanese Cuisine Rescue Team, a children’s music video (MV) series in the Taiwanese language Let’s Sing Together, and a short film series DaiDai Good Friends.

DaiDai Friends also collaborates with publishers to make the content available on electronic platforms as supplementary teaching materials for teachers. During the COVID-19 pandemic when **distance learning⁶** was implemented, some teachers used video clips from Taiwanese Cuisine Rescue Team for their lessons.

Wang believes that compared with hardcopy books which only contain text and 2D images, multimedia materials such as audio apps, videos, and MVs will increase interactivity and fun. “For students, different mediums **complement each other^{7 8}**, making learning more enticing.” In addition to the animated series, professional consultants have also been invited to host the Taiwanese language teaching

units for Dai Dai Friends, allowing students to directly observe the teachers’ mouth movements to learn pronunciation.

After establishing comprehensive online learning resources, the next step for LiRise Games is to do the opposite and publish physical picture books for Dai Dai Friends. “It’s actually about completing the product line of DaiDai Friends so as to create a fusion of virtual and real materials.” As explained by Wang, some parents do not want their children exposed to electronic products such as smartphones and tablets at an early age. Therefore, picture books are mainly for catering to the needs of young children.

The upcoming picture book not only features interactive **treasure hunt⁹** games, but also includes QR codes of Dai Dai Friends videos. Parents and children **who are interested¹⁰**, can scan and watch the content. The most important thing is to make both online and offline resources readily accessible to achieve the best learning results.



Animation, Taiwanese Cuisine Rescue Team



Newly released picture book micro-animation series, A-kng the Dog's Home



Dai Dai Friends team photo. The first on the left is the Taiwanese language consultant Chen Li-Wen, and the second from the right in the front row is Patty Hong, a host on PTS Taiwanese Channel.

Vocabulary

- | | |
|-------------------------------------|---|
| 1. Dog, tracking | 6. Distance learning |
| 2. Created | 7. Complement each other |
| 3. Gaming | 8. Complement each other, support each other |
| 4. Not much differentiation | 9. Treasure hunt, let... search for |
| 5. Release one after another | 10. Who are interested, who want to do |

Example Sentences

- Created**
Who created that audiobook?
- Treasure hunt, let... search for**
My favorite game to play is a treasure hunt.
- Who are interested, who want to do**
There are already many people who are interested in watching such videos.

Indigenous Language! Starting from One's Own Life— O.S.T-Offspring Tayal's Unique Music Style Combines Indigenous Language with Catchy Ballads

Ke na cquliq Tayal
◆◆◆◆◆
Advanced Level



Listening to Indigenous Languages



“qnituh mu, wagi mu, siyan misu calay calay” (My star, my sun, I really like you very much).....

On stage, the vocal group “O.S.T-Offspring¹ Tayal” was singing the first song, “Really Like” in the Atayal language from their album, This is Not an Original Soundtrack, This is Offspring Tayal. The lively², cheerful melody with rich and layered harmonies captivated the audience, who also “really liked” their performance.

O.S.T-Offspring Tayal is composed of three members: Kaljaljuy, Yaway Emiy and Lowking. O.S.T. stands for “Offspring Tayal,” which also carries the meaning of “original soundtrack.” Last September, the group released their first



Lowking
Member of O.S.T-Offspring Tayal, of Truku descent, responsible for harmony³ arrangement and serving as the head of recreational activities within the group.

Yaway Emiy
Member of O.S.T-Offspring Tayal, of Atayal descent, responsible for lyrics writing and harmony arrangement, serving as the indigenous language representative within the group.

album entirely in the Atayal language, featuring diverse genre⁴s such as ballads, R&B, and K-pop, which have been well received by their fans.



Kaljaljuy
Member of O.S.T-Offspring Tayal, of mixed Atayal and Paiwan descent, responsible for music production, arrangement, and nagging.

Interesting⁵ly, although it was an all-Atayal album, the trio’s proficiency in the indigenous language is actually “quite average.” Yaway Emiy, who is of Atayal ethnicity, wrote all the lyrics for the album and jokingly described her proficiency was only at the intermediate level. As someone of mixed Paiwan and Atayal descent, Kaljaljuy’s proficiency fell slightly behind Yaway Emiy’s. As for Lowking, a Truku, “his proficiency in both the Atayal and Truku languages is only a five!”

Since their proficiency in the indigenous languages was not great, why did they still want to write music in their own indigenous language? Kaljaljuy **explain**⁶ed that all of them were children who grew up in the city and wanted to get to know their hometown. However, if they did not even know their own indigenous language, it would seem somewhat unreasonable to portray the mountains, seas, and ancient tunes of the indigenous people in their music.

So they **thought**⁷, why not started with their own lives and blended the Mandarin and Korean pop music they usually listened to with their own indigenous language? They wanted to see if they could **spark**⁸ something unique. “We still don’t know much about our tribal culture, but that’s okay. We can start by blending our daily lives with our indigenous language.”

This approach indeed allowed the members to gain more knowledge and insights into their indigenous languages and tribes. Yaway Emiy revealed that when she was writing the lyrics, she first wrote them in Chinese before translating them into the indigenous language. She sought assistance and guidance from her uncle, who is an indigenous language teacher, to refine the translation. “Initially, I only planned to write one song. But as I went go, I became more interested and ended up writing ten songs.”

Since the release of the album, all three members have received various feedback. Kaljaljuy admitted that it took her some time to find Yaway Emiy and Lowking, who “did

not want to overthink” and just wanted to play music. After the album was released, many young people from indigenous tribes approached her, saying, “Hey, I thought you were going to do **chants**⁹ and ancient tunes and that was why I didn’t participate. I didn’t expect you to create a pop music album in indigenous language. It sounds really fun!” Kaljaljuy is delighted to see that because of this album, young people in the tribe are inspired to imagine more possibilities for indigenous languages and music.

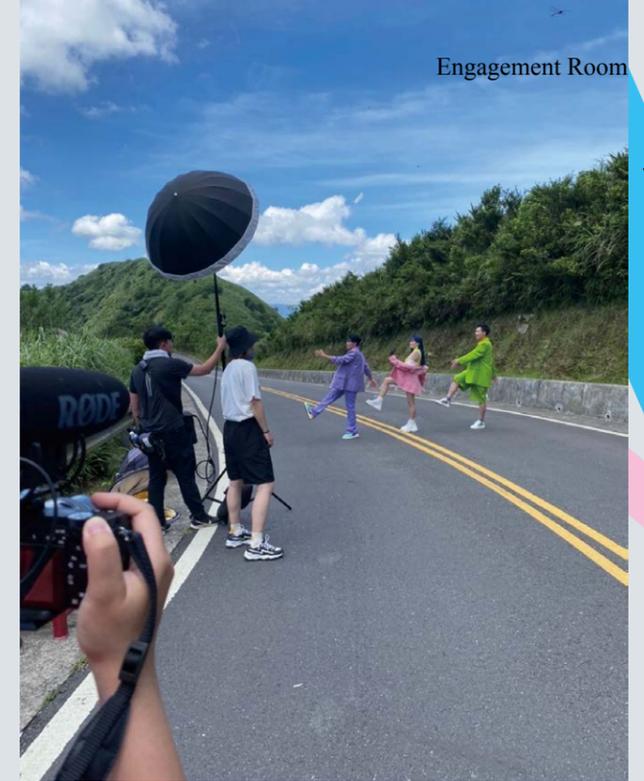
Yaway Emiy discovered that almost every family in the tribe had a copy of the album in their cars, and almost everyone can hum along to a few lines, and some would even share with her which song they particularly liked.

It was even more incredible for Lowking—his father, who usually did not listen to indigenous music, now listens to the album “on loop” every day. He also came to know how to create an album in his own language and decided to reclaim his native tongue and learn the Truku language from scratch.

Currently, Lowking is preparing an EP (mini album) in Truku. To write the lyrics and music, he often takes the train back to his tribe in Hualien during the day to seek advice from the elders and rushes back to Taipei at night to work.

In addition to Lowking’s EP, O.S.T is also preparing for an online concert and a group EP. Kaljaljuy explained that they chose to make an EP instead of an album because after O.S.T gained attention, they realized that they could

not rush into things. Instead, they needed to pay more attention to the use of the indigenous language and the **musical style**¹⁰. They wanted to carefully craft unique works. “However, we believe that by the time we release the fifth or sixth album, we will truly be able to sing the ancient tunes of the indigenous people, the mountains, and the sea, and become veterans in our own right in the mountains!” the trio declared proudly.



Vocabulary

- | | |
|---|------------------------------------|
| 1. Offspring/descendants of the Atayal | 6. Explain |
| 2. Lively, cheerful | 7. Thought, idea |
| 3. Harmony | 8. Stimulate, spark |
| 4. Musical style, genre | 9. Chants and ancient tunes |
| 5. Interesting, fun | 10. Musical style |

Example Sentences

- | | |
|---|---|
| 1. Offspring/descendants of the Atayal | As descendants of the Atayal, discipline of your hearts and do not live life recklessly. |
| 2. Chants and ancient tunes | The chants and ancient tunes are the legacy of Atayal linguistic wisdom, presented through recitation or singing. |
| 3. Musical style | For indigenous language teaching, teachers can also use different musical genres and style as a medium for their lessons. |

Indigenous Languages, Culture, Spirituality Naturally Conveyed Through Films

Ke na cquliq Tayal



Advanced Level



Listening to Indigenous Languages

At the 59th Golden Horse Awards¹ ceremony last year, “GAGA” was definitely one of the most high-profile films. The story depicts how a three-generation family in an Atayal village in the mountains is affected by conflicts caused by clashes of values related to elections and foreign cultures. The film won the awards for Best Director and Best Supporting Actress at the Golden Horse Awards. The **film director**² of “GAGA” is Laha Mebow, an Atayal from Nanao, Yilan.

Laha Mebow, who majored in film making at the Department of Radio, Television and Film of Shih Hsin University, originally wanted to retake her college entrance exam. However, after watching various films at the Taipei Golden Horse Film Festival during her freshman year, and working as a clapper loader on-set for a French-Chilean director, Raoul Ruiz, during her sophomore year, she gradually felt the magic of film. “As a clapper loader, everyone has to wait for you to finish clapping the slate and step out of the frame before they can start performing. That gave me a **sense of pride**³.”

Gradually Establishing Identity After Joining TITV

After graduating from university, in addition to working with renowned directors such as Chang Tso-Chi and Tsai Ming-Liang, Laha Mebow gained experience in the pre- and post-production processes, as well as the promotion effort in the film industry. She also worked at Taiwan Indigenous TV (TITV). Interestingly, despite being of Atayal descent, Laha Mebow moved to Taichung at the age of four and had no indigenous friends around her, nor did she have the opportunity to speak any of the Taiwan’s indigenous languages (henceforth referred to as indigenous languages). Therefore, her **sense of identity**⁴ and **understanding of**⁵ indigenous **culture**⁵ gradually developed only after she joined the TV station.

She mentioned that her colleagues at the TV station all had tribal names. When she asked her mother how to choose a name, she found out that she had **inherited**⁶ her grandmother’s tribal name, “Laha,” from birth. As the Atayal people follow a “patronymic naming system,” she added her father’s name, “Mebow,” and thus established her own tribal name, “Laha Mebow.” When her supervisor asked her to



Laha Mebow. Taiwanese film director, of Atayal descent from Nanao Township, Yilan County, known for works centered around indigenous themes. In 2022, her film “GAGA” won the Best Director award at the 59th Golden Horse Awards, making her the first Taiwanese female and the first indigenous person to receive this honor.

Infusing Atayal Spirit into Work, Igniting Curiosity Among Audience

something about her hometown Nanao, she took the opportunity to deepen her understanding of the tribe's culture and **history**⁷, which later became **nourishment**⁸ for her subsequent works.

As a director, Laha Mebow has made three feature films to date, namely "Finding Sayun," "Hang in There, Kids!," and "GAGA." "Finding Sayun" unveils the mystery of "Sayun's Bell," while "Hang in There, Kids!" focuses on the tribe from a child's perspective. Although the first two films were set in the tribe, it was not until "GAGA" that Laha Mebow truly incorporated more indigenous language elements into her film.

For instance, the word "GAGA," the core element that runs through the entire film, means "norm" in the Atayal language and holds significant spiritual importance within the tribe. The film cast amateur actors, Kagaw Piling to play the grandmother, and Wilang Lalin to play the eldest son. They deliver almost all their lines in the indigenous language. "Among contemporary indigenous films, 'GAGA' has the highest proportion of indigenous language usage," she said.

Laha Mebow further explained that a film, as a medium, is a process of translation, intending to help the audience discover similarities and differences among themselves. While "GAGA" revolves around "family," which easily **resonate**⁹s with the audience, infusing the "GAGA" spirit exclusive to the Atayal people whets curiosity.

She jokingly said that although recently, some people at international film festivals pronounced "GAGA" the way they say Lady Gaga, "that's okay too. I would explain that GAGA is the rule and law of the Atayal people and its underlying significance, which means the audience is once again exposed to the issues facing indigenous peoples currently. There's not much of a barrier to understanding there."

For Laha Mebow, film making is her favorite way to **convey**¹⁰ her cultural heritage. She hopes that all her future works can naturally let the audience immerse themselves in her worldview and allow everyone to savor the uniqueness and beauty of the indigenous culture.

Stills provided by: CPT Entertainment Co., Ltd.

"GAGA" stills



Shooting location of "GAGA": Quri Sqabu (Siyuan Pass)

Vocabulary

- | | |
|------------------------------------|-----------------------|
| 1. Awards | 6. Inherit |
| 2. Film director | 7. History |
| 3. Sense of pride | 8. Nourishment |
| 4. Sense of identity | 9. Resonate |
| 5. Understanding of culture | 10. Convey |

Example Sentences

- | | |
|-----------------------------|---|
| 1. Film director | A film director is the overall supervisor of the filming process, who provides guidance based on the script and leads the entire film crew. |
| 2. Sense of identity | One's expression of personal characteristics is part of one's sense of identity, which is also known as self-identity. |
| 3. Nourishment | Fertilizer refers to substances that provide nourishment to plants or improve the soil. |

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Issuing Agency: Indigenous Languages Research and Development Foundation

Address: No. 63, Sec. 1, Roosevelt Rd., Zhongzheng Dist., Taipei City 10093

Telephone: 02-2341-8508

Website: <http://www.ilrdf.org.tw/>

Publisher: Mayaw•Kumud

Editor-in-Chief: Lowking Nowbucyang

Project Coordinator: Maital Manghuhu Tanapima、Aman Fuyan

Executive Coordinator: Decent Idea

English Translation by: Linguitronics

Publication Date: November 2023

Price: NT\$240

Funding Agency: Council of Indigenous Peoples

ISSN 3005-4761



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Issue 3

*Using Technology to Promote Multilingual Learning:
Challenges and Opportunities*



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