

2022

SolarSPELL

Annual Report



Contents

- 01** Letter from the Director
- 02** About us
- 03** Impact snapshot
- 04** ASU student engagement
- 08** Partner update:
Peace Corps
- 12** Project highlights
- 21** Looking ahead
- 22** Partners and supporters
- 23** Get involved



Letter from the director

Dear SolarSPELL Supporters,

Although the world's return to pre-pandemic norms (i.e. lifting travel restrictions) took longer than we expected, the SolarSPELL team remained focused on staying the course this past year, confident that our hard work would pay off. Here are some 2022 highlights I'd like to share with you:



- Partnering with The UN Refugee Agency (UNHCR) and our colleagues at ASU's Education for Humanity to launch SolarSPELL education libraries in schools across multiple Ethiopian refugee camps.
- Continuing to strengthen our Peace Corps partnership via multiple activities: engaging Phoenix-area RPCVs in library Curate-a-thons and Tag-a-thons; attending a Peace Corps Response Advancing Health Professionals conference in support of our Health Library; and engaging numerous Coverdell Fellows (ASU RPCV Graduate Students) to contribute their time and talent to SolarSPELL, to name just a few.
- Curating content and advancing partnerships for multiple libraries, in order to be ready for 2023 launches. This includes the Southern Africa Education Library, Middle East Arabic and Kurdish Education Library and the Agriculture Library.

I'm writing this letter in 2023, and with the benefit of hindsight, I can say that our diligence and patience have paid handsome dividends: we've had a momentous and exciting start to the year! There's a lot to look forward to for SolarSPELL, so please stay tuned.

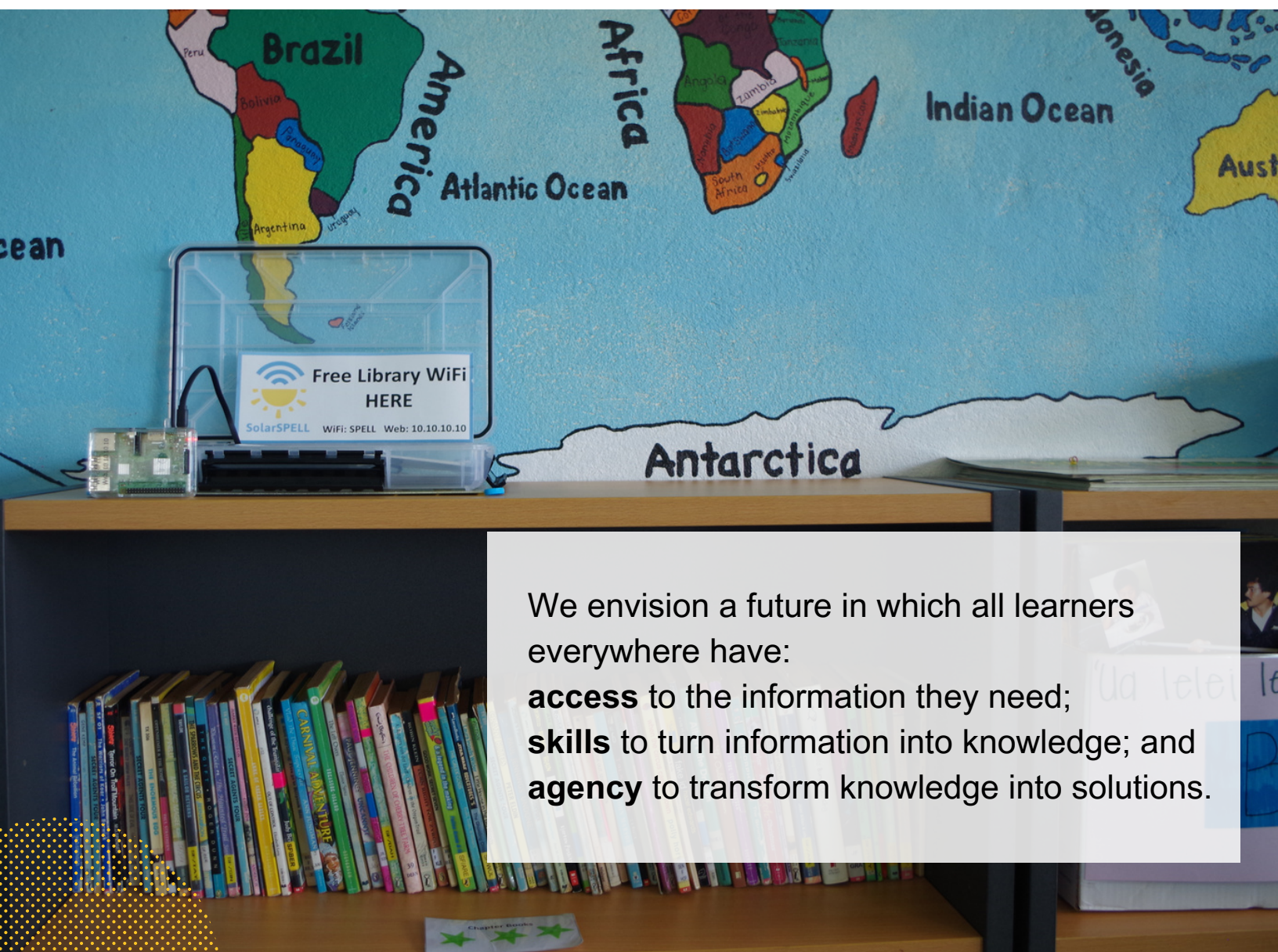
Thank you for your continued support!

Laura Hosman

About us

How we change lives

SolarSPELL empowers offline communities globally by providing localized digital libraries and building the information literacy and digital skills that people need to make informed decisions, increase their self-reliance and improve their quality of life.



We envision a future in which all learners everywhere have:

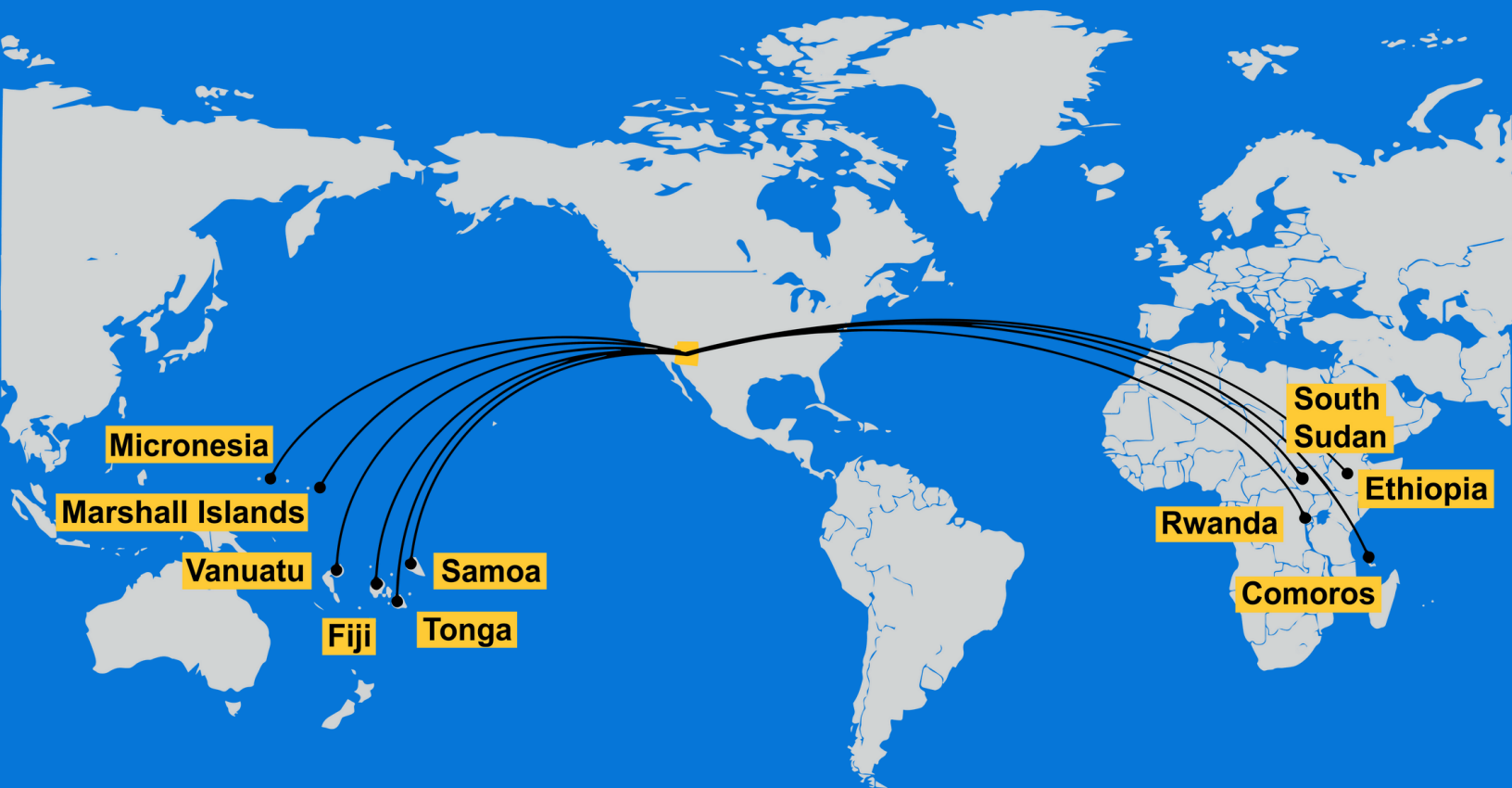
- access** to the information they need;
- skills** to turn information into knowledge; and
- agency** to transform knowledge into solutions.

Impact snapshot

SolarSPELL launched its first pilot in 2015. Here's how many people we've reached since then.

462 Libraries implemented

across **10** countries



731
People
trained



250,000
People reached

ASU student engagement

In 2022, students from across ASU's campuses and programs joined the SolarSPELL team via internships, volunteerships and project-based courses. They helped develop diverse library collections, including the new Middle East Library and Southern Africa Library, as well as our Health and Agriculture libraries.

A significant number — seven — of our graduate students were returned Peace Corps Volunteers who helped create a more robust monitoring and evaluation program, a digital storytelling course, and improve the digital and information literacy sections of our libraries.

Student success is central to our mission, and students are central to SolarSPELL's success around the world!



Barrett Honors fellows Dani and Sarina present on their work with SolarSPELL at the semi-annual ASU School for the Future of Innovation in Society poster session.



“In addition to improving my technical skill set with programming languages, SolarSPELL has taught me how technology can create a positive impact on society and how to work together as a team to achieve a common goal.”

— Pavithra, Web Intern

“

"SolarSPELL has opened my eyes to an active community of people who have compassion for the planet, and the people who live on it."

— KT, Content Curation Intern



"When I decided to major in French, I was excited for the day that I would be able to use my skills as a humanitarian. This day came even before my college graduation, allowing me to prove to myself that I am fulfilled by this work — SolarSPELL has confirmed to me that I am on the right path.

— Chris, Content Curation Intern



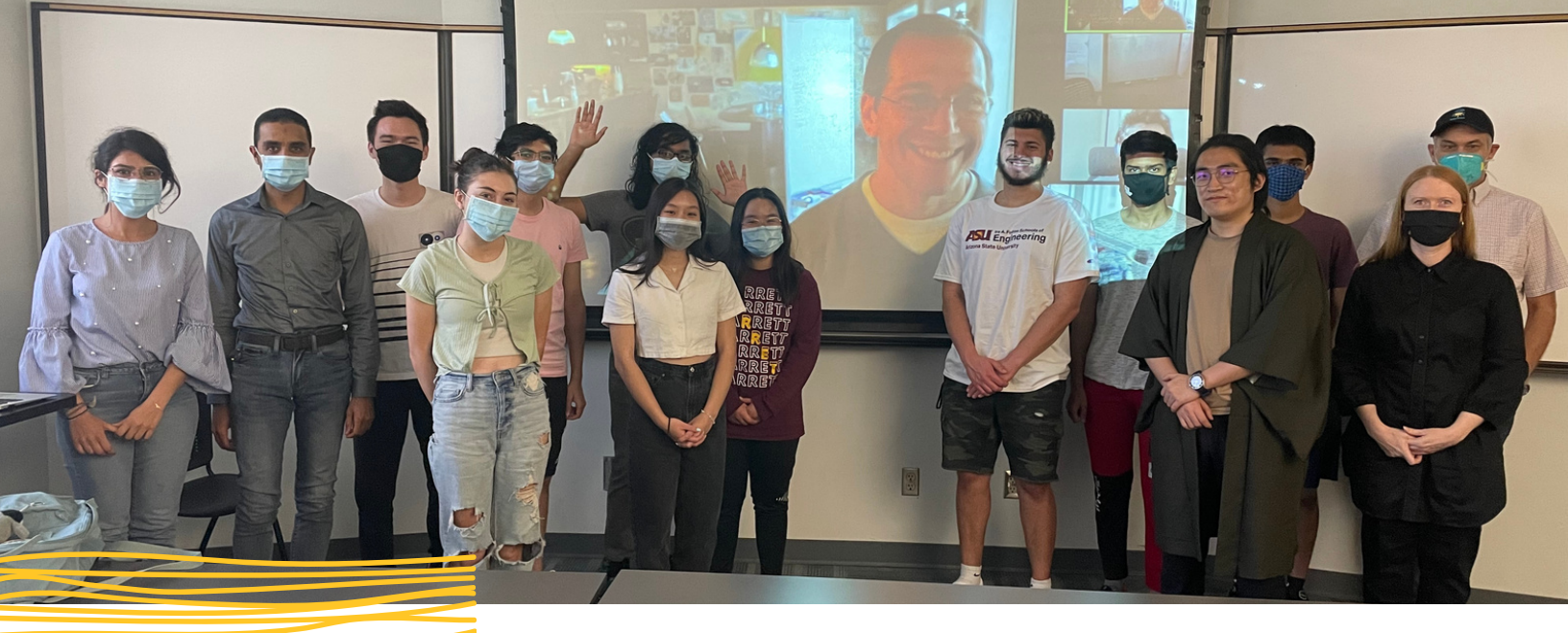
7,351

**Student hours
contributed in
2022**



**Monitoring and evaluation
intern Libbie Farrell earned
the SFIS Graduate Charter
Award in Access in fall 2022.**





Computing for good

ExploreCSR workshop 2022



Our second annual exploreCSR workshop series, supported by Google Research, examined SolarSPELL as an initiative applying ‘computing for good.’

A dozen students problem-solved tech challenges that our libraries face, integrating a machine learning (ML) approach in the solutions they pitched in our final session. Two of these students continued on as SolarSPELL fellows over the summer to develop their improved library search feature using ML.

“The most rewarding experience for me during this program was learning that sometimes the problem given is not always the problem that needs to be solved.”

— ExploreCSR 2022 participant

“I really enjoyed coming up with solutions with my team and presenting our ideas. It was very rewarding to get to express our passions to people who were interested in what we had to say.”

— ExploreCSR 2022 participant

Peace Corps updates

SolarSPELL has worked with Peace Corps since 2015 to implement digital libraries in seven countries throughout the Pacific Islands and East Africa. Our train-the-trainer model empowers both Peace Corps Volunteers (PCVs) and their local counterparts to foster skill development, as well as long-term, sustainable use of SolarSPELL libraries in their schools and communities.

We signed a Global Strategic Partnership in 2020, but with PCVs having been evacuated due to the global pandemic, we were unable to expand to new posts. This year PCVs began returning to the field after a two-year wait. Meanwhile, our team has been hard at work building relationships and preparing our libraries to launch in Lesotho and Malawi in 2023.



Peace Corps Namibia

SolarSPELL may soon be expanding to Peace Corps Namibia! After Crissy, a Peace Corps Volunteer in Namibia, was evacuated in 2020, she resolved to complete her service as soon as the post re-opened. Since returning to Namibia in June, she has been working closely with our team to curate locally relevant content and facilitate connections with local partners like the Ministry of Education.



Peace Corps Response

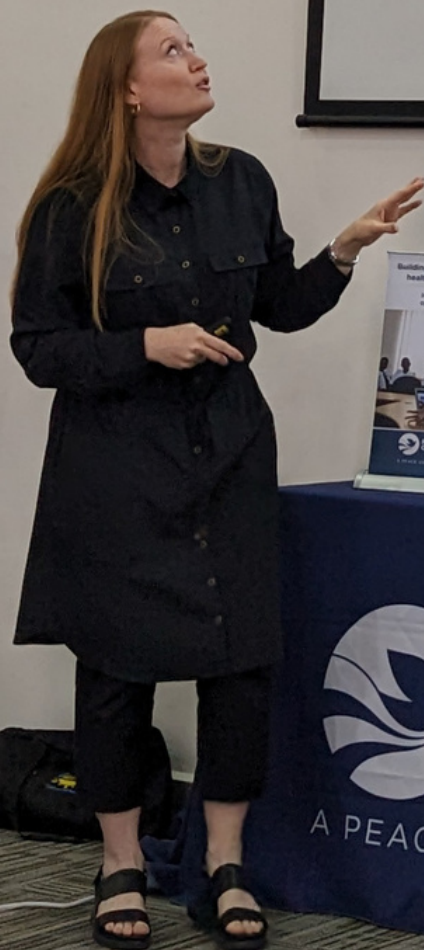
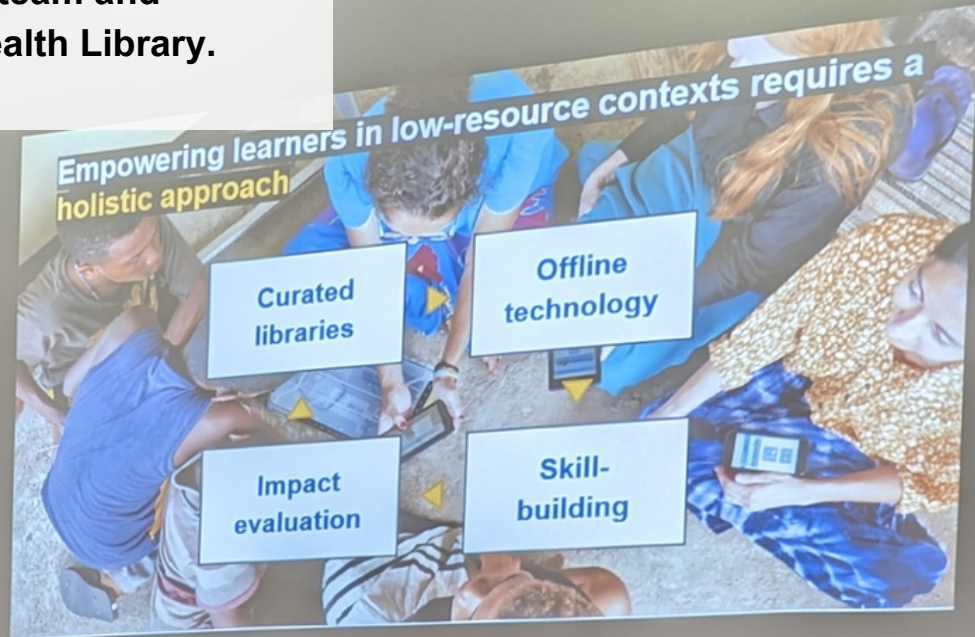
Advancing Health Professionals

The SolarSPELL Health Library is slated to launch in Malawi next year, in partnership with the Peace Corps Response Advancing Health Professionals (AHP) program and the Kamuzu University of Health Sciences. The AHP program works to improve health systems and educate emerging health care professionals in resource-constrained areas by recruiting experienced medical and health professionals to serve as educators and advisors.

We were invited to the AHP Conference in November to strategize with AHP program staff and representatives from Peace Corps Headquarters about how the Health Library can serve their partners and what content would be most useful. Attendees were excited about the library's potential and enthused about partnering in the future to bring this resource to their PCVs and partner organizations!



Co-founder and director Laura Hosman shares SolarSPELL's story with the Peace Corps Advancing Health Professionals team and invites them to connect to the Health Library.





RPCV Tag-a-thon



~300
Resources
tagged

Harnessing the power of the vast network of Returned Peace Corps Volunteers (RPCVs) in the Greater Phoenix area, we hosted our first large-group Tag-a-thon this year. We invited local RPCVs, as well as ASU undergraduates in the Peace Corps Prep program to help us tag the vast amount of content curated this year with metadata. While they worked, students had the chance to ask RPCVs more about their Peace Corps experience.

Using the new digital workspace created by SolarSPELL library specialist Sara Jordan, 15 volunteers tagged nearly 300 resources in the span of just a few hours.



Project highlights

From curating content for new collections to implementing libraries in new locations, our team continued to expand both our offerings and our reach this year. Here are just a few of the highlights.

Content Curation

To help us rapidly add more content to our newest library collections, we hosted three Curate-a-thons, during which volunteers helped source and catalog resources and tag them with metadata. This last part of the process is especially crucial, as it enables resources to be easily searchable within the library.



1,927
Resources
curated in 2022

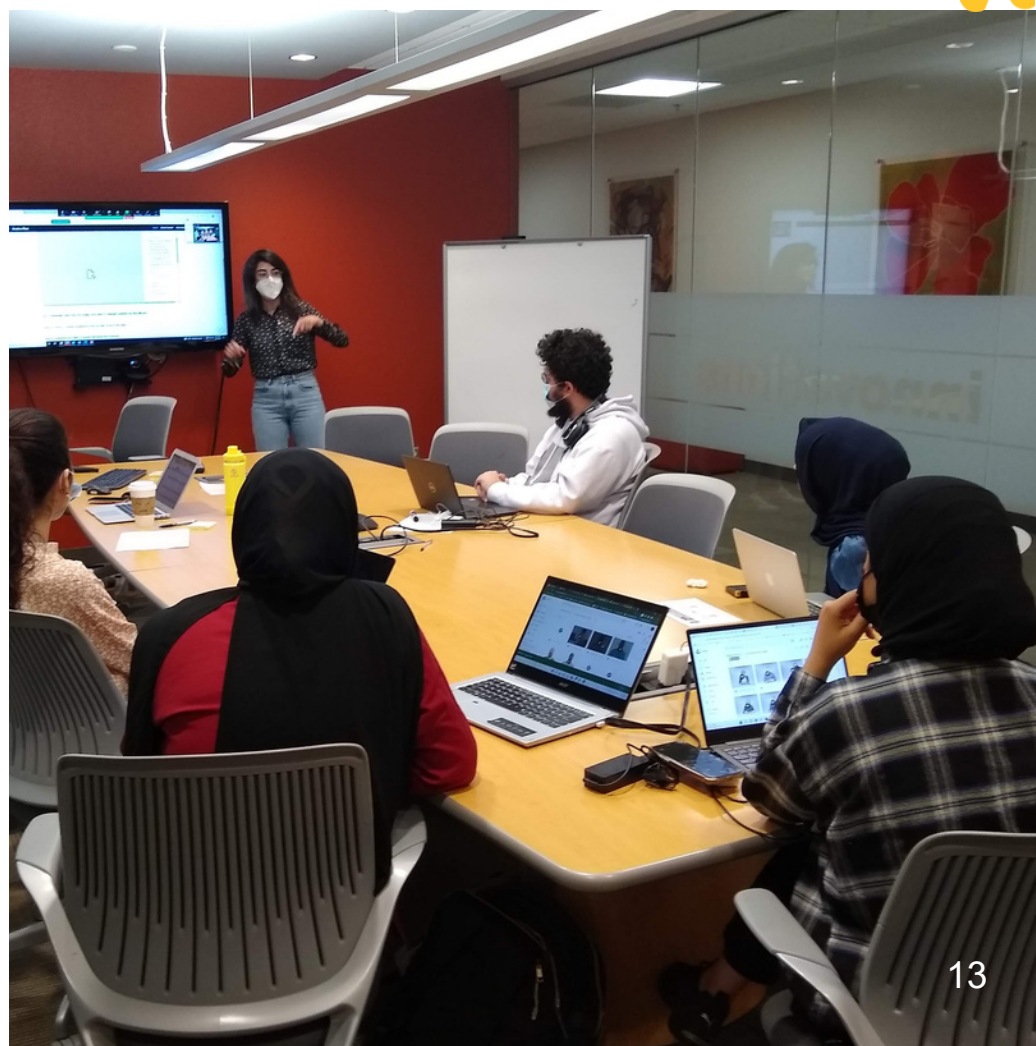


Upward Bound students from Phoenix curated English-language resources during one event, while Returned Peace Corps Volunteers curated English and Spanish resources for Peace Corps Service Day. We even had the opportunity to partner with ASU Global Launch and students from King Abdullah University of Science and Technology to curate Arabic and Kurdish-language resources!

Arabic and Kurdish Education Library

In an effort to help the Autonomous Administration of North and East Syria renew their education system after decades of oppression and civil war, we've been working with their Education Commission to develop a library collection of Arabic and Kurdish educational resources. In preparation for our upcoming train-the-trainer workshop to launch this library, we worked with a team of ASU students to translate and adapt our offline training course to serve as a resource for in-field trainers.

We are especially excited to report that this collection will feature Kurdish- and Arabic-language episodes of Sesame Street (or Ahlan SimSim) that were created specifically for young Syrian refugees.





Agriculture Library

Foundations for Farming

Around the world, 60% of people depend on agriculture for survival. Yet as climate change threatens their livelihoods, less than 10% of rural farmers can access the internet for information to help them adapt. Conservation Agriculture is a proven, climate-smart approach that can enable farmers to grow more food with less fertilizer and water, while also reducing soil erosion.

Our co-founder and tech advisor Bruce Baikie traveled to Zimbabwe this year to attend Foundation for Farming's (FfF's) Conservation Agriculture training, to better understand this approach. While there, Bruce introduced the SolarSPELL library to Foundation for Farming's leadership, explaining how an offline digital library could assist FfF more effectively disseminate their training materials and all of their Conservation Agriculture resources. The FfF team shared their training materials (manuals, powerpoints and videos) for the SolarSPELL team to combine and convert into digital interactive lesson modules.



Field report: Ethiopia

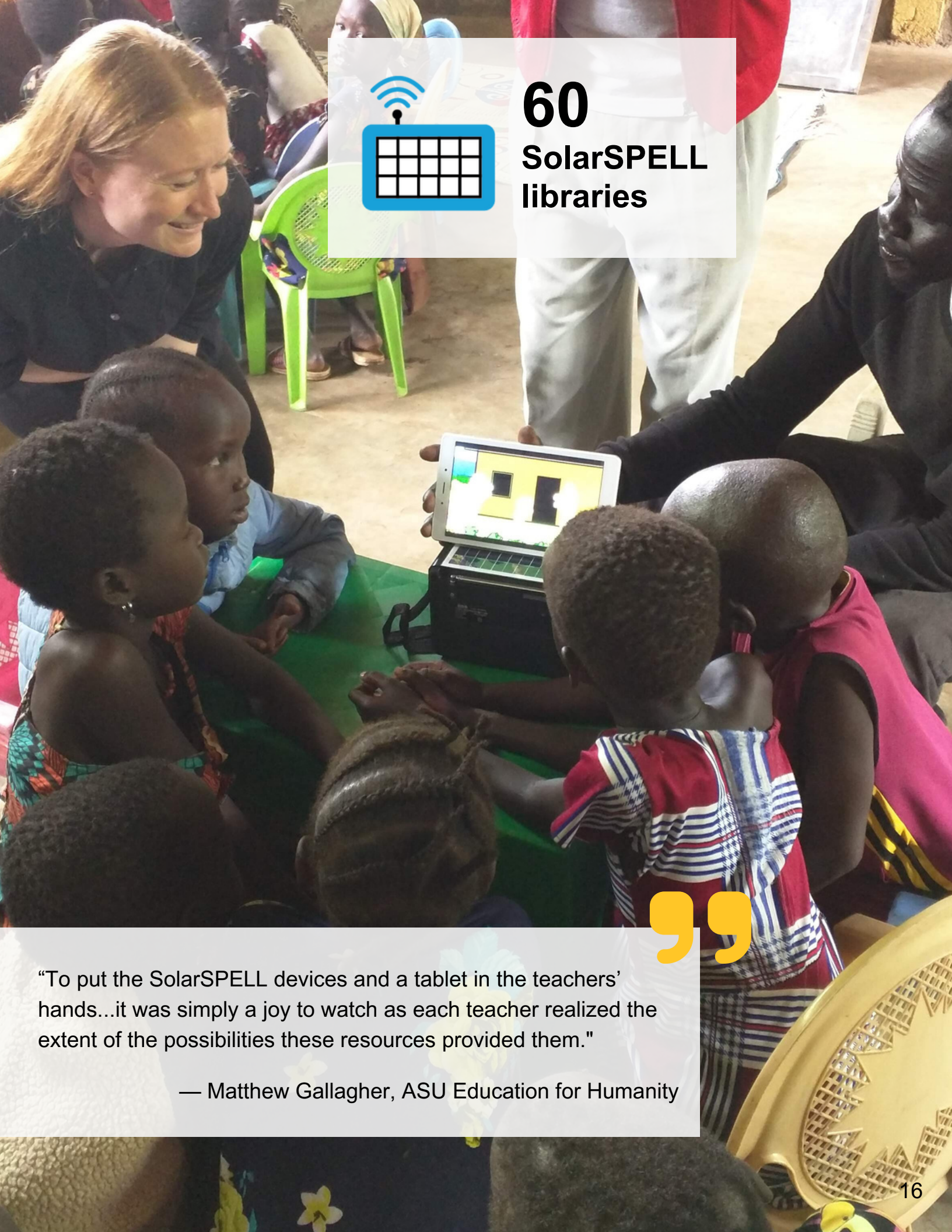
In the Gambella and Assosa refugee camps in Ethiopia, school administrators estimate there is only one textbook for every ten students. Teachers are often refugees themselves who, despite lacking formal teaching certification, are working to educate their young people amidst violent displacement and a global pandemic.

This year SolarSPELL had the opportunity to give these schools a new tool to use in this mission. In partnership with the United Nations High Council on Refugees (UNHCR), ASU's Education for Humanity, Save the Children Ethiopia, Plan International Ethiopia, and the LEGO Foundation, we developed and implemented 60 SolarSPELL digital libraries, which included multimedia teaching materials translated into Nuer, as well as a new LEGO Learning Through Play module.

Cont. on pg 17 ➤



60 SolarSPELL libraries



“To put the SolarSPELL devices and a tablet in the teachers’ hands...it was simply a joy to watch as each teacher realized the extent of the possibilities these resources provided them.”

— Matthew Gallagher, ASU Education for Humanity



When our team visited the schools four months later, teachers and parents reported improvements in students' motivation to attend school, involvement in lessons, and knowledge retention after using the SolarSPELL libraries. For director Laura Hosman, this project holds a lot of potential: "What I take away from this is the excitement I saw in every school from every teacher who used SolarSPELL."



15
Teacher
trainers

“

“We had teachers saying that SolarSPELL can fill in gaps because many of the teachers are refugees who never got the opportunity to get a degree or be certified to teach. SolarSPELL was one tool in the toolkit for making sure that learning continued during the pandemic.”

— Laura Hosman, SolarSPELL Co-founder & Director



Field report: Rwanda

With travel restrictions easing, our team traveled to Rwanda in November to lead a workshop on the SolarSPELL Agriculture Library with our partners at Bridge2Rwanda (B2R) Farms. In addition to giving an overview of our approach — including how we develop our libraries, build information literacy, provide training and support and perform monitoring and evaluation — we also demonstrated the new interactive conservation agriculture lessons based on Foundations for Farming's training materials. We were even able to show a sample lesson translated into Kinyarwanda.

We took advantage of our time with B2R Farms to preview the SolarSENSE, a solar-powered soil sensor designed to monitor soil health and connect to the digital library to give farmers actionable advice based on soil readings.





Looking ahead



In 2023, we look forward to officially launching our newly developed Health and Agriculture Libraries to address urgent information needs across sectors.

SolarSPELL will be expanding geographically, too, implementing digital libraries in at least four new sites next year: Lesotho, Malawi, Zimbabwe and the Autonomous Administration of North and East Syria.



Also coming soon — the debut of our new library platform, designed by ASU students to be more user friendly than ever.

Partners + supporters

Arizona State University

ASU Coverdell Fellows
Program

ASU Education for Humanity

Autonomous Administration
of North and East Syria
Education Commission

Bridge2Rwanda

EmpowerKids-South Sudan

Foundations for Farming

Joan T. & S. Rex Lewis
Foundation

Kwajalein School System,
Marshall Islands

Peace Corps

UNHCR, the UN Refugee Agency

Voice of America - Let's Learn
English Program

WiRED International



Get involved

Join our journey!

The SolarSPELL Initiative is made possible by the contributions of donors, partners, volunteers, and our team of ASU students, faculty and staff. We invite you to be a part of SolarSPELL's story by giving your time, leveraging your area of expertise, sharing about SolarSPELL with your networks, or making a financial contribution.

Together, we can provide communities with the knowledge they need to solve the complex problems they face and work toward creating a sustainable, equitable future for all. To learn more and stay connected, please visit our website, subscribe to our newsletter and follow us on social media.



solarspell.org



team@solarspell.org

