

OPEN LEARNING EXCHANGE NEPAL



2023ANNUAL REPORT







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BIDDING FAREWELL TO AN EVENTFUL YEAR

OUR JOURNEY OF INNOVATION AND INCLUSION IN 2023

In 2023, as we continued our 16-year journey of integrating technology into Nepalese classrooms, we made significant strides in seven projects, supported by three major partners. Our efforts enhanced the educational landscape of Nepal, ranging from developing animated children's stories sourced from diverse communities on our Hamro Ramailo Kathaharu platform (*katha.olenepal.org*), to updating our E-Paath platform (*epaath.olenepal.org*) with curriculum-aligned interactive lessons. Our comprehensive ICT in Education programs reached from lush foothills to remote high-altitude settlements over 4000 meters, deploying offline servers and essential computing infrastructure, accompanied by targeted teacher training and stakeholder engagement. This year, specialized accessible content development, and training programs extended our impact to learners with hearing and visual impairments from multiple schools.

We expanded our offline server network in response to over 50 new requests from schools outside our projects, highlighting the growing recognition of our servers as crucial educational resources. In 2023, we deployed 103 servers across 40 districts, benefiting over 50,000 students and increasing our national tally to over 1700 servers. Significant upgrades to our E-Pustakalaya digital library (pustakalaya.org) improved user experiences and web accessibility, while our website's (olenepal.org) transition to a more secure platform and enhanced data analysis mechanisms provided deeper insights into our learning resource usage.

This year also saw us introspect and realign our strategic priorities, focusing on streamlining our efforts to amplify impact. Reflecting on our past work, we've set a forward path emphasizing innovation, inclusivity, and the continuous enhancement of our educational tools and programs.

Our heartfelt gratitude goes to the local communities, students, teachers, partners, and the global network of OLE Nepal supporters who have been integral to our mission. Your unwavering support propels our mission to transform education in Nepal.

This report encapsulates our 2023 milestones and key initiatives. We eagerly anticipate continuing this transformative educational journey and express our deepest thanks to the OLE Nepal family for your enduring support and partnership.





2023 AT AGLANCE

PROJECTS AND PARTNERS

Overview of 2023 projects, duration, and partners.

EMPOWERING EDUCATION ACROSS NEPAL'S DIVERSE TERRAIN

Map showing districts reached in 2023 through direct field related activities across all projects in 2023.

INFUSING TECHNOLOGY IN CLASSROOMS ACROSS NEPAL

Summary of schools reached, equipment deployed, students impacted, and teachers trained across all projects in 2023,

EXPANSION OF OUR OFFLINE SERVER NETWORK

Map showing districts and students benefited by new server installations and upgrades of existing servers in 2023.

OUR OFFLINE SERVER

Overview of the comprehensive digital learning and edutainment resources hosted on our offline servers.

E-PUSTAKALAYA AND E-PAATH USAGE ONLINE

Overview of 2023 usage analytics for E-Pustakalaya and E-Paath platforms online.

FINANCIALS

Overview of 2023 revenue, expenses, and distribution of expenses.

PROJECTS AND PARTNERS

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2023 PROJECTS AND PARTNERS SUMMARY

PROJECT NAME	ABBREVIATION	PARTNER	DURATION
Digitally Enhanced Early Reading Program	DEER	ONGD-FNEL	April 2019 - December 2023
STEAM Ahead	STEAM	PLAN INTERNATION NEPAL	April 2021 - May 2024
Digital Content Update And Tablet Support Program	DUTP	KDDI FOUNDATION	September 2022 - August 2023
Enhanced Accessibility In Learning	EAL	KDDI FOUNDATION	September 2022 - December 2023
Robotics And Programming Support	RPS	KDDI FOUNDATION	September 2022 - August 2023
ICT In Basic Education	ICTBE	KDDI FOUNDATION	January 2023 - June 2024
Digital Learning Project	DLP	ROTARY CLUB OF TRIPURESHWOR	August 2023 - January 2025
Equity And Inclusion In Education	EIE	PLAN INTERNATIONAL NEPAL	October 2023 - September 2024
E-Pustakalaya Updates And Misc. Projects	ЕРМР	LOCAL SUPPORT	N/A - Ongoing Work

GOVERNMENT AND COMMUNITY PARTNERS

Our sincere appreciation goes to our government collaborators, including the Centre for Education and Human Resource Development, and local governments, notably Lalitpur Metropolitan City and 6 local levels in Dolpa district, as well as other community-level stakeholders throughout Nepal. Their support has been crucial in the implementation and success of our programs and activities

OTHER MAJOR PARTNERS

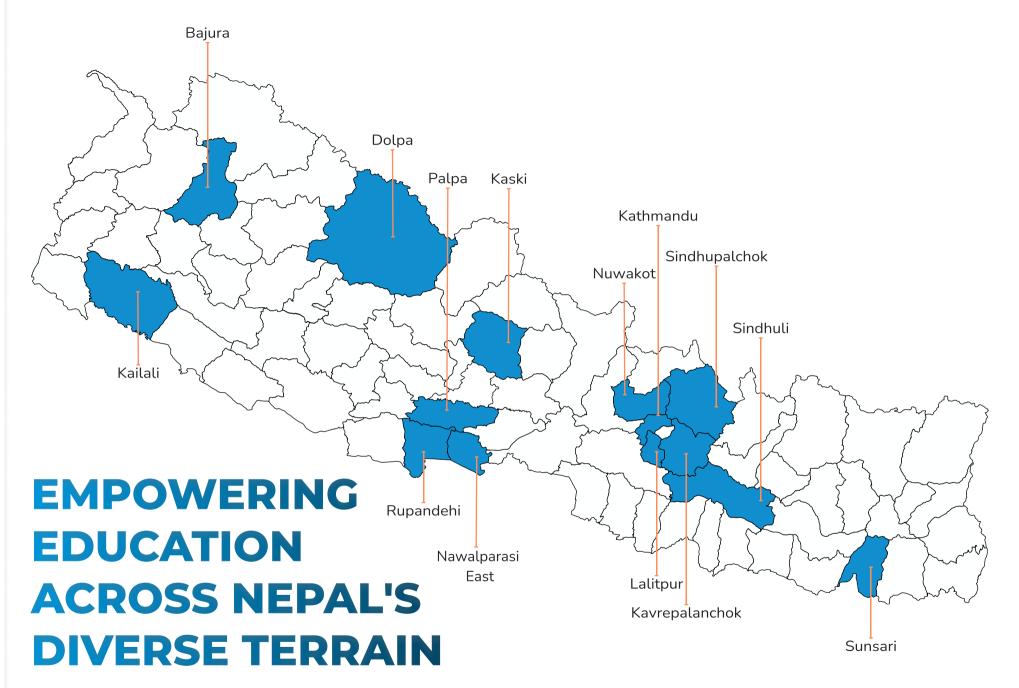
Our impact across current and past projects would not have been possible without our collaboration with various partners over our 16 years of operation. Thank you to all our collaborators who have helped us develop offline server technology, build our comprehensive collection of learning resources, and extend our work with public schools and local communities across Nepal.

Air Asia Foundation, Children of the Mountain, Embassy of Denmark, Embassy of Finland, Good Neighbors International Kids of Kathmandu, MIT-JWEL, One Laptop Per Child, Open Learning Exchange, UNICEF, UNWFP, Winrock International

E-PUSTAKALAYA PARTNERS

British Council, Deerwalk Learning Center, Digital Himalaya, India Development and Relief Fund, Let's Read, Maitri Trust UK, Nepal Library Foundation, Nepal Pragya Pratisthan, Practical Action, Rotary Club of Kathmandu, Room to Read, Wildlife Conservation Nepal



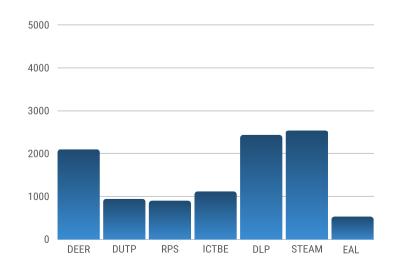


In 2023, our on-site educational outreach initiatives across various projects benefited 50 schools across 14 districts, reaching diverse communities across Nepal's diverse landscapes from the foothills to some of the highest human settlements at above 4000 m altitudes. Supported by diverse partners, our initiatives included infrastructure support including deployment of offline servers for uninterrupted access to comprehensive digital learning resources, as well as comprehensive teacher training programs. This year also saw innovative content development and teacher training programs in schools catering to hearing and visually impaired learners.

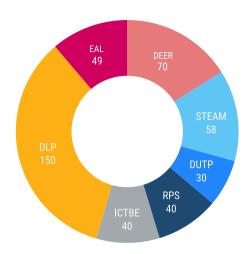
INFUSING TECHNOLOGY IN CLASSROOMS ACROSS NEPAL

Across all our projects in 2023, we deployed 360 computing devices, 15 solar battery systems, and 38 offline servers across 50 schools in 14 districts, providing access to learning resources to over 10,000 students directly. Around 350 teachers received comprehensive ICT in Education trainings, empowering them with the skills to integrate technology in the teaching-learning process, including the use of accessible learning tools. We also engaged with local stakeholders including representatives from local governments and community members for long term sustainability of our work.

STUDENTS BENEFITED BY PROJECTS IN 2023



TEACHERS TRAINED BY PROJECT IN 2023



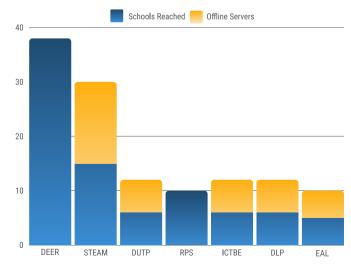
EQUIPMENT DEPLOYMENT



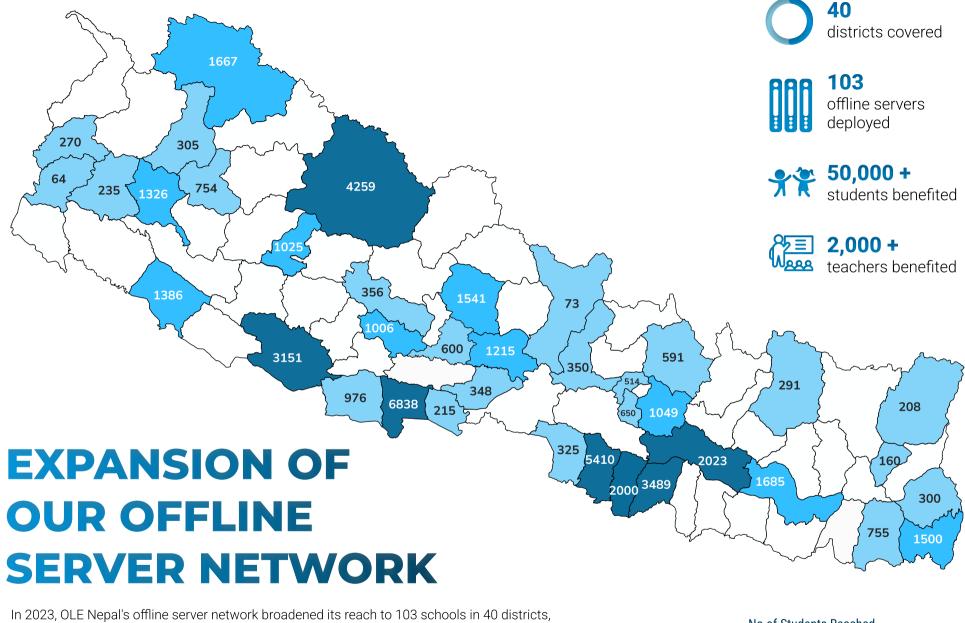


15 Solar Battery System

SCHOOLS REACHED AND OFFLINE SERVERS DEPLOYED BY PROJECT







In 2023, OLE Nepal's offline server network broadened its reach to 103 schools in 40 districts, totaling over 1700 servers. With 38 new servers deployed through our projects, and the remainder installed upon school requests, we've strengthened digital education for over 50,000 students and 2,000 teachers. Our servers offer uninterrupted access to extensive educational content, including our E-Pustakalaya and E-Paath, and resources like Wikipedia, ensuring every student has the opportunity to learn, regardless of their location.







F-PAATH



MATH & SCIENCE

GAMES

Fun Conceptual

CONNECTING **LEARNERS EVERYWHERE**

OUR OFFLINE SERVERS OVERCOME CONNECTIVITY BARRIERS TO BRIDGE THE DIGITAL DIVIDE

















Our offline servers are comprehensive educational hubs, providing access to a wide array of both OLE Nepal-developed and external digital learning resources. These servers are crucial in ensuring uninterrupted educational access in remote and lowconnectivity areas across Nepal.

Our digital learning resources are freely available online and can also be accessed offline through our cost-effective, low-power servers connected to routers. This setup facilitates the use of our resources on various devices, including desktops, laptops, Raspberry Pi computers, and mobile tablets



















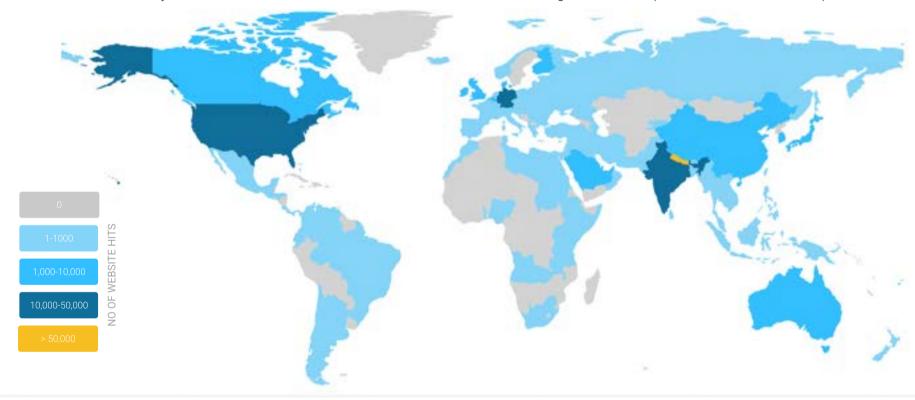


E-PUSTAKALAYA USAGE ONLINE



2023 WEBSITE HITS BY COUNTRY

E-Pustakalaya's online reach extends far beyond its primary Nepali audience, engaging thousands within the country and hundreds internationally. Although tailored for learners and educators in Nepal, its multilingual and diverse content, including local resources, has made it a valuable educational platform for a global user base. In 2023 alone, E-Pustakalaya saw a total of over 1.33 million hits, with about 44% of hits coming from within Nepal and 56% from outside Nepal or unknown locations.



2018-2023: 5 YEAR STATS

E-Pustakalaya is a comprehensive digital library hosting not just documents, but also audio and videos. In the period of 5 years from 2018-2023, E-Pustakalaya engaged over 14,000 users globally, saw over 2.2 million document views, experienced 130,000 audio streams, and attracted 14,000 video plays, showcasing its widespread appeal and diverse content reach.











Video

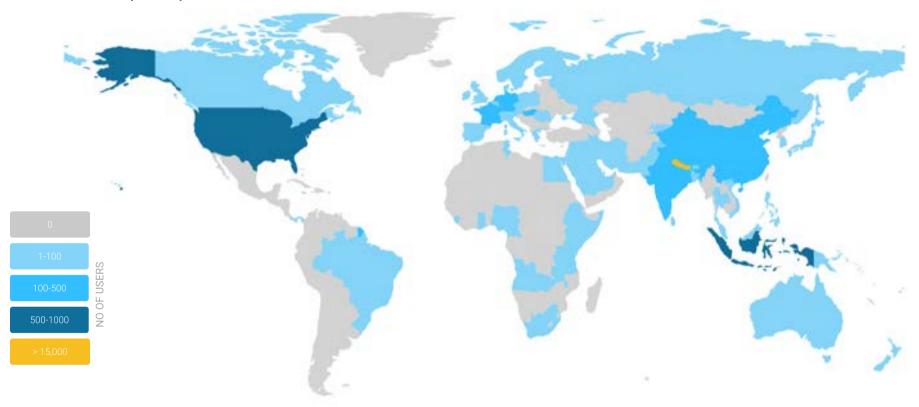
Audio

E-PAATH USAGE ONLINE



2023 USERS BY COUNTRY

In 2023, E-Paath Web engaged **18,416 global users**, with **15,627 from Nepal**, demonstrating its appeal beyond its core audience. Despite being tailored to Nepal's curriculum, it's widely used by learners and educators from various countries.



2023 USAGE SUMMARY

In 2023, E-Paath platforms have shown robust engagement, with the website drawing over **18,000 users** and recording **1.59 million interaction events**, and average engagement times surpassing **13 minutes**, suggesting content that resonates deeply with learners. The mobile app's promising growth parallels this trend, while Sanketik E-Paath, designed for Nepali Sign Language, broadens E-Paath's commitment to inclusive education, also reflecting healthy engagement times.

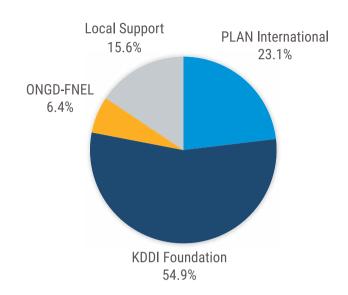
	Users Users	Avg. Engagement	Engagement Sessions	Events
E-Paath Website	18,416	13.23 mins	35,026	1,590,061
E-Paath Mobile app	1,985	10.72 mins	3,256	155,303
Sanketik E-Paath	1,309	5.87 mins	1,550	43,713



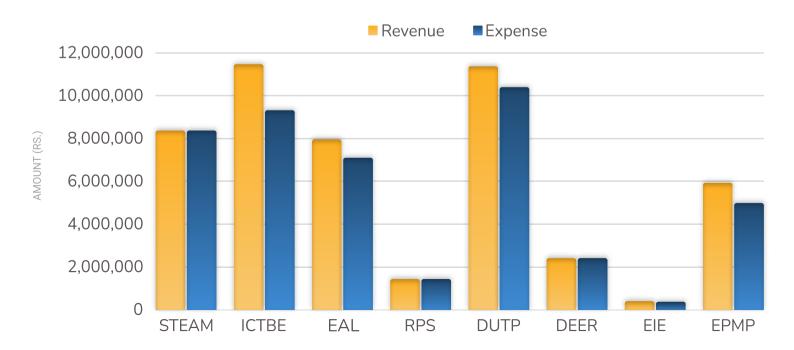
FINANCIALS

REVENUE BY SOURCE

In 2023, total revenue of **Rs. 49,403,788** was generated from various grants, with support from three main partners and local contributions. Expenditures amounted to **Rs. 44,440,472**, approximately 90% of the total revenue.



REVENUE AND EXPENSES BY PROJECT

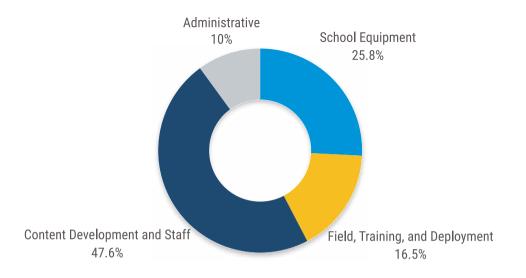


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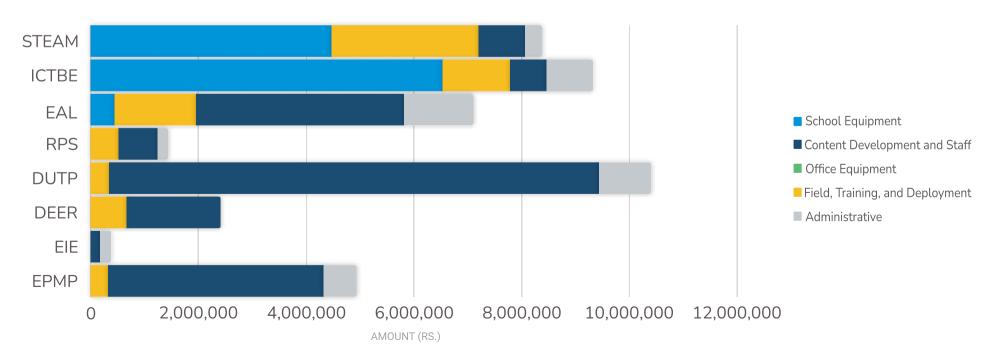
FINANCIALS

DISTRIBUTION OF EXPENSES

The highest expenditure, about 47.6% of the total expenses, was on human resources and content development activities. Similarly, school equipment support, and field, training, and deployment activities together accounted for about 42.3% of the total expenses. Administrative costs account for only 10% of the total expenditure.



DISTRIBUTION OF EXPENSES BY PROJECT









PROJECT UPDATES

LETS SEE SOME UPDATES REGARDING OUR PROJECTS THIS YEAR.

Digitally Enhanced Early Reading Program	DEER
STEAM Ahead in Dolpa	STEAM
Digital Content Update and Tablet Support Program	DUTP
Enhanced Accessibility in Learning	EAL
Robotics and Programming Support	RPS
ICT in Basic Education	ICTBE
Digital Learning Project	DLP
Miscellaneous Updates	MISC



DIGITALLY ENHANCED EARLY READING PROGRAM

The Digitally Enhanced Early Reading (DEER) Program, a collaborative effort with ONGD-FNEL from 2019 to 2023, reached its successful completion this year. In 2023, we reached a pivotal moment, publishing the final six stories in the Hamro Ramailo Kathaharu (HRK) app, culminating in a rich collection of 50 stories complemented by seven interactive games designed to promote emergent literacy and early-grade skills in the Nepali language. This year was also marked by vigorous dissemination campaigns and teacher training sessions in 38 schools across 11 districts, leveraging activities from our other projects. These efforts included dedicated sessions in 7 schools for hearing-impaired learners, ensuring the inclusivity of our educational reach. Through these initiatives, we have ensured that the treasure trove of local knowledge encapsulated in these stories is accessible to students even in the most remote areas of Nepal.

Duration: April 2019 - December 2023

Partners: ONGD-FNEL
Status: Completed

HAMRO RAMAILO KATHAHARU

katha.olenepal.org



FOR EARLY LEARNERS

Stories and games designed to promote emergent literacy and early grade skills



MULTILINGUAL SUPPORT

Currently available in Nepali. Work ongoing in English, Newari, Tibetan and Maithili languages.



7 GAMES

For engaging language practice



50 ANIMATED STORIES

Sourced from diverse communities across Nepal

PROJECT GOALS

- Collaborate with local artists and writers to create culturally-rich digital stories that are familiar and relevant to learners from diverse communities.
- Develop the Hamro Ramailo Kathaharu (HRK) app, featuring 50 animated stories and 7 learning games, sourced from diverse Nepali communities.
- Preserve and promote local narratives in digital formats, accessible online for free, and offline through affordable servers.

2023 ACTIVITIES

- Published 6 animated stories sourced from various communities.
- Implemented story dissemination and teacher orientation in various schools across 11 districts, including in 7 schools for visually and hearing impaired learners.
- · Conducted social media campaigns in different media platforms.



M

Yuma: Memories of Weaving Knowledge

This story explores how the Limbu society learned the knowledge of weaving clothes. It narrates how Ishwar Tageraningwafumang, assuming the human form of Yuma (a woman of many forms/Boju), imparted the skill of weaving to the people. Through nature and dreams, Yuma acquires the knowledge of weaving, a skill that is then

W



Mundhum is the sacred scripture and folk literature of the Kirat people, especially the Limbu community, detailing their history, culture, and spiritual beliefs, and highlighting their deep connection with nature and the cosmos.

learned by others. The narrative of women learning to weave

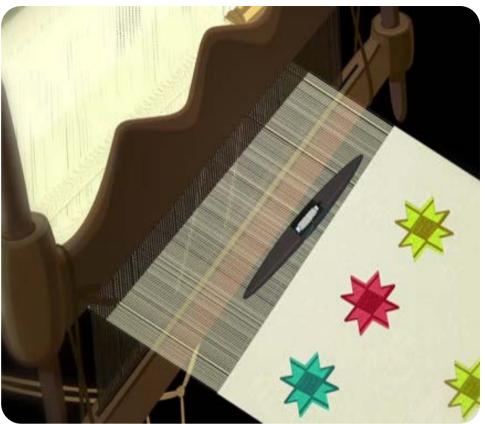






from Yuma Boju is found in the Mundhum.









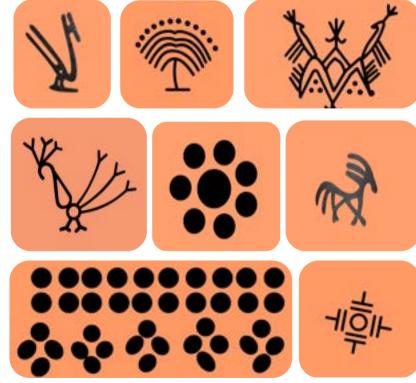


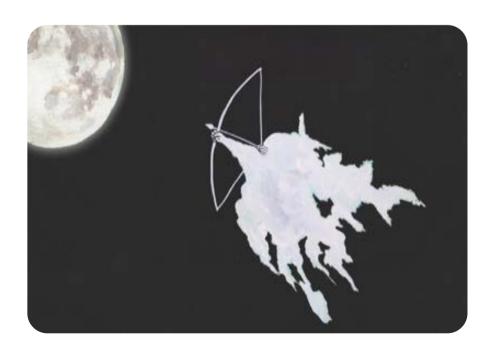


थारु टिका T

Tharu Tika

This story delves into the rich tapestry of the Tharu community, showcasing the diverse tattoos, Tikas, and patterns that adorn their bodies. It unfolds how these designs, steeped in tradition, serve as a canvas, telling the tales and carrying the legacy of the Tharu people.





सृष्टिको गीत H

The Song of Creation (part 1)

A captivating narrative on creation expressed through a song in the Tamang language, enhanced by beautiful imagery.

Our mother spoke (or played or created)

In the ancient Satya Yuga,

Formless. Neither sky nor earth was visible or existent.

In that formless era, the Dorje of Wind came into being.

The frozen thunder in the wind turned into fire,

Above the fire, a white water pond formed, Above the water, foam appeared,

Then, Mount Sumeru was created, In the cosmos, the hunter deity established dominion,

While in Patala, Nagaraja established his realm.

I have shared what I remember, I request you to also ponder deeply from your heart.

आम्मैले हड़ खैलाला

उहिले सत्य युगमा निराकार आकाश पृथ्वी केही नदेखिने निराकार युगमा हावाको दोर्जे सृष्टि भयो जमेको बज्र हावामा आगो बनेछ आगो माथि सेतो पानीको तलाउ जम्यो पानी माथि फिंज भएछ त्यसपछि सुमेरु पर्वत बनेछ

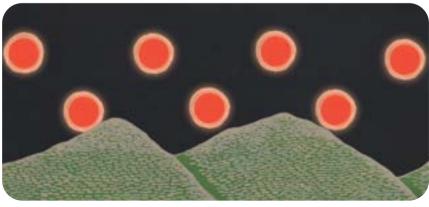
अन्तरिक्षमा सिकारी देवताले राज्य कायम गर्नुभयो

पातालमा नागराज देवताले राज्य कायम गर्नु भयो

मैले सम्झिएको कुरा सुनाएँ, तपाईहरू पनि हृदय देखि मनन गर्नुहोला ।

Notes:

- Patala refers to the netherworld.
- · Nagaraja refers to the serpent king deity.
- Satya Yuga, often called the "Age of Truth," is considered the first of the four Yugas (ages or epochs) in classical Indian/sub-continent cosmology, characterized by virtue, wisdom, and religion.
- Mount Sumeru is a sacred mountain in Hindu, Buddhist, and Jain cosmology, considered the center of all the
 physical, metaphysical, and spiritual universes.







IMPACT AND OUTREACH

The Hamro Ramailo Kathaharu (HRK) platform is crafted to primarily support the learning journey of children aged 0-8, spanning from day care attendees to third-graders. A valuable resource for teachers, parents, and students, it offers a spectrum of animated stories and interactive games designed to foster emergent literacy and reading skills in the Nepali language. Efforts are underway to diversify the platform's language offerings, including Nepal Bhasa (Newari), Maithili, Tibetan, and English, enhancing accessibility and the stories' reach. Looking ahead, the platform will continue to evolve with new stories.

IMPACT IN 2023

Online App Engagement:

The HRK app at katha.olenepal.org welcomed over 5000 users, while the Android app achieved over 1000 downloads on the Play Store, marking a promising launch.

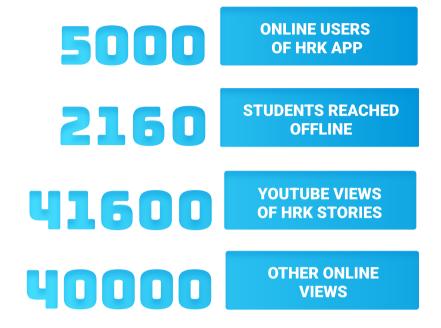
Social Media Outreach:

On social media, HRK stories garnered significant attention, achieving 41600 views on YouTube and 40000 views on other platforms, indicating robust digital engagement and a strong user base.

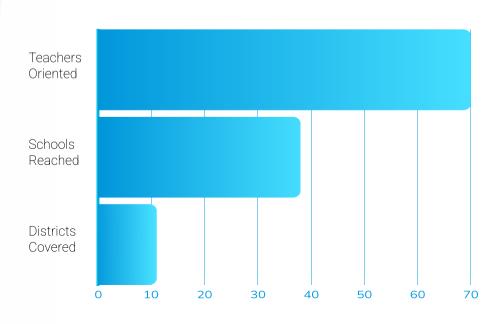
Educational Outreach and Impact in Schools:

Our comprehensive projects facilitated teacher orientations and student engagement with the HRK app and its stories. Reaching 38 schools across 11 districts, the initiative benefited 2160 students and 70 teachers, providing access to stories through offline servers. Sessions for hearing-impaired students and teachers in 7 schools were particularly noteworthy, with animated stories inspiring active discussions in Nepali Sign Language.

2023 ONLINE REACH



2023 OFFLINE REACH



TESTIMONIALS





"I saw a "Saalak" pangolin in my village too; my mother said it eats ants."

During our story-sharing session on July 27, 2023, at Balbinod Secondary School, one enthusiastic student shared a personal connection with the "Saalak and Baalak" story. The student recognized the pangolin from the tale, a creature familiar from their village, sparking excitement and a moment of shared experience among the students.



"I think teaching through stories is not a new idea to teach in early grades but getting contextualized stories in our case is important. I am so glad that HRK contains contextualized stories. The animations used in the stories are really interesting."

Early Grade Teacher from Crystal Mountain School, Dolpo Buddha Rural Municipality.

A TOUCHING STORY

In 2023, during a field visit to Dolpa, our team had the opportunity to share HRK stories directly on mobile phones with local residents. A particularly touching moment occurred en route to a school near Phoksundo Lake, where our team encountered a young girl and her mother running a tea shop on a popular trekking route. With the nearby primary school closed due to continued teacher absences and poor management, the mother was there supporting her daughter's keen interest in learning, as she engaged in drawing and writing in her notebook. While our offline servers are designed to provide access to schools even in the absence of the internet, the ability to transfer stories directly to mobile phones was especially meaningful, benefiting the girl, her mother, and other out-of-school learners.

STEAM STEAM

In 2023, the Showing Talent, Equality & Ambitions of Marginalized Children in Karnali (STEAM Ahead) project, in partnership with PLAN International Nepal and funded by the EU, profoundly impacted Dolpa district's educational landscape, benefiting over 2661 students and 58 teachers across 15 schools. Our engagement in the project saw the deployment of 150 Raspberry Pis and 15 offline servers, significantly enhancing the region's digital learning infrastructure. A key highlight was the intensive training session conducted in May in Dunai, where 3-4 teachers from each school were equipped with essential ICT skills. This was complemented by on-site technical support and orientation post-training to ensure effective utilization of the new computer labs. In September, the project further solidified its impact with refresher training for teachers and engagement with local stakeholders.

Duration: April 2021 - May 2024

Partner: PLAN International Nepal (Funded by EU)

Status: In Progress

PROJECT ACTIVITIES (2023)

- Initiated ICT in education program for 15 public schools in the Dolpa district, Karnali Province, benefiting over 2600 students.
- Installed solar-powered computer labs with 10 Raspberry Pi desktops and offline servers in each school, enhancing digital infrastructure with a total of 150 computers across these remote schools, where many are hours to days away from the nearest roads.
- Conducted comprehensive training for 58 teachers on effectively integrating digital resources into classroom teaching, along with providing on-site technical and teaching support.

58 TEACHERS

Trained in the use of ICT in education, and of our learning resources in classroom teaching.

15 OFFLINE SERVERS

Deployed, one in each school, providing access to E-Pustakalaya, E-Paath, HRK, as well as external resources like Wikipedia and other free and open source learning platforms.

150 RASPBERRY PI 400

Powered desktops deployed, 15 per school.





15 SCHOOLS

From 6 local levels in Dolpa district, Karnali Province empowered by comprehensive ICT in Education Program.

2661 STUDENTS

Students benefiting the comprehensive digital learning resources and improved teaching methodologies.

1 KVA SOLAR AND BATTERY BACKUP

Providing uninterrupted access to computer lab and learning resources on offline servers using clean, renewable energy



15 WELL EQUIPPED LABS

Installed at dedicated spaces provided by the schools for digital learning with 10 raspberry pi powered computers, offline server with router for access through Wi-Fi, furniture, and solar backup.





MAY 2023

In May 2023, our dedicated training and program team held a rigorous 5-day workshop in Dunai, the administrative center of Dolpa. The workshop was designed to equip 58 teachers from 15 schools across six local levels with the necessary pedagogical and technical expertise for integrating digital learning resources into their teaching methodologies. The training emphasized the utilization of resources available on our offline servers, including E-Pustakalaya and E-Paath, encouraging teachers to incorporate these tools into their daily lesson plans. Additionally, participants engaged in practical sessions where they learned to set up computers, connect to offline empowering them to facilitate a seamless digital learning environment in their classrooms.





JOURNEY TO SCHOOLS IN DOLPA

B.S. = Basic SchoolS.S. = Secondary School



BIKE



OFF ROAD VEHICLE



TREKKING

OLE Nepal's journey to schools in Dolpa during technical support and refresher teacher training is a testament to our dedication, traversing some of the most challenging terrains for deployment, training, and on-site support. This mission involved navigating rough roads by jeeps to eight schools and undertaking treks from Dunai spanning 1 to 5 days to reach the remaining seven schools in the most remote and inaccessible areas.



TECHNICAL SUPPORT

MAY 2023

After the comprehensive 5-day workshop in Dunai, our technical support team distributed essential equipment, including computers, offline servers, and power strips, to each school's representatives. This initiative was crucial for the timely transport of the equipment to the schools, which involved the use of jeeps, porters, mules, and horses depending on the accessibility of roads and trails to the schools. The schools were already equipped with solar power systems and furniture in the months prior to deployment support. Subsequently, our team visited all 15 schools to set up the computer labs and verify the solar power systems, providing additional training and support to teachers who couldn't attend the initial training, ensuring everyone was adept in using the new resources.

The deployment presented considerable logistical challenges, as our team traversed rugged terrains to reach eight schools by jeep and embarked on multiple-day treks to seven others in the remote, mountainous areas of Dolpa. These efforts, often through routes 3-5 days from the closest roads or airports, underscored our dedication to bridging educational gaps, demonstrating our commitment to overcoming geographical and infrastructural challenges to facilitate digital learning access even in the most remote of regions.







REFRESHER TRAINING

SEP 2023

Throughout the month of September 2023, our training and technical support teams embarked on visits to each of the schools involved in the STEAM Ahead project. The purpose of these visits was multifaceted: to gather valuable feedback from teachers, students, and community members, and to observe firsthand the application of digital learning resources in classroom settings. During these visits, our team provided constructive feedback to teachers, addressing any queries or challenges they encountered. Additionally, the team conducted meetings with school management committees and local officials to discuss essential topics such as maintenance funding and strategies to ensure the program's sustainability beyond the project's conclusion. These engagements were crucial in reinforcing the project's objectives and ensuring its lasting impact on the community.

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CRYSTAL MOUNTAIN SCHOOL

After a three-day trek from Dunai, our team reached Crystal Mountain School (CMS) to conduct a refresher training session that brought together teachers from Dharma Bhakta School (Namdo Village) and Charkabot schools (Charka Bhot) with CMS educators. This joint session, involving two teachers from each school, created a platform for sharing experiences and addressing common challenges faced by schools in the Dolpo region. The teachers, including those without prior training, showcased their integration of digital tools into their teaching practices. The training highlighted student interactions with basic computer applications like LibreOffice, reflecting a growing digital literacy. Additionally, productive discussions with the representatives of the local government reinforced the community's commitment to continuing and expanding our educational initiatives, underlining the potential for future partnerships to further empower the region's educational landscape.

















A

D













During the refresher training at Tapriza School in Saijal, situated on the route to the renowned Phoksundo Lake, teachers showcased their dedication to integrating digital learning into their curriculum, even as the academic year drew to a close. In our session, we observed five classes where enthusiastic teachers utilized E-Paath to teach core subjects like English, Math, Science, and Nepali, in addition to imparting basic computing skills such as word processing to their students. The school is proactively preparing to boost its digital learning environment by moving the computer lab to a newly constructed room, thereby maximizing the utility of their technological resources. The positive feedback from teachers on the impact of computer-aided teaching underscores the significant advantages of digital learning, notably in improving student engagement and comprehension.

























Dunai bazaar made it the most accessible for our monitoring efforts.





DIGITAL CONTENT UPDATE AND TABLET SUPPORT PROGRAM

The Digital Content Update and Tablet Support Program (DUTP), supported by the KDDI Foundation and in collaboration with Lalitpur Metropolitan City and Citynet + Arts, achieved a significant milestone in 2023 by updating 163 E-Paath activities in Math, Science, English, and Nepali for Grades 1-8. This update, which aligns the content with the latest national curriculum guidelines, not only enhances the materials' relevance and effectiveness in classrooms but also benefits the broader E-Paath user base, including over 18,000 annual online users. The updated content is set to impact a wider audience, with future upgrades for offline servers across a network that encompasses 1700 schools, as well as with new offline server installations.

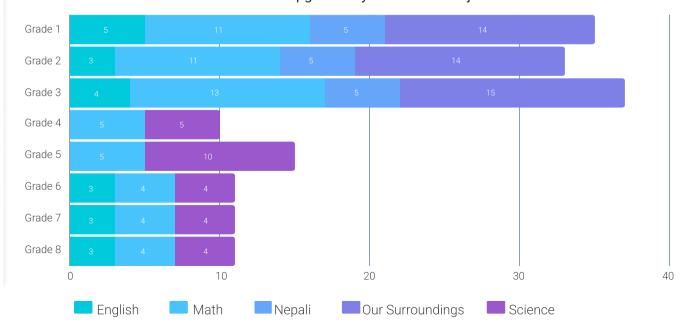
In Lalitpur, direct impacts were felt in six schools that received tablets and offline servers during the COVID-19 pandemic in 2020. This phase involved updating the tablets with the new E-Paath app and the offline servers with the latest content. Teachers in these schools received targeted orientation to familiarize them with the new materials, ensuring they could effectively integrate these resources into their teaching.

Duration: September 2022 - December 2023

Partners: KDDI Foundation

Status: Completed

No of E-Paath Modules Upgraded by Grade and Subject



PROJECT ACTIVITIES (2023)

- Updated 130 E-Paath activities for Grades 1-5 in English, Math, Science, and Nepali, ensuring alignment with new national curriculum guidelines.
- Updated 33 E-Paath activities for Grades 6-8 in English, Math, and Science subjects, ensuring alignment with new curriculum guidelines.
- Updated 184 tablets and 6 offline servers at 6 schools in Lalitpur loaded with digital learning resources including E-Paath and other resources. Trained teachers and students
- Facilitated the dissemination of the updated E-Paath in project schools alongside the deployment of new offline servers.



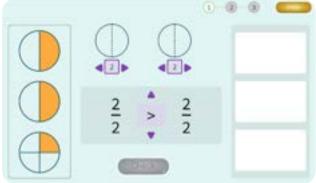


E-PAATH CONTENT GETS A REVAMP

In 2023, E-Paath experienced a comprehensive upgrade, with 163 new and updated activities developed for grades 1-8, meticulously aligning with the latest national curriculum standards. This enhancement not only refined the user interface and user experience but also introduced a variety of interactive modules to foster deeper student engagement. Noteworthy additions include simulation activities in Math and Science, the gamification of learning activities, and interactive exercises offering unlimited practice opportunities. These updates aim to enrich the learning experience, making education both enjoyable and impactful. Discover the transformative changes and explore the newly developed activities at epaath.olenepal.org





























ENHANCED ACCESSIBILITY IN LEARNING

The Enhanced Accessibility in Learning (EAL) Project, launched in partnership with the KDDI Foundation in September 2022, targets the enhancement of educational experiences for students with visual and hearing impairments across selected schools. This initiative, leveraging experiences from an earlier pilot, focused on advancing iOCR technology, converting 30 textbooks into accessible formats, and upgrading the accessibility of the E-Pustakalaya platform. In 2023, EAL dedicated its efforts to deploying these technologies and conducting specialized teacher training to nurture an inclusive learning atmosphere. The project aimed to seamlessly blend accessible content into the curriculum, enabling educators and students to embrace a more inclusive approach to learning and setting a precedent for inclusive education advancements.

Duration: September 2022 to December 2023

Partners: KDDI Foundation

Status: Completed

PROJECT ACTIVITIES (2023)

- Enhanced the E-Pustakalaya site to meet Web Content Accessibility Guidelines (WCAG), ensuring accessibility for online and offline users.
- Developed iOCR software to convert texts, images, tables, and equations in Nepali and English into accessible EPUB formats, improving access for visually impaired learners.
- Converted 30 textbooks into screen-reader-friendly formats, now accessible on the E-Pustakalaya site and offline in selected schools.
- Equipped six schools with offline servers and conducted computer and digital content integration training for teachers and screen reader users, focusing on inclusivity for visually and hearingimpaired students.
- Undertook rigorous monitoring and testing of the iOCR software, collecting feedback to refine its accuracy and user-friendliness, ensuring the technology meets the needs of users.
- Conducted surveys with students and teachers to assess the impact and usage of digital learning resources, gathering insights to inform further enhancements and ensure the project's effectiveness.

E-PUSTAKALAYA ACCESSIBILITY ENHANCED

E-Pustakalaya now adheres to WCAG standards, with tagged elements, alt text, and accessible media players, ensuring smooth navigation and content access via screen readers for an effortless user experience on both online and offline platforms.





IOCR DEVELOPED

Access the newly developed iOCR technology freely online at iocr.olenepal.org. This innovative application converts Nepali and English documents into EPUB formats compatible with screen readers, enriched with additional features like PDF to Image, PDF Split, and Word to E-Pub, enhancing document accessibility for all users.

30 ACCESSIBLE TEXTBOOKS

Thirty accessible EPUB textbooks are now available on E-Pustakalaya, both online and offline, for a comprehensive array of subjects spanning grades 4-12. These textbooks are designed to cater specifically to visually impaired learners, allowing them to engage with the content using screen readers. For access and downloads, visit: pustakalaya.org/en/accessibility/.



















IMPACT AND AND OUTREACH



Schools Enhanced with Accessibility:

Five schools, including three for visually impaired and two for hearing-impaired students, were equipped with offline servers, enabling access to E-Pustakalaya, accessible textbooks, and NSL-integrated learning resources, fostering an inclusive educational environment.



Comprehensive Training for Educators and Students:

A total of 58 teachers and 40 students received training on accessible learning tools, enhancing their ability to utilize digital content effectively and creating a supportive learning atmosphere for students with sight and hearing related difficulties.



Expanding Digital Resource Usage:

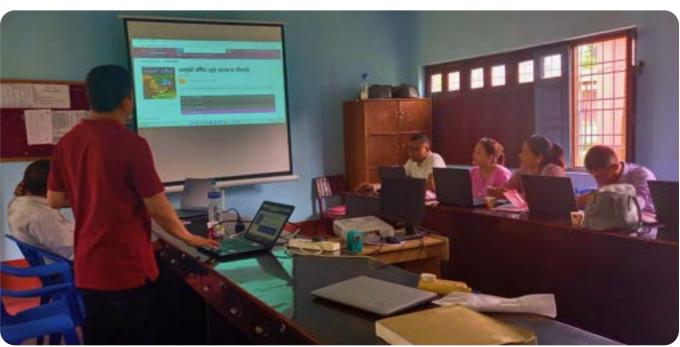
Across these five schools, 262 individuals utilized the accessible digital content, demonstrating the effective reach and positive reception of these educational resources within the school communities, contributing to an improved learning experience for all.













ROBOTICS AND PROGRAMMING SUPPORT

The Robotics and Programming Support (RPS) Project, backed by the KDDI Foundation and in collaboration with Lalitpur Metropolitan City and Citynet+Arts, was designed to spark an interest in robotics and programming among Lalitpur's public school students. Targeting students in Grades 6-8, the project utilized educational robotics kits featuring LEGO blocks, Arduino boards, and the intuitive Studuino visual programming platform, enhancing their critical thinking and problem-solving skills. In 2023, RPS delivered engaging, hands-on learning experiences, supported by consistent guidance from specialized robotics trainers. Participants learned to design and program robots, culminating in the first interschool robotics challenge on June 21, 2023, in Lalitpur. This event showcased their achievements in creating autonomous driving robots and autonomous garbage collectors, highlighting the spirit of innovation and teamwork among the students.

Duration: September 2022 to August 2023

Partners: KDDI Foundation, Lalitpur Metropolitan City, CITYNET+arts

Status: Completed



PROJECT ACTIVITIES (2023)

- Developed comprehensive robotics teaching modules utilizing LEGO robotics kits and visual programming software, focusing on building autonomous cars and robotic arms, to foster creative and analytical thinking in students. Video tutorials are now available on OLE Nepal's Youtube channel, and also accessible via offline servers.
- Rolled out robotics programming in 10 public schools in Lalitpur Metropolitan City, significantly enhancing students' problem-solving skills. Equipped these schools with 34 sets of LEGO-based educational robotics kits and conducted training for teachers and students from Grades 6-8 in robot coding using child-friendly visual programming software.
- Integrated teacher training in robotics with the support of OLE Nepal's teaching fellows for sustained guidance and support. This strategy resulted in enhanced teaching proficiency and heightened student engagement in robotics.
- Established robotics clubs in the participating schools, led by student-appointed club leaders, to promote leadership and coordination skills among students, with ongoing support from the program.
- Organized the first inter-school robotics challenge in Lalitpur Metropolitan City, where approximately 80 students from 10 schools showcased their robotics skills in a competitive yet collaborative environment.

36

FIRST INTER-SCHOOL ROBOTICS CHALLENGE

On June 21, 2023, OLE Nepal organized the first Inter-School Robotics Challenge in Lalitpur, where students from grades 6 to 8 across 10 public schools demonstrated their robotics prowess. Participants, trained in using the Artec Robotics Kit and Raspberry Pi computers, competed in events like the "Line Tracing Robot" and "Automatic Object Collector Robot," showcasing their skills in building and programming autonomous robots. This event celebrated the students' creativity, teamwork, and application of their robotics training, highlighting the impact of robotics education in fostering innovation and technological proficiency among young learners.























ROBOTICS TRAINING

Our team has launched a series of 11 tutorial videos on our YouTube channel, providing a step-by-step guide on using educational robotics kits and visual programming tools, as demonstrated in our program across 10 Lalitpur schools. These videos serve as an extended learning resource for students to explore robotics at their own pace. To foster ongoing engagement, Robotics Clubs have been established in each school, empowering students to further their robotics programming skills independently.











ICT IN BASIC EDUCATION

The ICT in Basic Education (ICTBE) Project, initiated in January 2023 with support from the KDDI Foundation, aimed to enrich the educational landscape of Bajura and East-Nawalprasi districts by integrating digital learning tools in 6 public schools. Throughout the year, the project focused on implementing digital learning labs powered by our offline servers and Raspberry Pi powered computers. The project also involved extensive teacher training sessions and ongoing support to ensure effective use of these digital tools in classrooms. By enhancing the digital infrastructure and fostering teacher proficiency in technology integration, the ICTBE Project succeeded in elevating the learning experiences of 1,117 students and empowering 36 teachers, while also engaging local officials in the broader dialogue about the pivotal role of educational technology in improving teaching and learning outcomes.

Duration: January 2023 - June 2024

Partners: KDDI Foundation

Status: In Progress

PROJECT ACTIVITIES

- Coordinated procurement, setup, and preparation of technology infrastructure, followed by systematic monitoring and evaluation to maintain and optimize the use of digital learning tools in schools.
- Installed computers with curriculum-aligned learning software and offline digital library servers in 6 public schools in Bajura and East-Nawalprasi districts, enriching the educational experience with diverse digital resources.
- Provided a 5-day initial training and a 3-day refresher course for teachers at all 6 schools, supplemented by monitoring and support visits three months post-initial training to reinforce effective technology use in teaching.

6 SCHOOLS

Six public schools in Bajura and East-Nawalprasi districts were transformed with advanced digital learning tools, directly benefiting over a thousand students and dozens of teachers.





6 OFFLINE SERVERS

Installed one offline server at each school, providing uninterrupted access to comprehensive digital learning resources, accessible on all types of devices including mobiles.

150 RASPBERRY PI DESKTOPS

Delivered and installed 25 Raspberry Pi desktops at each school, equipping students with the latest in educational technology to enhance their learning experience.





COMPREHENSIVE TEACHER SUPPORT

Teachers received extensive training, including a 5-day initial session and a 3-day refresher course, complemented by ongoing support to ensure effective integration of digital tools in their teaching methodologies.



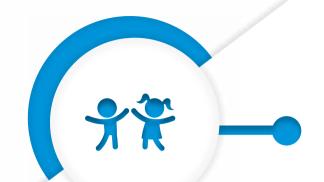








IMPACT AND AND OUTREACH



Student Impact:

A total of 1,117 students across grades 1 to 8 from these 6 public schools gained access to quality digital learning resources, enhancing their educational opportunities.



Teacher Empowerment:

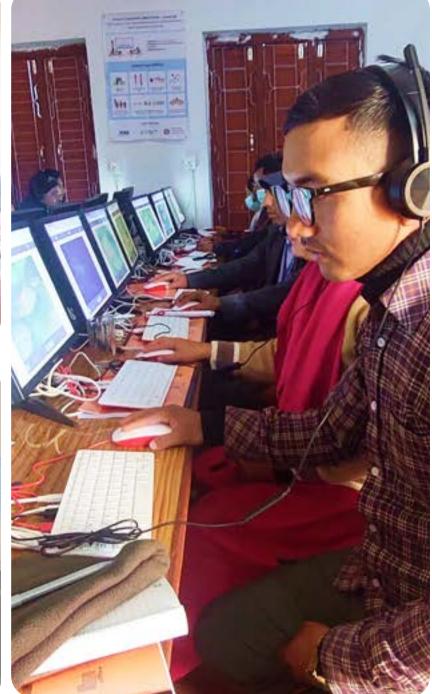
36 teachers were trained in incorporating digital learning resources into their daily teaching activities, fostering a more engaging and effective learning environment.



Local Stakeholder Engagement:

10 local officials, including education officers and School Management Committee (SMC) members, received orientation on the advantages of integrating digital learning resources into the educational process, contributing to a broader understanding and acceptance of technology in education.









DIGITAL LEARNING PROJECT

The Digital Learning Project (DLP), launched in August 2023 with the support of Rotary Tripureshwor, is set to transform the educational landscape in six schools across Kathmandu, Nuwakot, and Sindhupalchowk districts. This initiative aims to broaden our offline server network and introduce tablet-based learning, utilizing E-Paath, our interactive platform aligned with the curriculum. The year 2023 marked the successful deployment of tablets, offline servers, routers, and necessary accessories across these schools, coupled with the initiation of targeted teacher training programs. These efforts are designed to equip educators with the skills to leverage digital tools for enhanced teaching and learning experiences. With infrastructure and technical support in place, including additional desktop computers provided by Rotary, the DLP is poised to make a substantial impact on digital education in these regions, with ongoing activities planned until January 2025 to ensure a lasting and meaningful educational transformation.

Duration: August 2023 - January 2025

Partners: Rotary Tripureshwor

Status: In Progress

6 SCHOOLS

Targeted six schools in Kathmandu, Nuwakot, and Sindhupalchowk, equippin them with digital tools and training to foster an innovative learning environmen for both students and teachers.



6 OFFLINE SERVERS

Installed six offline servers to ensure uninterrupte access to a wealth of educational materials, supporting learning even in areas with limited internet connectivity.

60 TABLETS

Distributed 60 tablets across six schools, eac preloaded with the E-Paath platform, offering interactive, curriculum-aligned educational content to enhance student learning.





COMPREHENSIVE TEACHER SUPPORT

Initiated a robust teacher training program, including 4-day initial training and subsequent refresher courses, to enable effective integration of tablets and digital resources into classroom teaching.

PROJECT GOALS

- Equip six schools in Kathmandu, Nuwakot, and Sindhupalchowk with 10 tablets per school preloaded with offline version of E-Paath, our grade-specific, curriculum-aligned educational platform.
- Establish offline servers in these schools to facilitate reliable access to a broad spectrum of educational content, accessible on all types of devices.
- Conduct teaching-with-technology sessions aimed at integrating technology into classroom instruction, with a focus on maximizing the benefits of digital resources on our offline servers and of interactive learning using tablets.

2023 ACTIVITIES

- Collaborated with schools, local stakeholders, and Rotary to set up the necessary infrastructure, such as power supply, furniture, and computer labs.
- Completed the procurement, preparation, and testing of tablets and offline servers for the schools.

2024-25 ACTIVITIES

- Conducting 4-day initial teacher training program at each school. First training conducted in Feb 2024 at Melamchi Ghyang in Sindhupalchok.
- Conduct a one-day refresher teacher training session at each school
- Provide additional monitoring and technical support towards the end of 2024 and in January 2025.



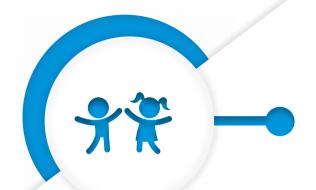








IMPACT AND AND OUTREACH



Student Impact:

2,457 students (1,259 girls, 1,198 boys) in Grades 1-5 from 6 schools across 3 districts get access to enhanced digital tools and resources, including interactive learning on tablets.



Teacher Empowerment:

150 teachers of grades 1-5 directly benefit from training and support activities, adopting innovative tech-integrated teaching methods to enrich classroom environments.



Extended Reach:

Students and teachers from all grades, including early childhood and grades 6 and above, get access to extensive educational materials on offline servers.











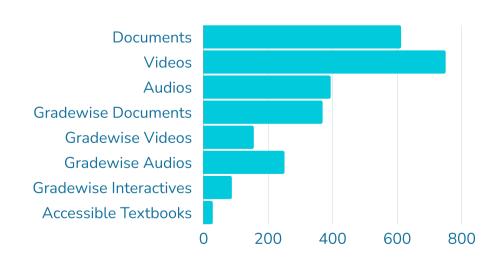


MISC. UPDATES

E-PUSTAKALAYA UPDATES

In 2023, E-Pustakalaya saw significant technological advancements to enhance user engagement and accessibility. With a system upgrade, the platform now offers a more stable and efficient user experience. Features such as multi-user authentication and a user dashboard with personalization options have been introduced, allowing users to access content tailored to their preferences and viewing history. Additionally, the digitization of the server request process for schools simplifies access to digital resources. Enhancements in web accessibility align with WCAG 2.0 standards, and a new analytics dashboard provides administrators with valuable insights into usage patterns. Security measures have been strengthened to prevent common web threats, and search optimization now highlights trending content for users.

Content-wise, E-Pustakalaya expanded its repository in 2023, adding 612 documents, 750 videos, and 394 audios. The library also grew in educational materials with 369 grade-wise documents, 156 grade-wise videos, 251 grade-wise audios, and 88 interactive resources, enhancing its role as a comprehensive educational tool. Notably, the addition of 29 accessible textbooks marks a significant step toward inclusivity, ensuring learners with various needs have equal access to information. With these updates, E-Pustakalaya continues to serve as a vital resource for over 9,600 books, 3,400 audiobooks, and 1,900 videos, supporting a culture of reading and independent learning in multiple languages.



OLE NEPAL WEBSITE UPGRADES

In August 2023, OLE Nepal launched its revamped website, transitioning from WordPress to Wagtail, a move driven by the need for enhanced security, flexibility, and performance. The previous WordPress site had been under constant threat from security attacks, jeopardizing data and user privacy. Wagtail's robust security features now fortify our website against such vulnerabilities, providing a safer environment for users and administrators alike.

The new platform offers greater customization, allowing us to tailor the website to our specific needs and improve the overall user experience. With Wagtail, we've seen notable enhancements in site speed and performance, essential for providing a seamless browsing experience. Additionally, the content editing interface in Wagtail is more intuitive, enabling our team to manage complex content structures efficiently and improve productivity. The shift to Wagtail also aligns with our future growth plans, offering the scalability needed to support our expanding projects. Moreover, reducing our dependency on plugins has streamlined site management, mitigating previous challenges related to compatibility and security.

TECH STACK UPGRADES

Apart from ongoing content development work, this year, our development team was focused on enhancing the security and functionality of our products. We implemented advanced security tools to fortify the overall security of our applications. A new data tracking system was developed to monitor offline usage data of E-Paath in real-time, ensuring timely insights and interventions. Our team integrated innovative JavaScript libraries like Plotly and Quill, alongside Graph JS, to boost the interactivity and user experience of E-Paath. We expanded our application development to accommodate both offline and online environments, including specific advancements for iOS users, broadening our reach. Additionally, the management of our extensive codebase and assets is being streamlined through an efficient git migration process, ensuring seamless development and maintenance of our applications.



USAID - EQUITY AND INCLUSION IN EDUCATION

In October 2023, OLE Nepal embarked on a new venture with the USAID - Equity and Inclusion in Education (EIE) Project, aimed at overcoming barriers to education for students in grades 6-10, particularly focusing on marginalized groups and out-of-school youth. Over the next five years, this initiative will unfold in Karnali and Madhesh provinces, demonstrating our commitment to fostering equitable educational opportunities. Collaborating with partners like Kirdarc, Aasaman, and IDP, our primary role will be to provide existing digital learning resources and establishing computer labs, ensuring that even the most underserved learners can benefit from our proven educational tools and content.

This project will also see us extending our reach to schools catering to hearing and visually impaired students, where we'll set up specialized computer labs and deploy our accessible learning materials. By training educators and providing continuous support, we aim to make a lasting impact on the educational journey of these students. The EIE project represents a significant stride towards OLE Nepal's mission to use technology in education, ensuring that every child, regardless of their circumstances, has access to quality learning resources.

Duration: October 2023 to September 2024

Partners: PLAN International Nepal, KIRDARC, AASAMAN Nepal

and IDP

Status: In Progress





OUR 2024-30 STRATEGIC PLAN

EXPANSION AND ENHANCED INTEGRATION

OLE Nepal will accelerate the expansion of our offline server network, currently serving over 1700 schools, targeting areas with limited internet access to enhance digital learning access in more schools across Nepal. We'll also upgrade our server technology to enable remote updates via low-bandwidth connections, reducing the need for direct interventions at our Lalitpur office and taking advantage of increasing connectivity in remote regions. This upgrade will significantly reduce costs and save time for our partner schools, and enable timely updates of new content. Furthermore, we plan to expand our ICT in Education programs, already benefiting 400 schools, by providing comprehensive infrastructure, teacher training, and support, focusing on the most underserved communities to help bridge the digital divide.



CONTENT DIVERSIFICATION AND LOCALIZATION

Our commitment to content diversification and localization aims to enrich our learning platforms, making them more inclusive and reflective of Nepal's linguistic and cultural diversity. We are dedicated to expanding our content offerings in multiple local languages, ensuring that our resources resonate with and are accessible to diverse communities across Nepal. This initiative includes enhancing the E-Pustakalaya digital library to encompass a broader spectrum of resources, and localizing our E-Paath and Hamro Ramailo Kathaharu platforms to support multiple languages. Additionally, we plan to develop new content types, such as skill-based courses, to cater to a variety of learning needs and interests. By creating content that aligns with learners' backgrounds and experiences, we aim to deliver more impactful and relevant educational resources.



PERSONALIZED LEARNING AND TECHNOLOGICAL INNOVATION



A key priority looking ahead is integrating personalized learning pathways into our digital platforms, including E-Pustakalaya and E-Paath, to enable learners to navigate their educational journey more effectively and track their progress. This focus is crucial for tailoring education to individual needs, enhancing engagement, empowering teachers and guardians to oversee learning progress, and improving learning outcomes. In parallel, we will continue our commitment to integrating assistive technologies like text-to-speech and OCR to support learners with hearing and visual impairments. As we look to the future, our exploration of advanced AI tools, including the development of a personalized AI tutor, will aim to leverage our educational content further, providing a more nuanced and effective learning experience for all users.



STRENGTHENING PARTNERSHIPS AND COMMUNITY INVOLVEMENT

Crucial to the success of our mission is the forging of robust collaborations with local governments, communities, and various stakeholders. We aim to expand these collaborations across all local levels, fostering strategic partnerships with regional and national entities. By synergizing our efforts with other organizations, we intend to broaden the reach of our programs and continually enhance their effectiveness. This comprehensive approach ensures that our initiatives are not only impactful but also deeply integrated within the communities we serve, paving the way for a more sustainable and inclusive educational landscape in Nepal.



RESEARCH AND DATA DRIVEN DECISION MAKING

We will heighten our focus on research and data-driven decision-making to refine our educational strategies and programs, particularly in learning engineering, instructional design, and digital education accessibility. Advanced monitoring and evaluation tools will be employed to fine-tune our program implementation in the field. Through the integration of data analytics, we aim to continuously enhance our educational content and training methodologies, allowing us to effectively assess and broaden our impact. This strategy will help ensure that our interventions are underpinned by robust evidence, yielding more efficient and impactful educational outcomes.

