



2022-23 ANNUAL REPORT



Letter From the Director

As FSU and the Learning Systems Institute turned the calendar for the fiscal year 2022-23, I wanted to reflect on and share the successes of our faculty and staff this past academic year. I must begin by thanking all our LSI personnel for their hard work and dedication to our vision and shared mission with the University. Our team members spend months away from their families and homes helping to build and innovate learning systems worldwide. At home, our staff has spent just as many hours ensuring Florida educators and students are at the forefront when it comes to learning and educational technology. In 2022-23, LSI continued to make a tangible impact on learning in Florida, across the United States, and all over the world.

As LSI enters its 54th year of delivering systems that measurably improve the learning and performance of organizations and individuals, we are so proud of our accomplishments. In 2022-23, we surpassed the \$750 million mark in lifetime contracts and grant awards and have significantly contributed to education in 47 countries in our 54 years. LSI worked on international projects this past fiscal year with education professionals from Egypt, Lebanon, Malawi, the Philippines, Rwanda, Uzbekistan, and Zambia. Our faculty won and started 12 new projects last year, and our portfolio of research and development grants reached nearly \$70 million in funding.

FSU singled out our Institute as one of the ways the University is changing the world, and to make that type of impact, we know it takes funding. Due to the arduous work of so many, 2022-23 was one of the most successful years funding our work. During the last fiscal year, LSI had a 15X return on investment on every university/state dollar invested in our Institute, we grew our expenditures by 15% on top of the 38% from the year before, and our awards once again increased year-over-year. This is the fourth consecutive fiscal year in which LSI has increased its return on investment, set a new record ROI, and increased its expenditures.



In addition to these accomplishments, we have aligned our passion for making a global impact on learning with the University's values and goals. It is something we are incredibly proud of as well. The University's mission includes strategic goals of "Academic and Research Excellence," "Entrepreneurship and Innovation," and "Excellence and Reputation." LSI has a proven record of success in all these areas that are important to the mission of the University. We have a rich history of international research, innovation in building learning systems, literacy, and STEM education, and the Institute's reputation for excellence has long been established and continues to thrive.

As an Institute whose top priority is improving human performance and learning as far around the world as possible, we are so proud that we can live up to our values and goals while doing it in a fiscally responsible manner. Our faculty and staff innovate and educate. Their work in 2022-23 has the potential to impact 600,000 educators and 16 million students, and we do it all while upholding the mission and reputation of Florida State University. I am proud to be LSI's director and work alongside such a talented and selfless team.

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Rabieh Razzouk Director, Learning Systems Institute

Accomplishments

Strengthening Teacher Education and Practice - Malawi

In January 2021, LSI received a cooperative agreement for the USAID STEP activity based in Lilongwe, Malawi. Over the past year, LSI has delivered intensive professional development training to 130 Teacher Educators from all public and private Teacher Training Colleges (TTCs) across Malawi. These educators are being prepared to lead participatory action research projects at their TTCs. In the coming year, the local team will continue to collaborate with the Malawi Ministry of Education (MoE) to develop a diploma program for primary teachers, with the aim to upgrade all teachers from a certificate to a diploma, as well as to design a continuous professional development program for teachers and teacher educators.



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The project team has delivered intensive professional development training to 130 teacher educators from all public and private Teacher Training Colleges (TTCs) in Malawi. These same participants are currently engaged in 21 different Participatory Action Research projects at 16 TTCs across Malawi.

Transforming Teacher Education in Zambia

Key accomplishments during year three of the USAID-funded project included finalization of new instructional modules for language and literacy for use in pre-service teacher training programs in colleges of education, training of lecturers from 12 colleges and universities on the new materials, development and rollout of a revised school experience approach along with accompanying guidelines and observation tools, support to two Zambian lecturers to participate in FSU residencies, and two Zambian lecturers to participate in master's degree programs. The participatory action research team published a peer-reviewed article in an international journal. In collaboration with the University of Zambia, TTE supported a special master's program in literacy, language, and applied linguistics open to the lecturers who participated in TTE. The lecturers can complete their master's degrees in one year, half the usual duration of study. Coaching visits commenced, allowing lecturers to receive feedback on their instruction from TTE staff and UNZA partners.



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New instructional modules for language and literacy for use in pre-service teacher training programs in colleges of education were finalized and lecturers from 12 colleges and universities were trained on the new materials. An enhanced approach to the student teaching practicum was rolled out in all government colleges of education.

National Reading Program Implementation and Expansion - Malawi

During the past year, LSI has provided intensive capacity development to the Malawi Institute of Education (MIE) through workshops and virtual sessions in this USAID-funded project. Together, we have developed new teacher guides and learner books for English and Chichewa language arts classes for grades seven and eight to be used in all primary schools across Malawi. Through this process, our team improved the capacity of 10 MIE staff and approximately 100 other professionals (teachers, teacher educators, and curriculum writers) in literacy education, curriculum development, and monitoring and evaluation.



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Teacher Excellence Initiative - Egypt

The Teacher Excellence Initiative (TEI) is a five-year project sponsored by the U.S. Agency for International Development (USAID). In 2022, the Education Development Center (EDC) signed a sub-award agreement with FSU to support the Teacher Excellence Initiative Activity. LSI is collaborating with FSU's School of Teacher Education (STE) to provide technical expertise in strengthening education systems in Egypt.

The TEI-Egypt project focuses on improving the quality and relevance of teacher preparation in Egyptian public universities, ensuring that teachers possess the necessary skills to support student learning in K-12 schools across the country. In collaboration with TEI partners, the FSU team has conducted a study to assess current university programs and course syllabi for pre-service teacher education. The study focuses on aligning these programs with competency standards for in-service teachers. The findings from this study will guide stakeholders in supporting ongoing reforms of undergraduate teacher education programs.

In Fall 2023, FSU plans to host a study tour, bringing Egyptian government officials, university deans, and faculty members from five selected universities to the FSU campus in Tallahassee. Additionally, FSU will



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establish a visiting fellows program, allowing Faculties of Education faculty members to engage with counterparts at the FSU School of Teacher Education from Spring 2024 to Fall 2025.

Lebanon Higher Education Capacity Development

LSI continued its partnership with the USAID/ Lebanon Higher Education Capacity Development Program by welcoming 19 university staff members from Lebanon to Tallahassee. The group spent five days focusing on career development programs, with much of the program hosted by The Career Center at FSU. LSI trained administrators and faculty from 10 Lebanese universities participating in the program. They were provided training and support on building career centers, grant proposal writing and infrastructure setup, design thinking, and other areas.



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"We were so impressed with the level of facilities here at Florida State, the level of professionalism and the multi-layers of support FSU is providing to students through their career services outreach and resources. We are impressed with Florida State's ability to accommodate these international visits."

- Bill Potter, Project Director of the Higher Education Capacity Development Program

ABC+: Advancing Basic Education in the Philippines

As part of their partnership with USAID-Advancing Basic Education in the Philippines, LSI continued supporting Bicol University (BU) and West Visayas State University (WVSU) faculty. Since improving mother-tongue literacy instruction is not just a regional priority but a national priority of the Philippines, LSI participated in *Sharing of Lessons Learned on Strengthening Links Between Pre-Service and In-Service Teacher Education for Early Grade Reading Activity.* In this national event, the LSI team shared the monitoring, evaluation, learning plan findings, and the experience gained from developing and implementing the two new pre-service teacher education course modules codeveloped by FSU, BU, and WVSU.

In addition, LSI engaged BU and WVSU faculty and staff from the Department of Education offices in regions five and six in participatory action research experiences. For five months, 32 participants representing the four institutions met with the LSI faculty in person and remotely to develop their research skills and engage in rigorous education research. In addition to learning about literacy-based research methods, the participants designed research studies to produce contextually relevant evidence useful for early literacy instruction at schools and in pre-service training.



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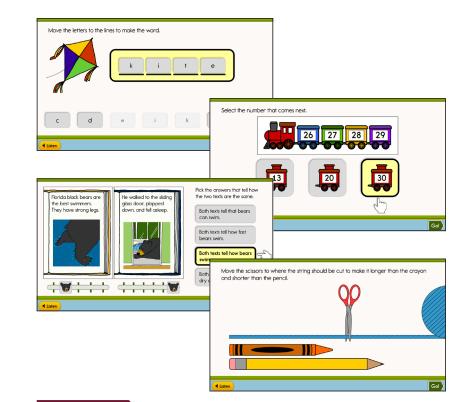
LSI built the capacity of Bicol University and West Visayas State University in implementing the Bachelor of Early Childhood Education and the Bachelor of Elementary Education curricula, with particular emphasis on early literacy instruction in the context of Department of Education's Mother Tongue-Based Multilingual Education program.

PreK-2 Assessment

LSI is leading the creation of PreK-2 English language arts (ELA) and mathematics assessment items that will be on the Florida Assessment of Student Thinking (FAST), a progress monitoring assessment administered across the state, in which over 800,000 students will participate three times per year.

LSI trained over 100 PreK-2 practitioners from across Florida to create over 3,500 ELA and math test items. LSI guided item review teams to edit and vet each item, ensuring they are standards-aligned, reflect classroom-based pedagogy, and are appropriate for the unique needs of these early-grade learners.

Based on LSI's expertise and innovation, the team is pioneering a new interactive assessment format and system for PreK-2 learners that utilizes LSI's capabilities to help teachers adapt their instruction based on instantaneous and informative data while providing a playful computer-based formative assessment. Pilot studies are set to begin in the Fall of 2023.



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"LSI's ability to engage educators in the full test development process, which includes item writing, review of interpretive products (test specifications), and item review, has been particularly valuable. The Department considers its partnership with LSI exceedingly beneficial and anticipates continued collaboration in implementing high-quality, standards-based Florida assessments leading to higher student achievement and improved educator effectiveness."

- Racquel Harrell, Executive Director Test Development Center, Bureau of K-12 Student Assessment, FLDOE

Community College Administrator Program

Since 2014, LSI has worked with the U.S. State Department and in partnership with Santa Fe College to conduct the Community College Administrator Program (CCAP). The extensive six-week training program enhances international understanding of U.S. community colleges and U.S. community college systems. This year, administrators and officials from Egypt and the Philippines participated in the project.



Approximately 250 individuals from more than 200 institutions in 15 countries have participated in the CCAP.

Uzbekistan Education for Excellence Program

Under the Uzbekistan Education for Excellence Program funded by the U.S. Agency for International Development, the LSI team has provided training, facilitation, and guidance on developing new curriculum standards for math, Uzbek language arts, and English as a foreign language (EFL). In addition to developing EFL standards, the LSI team supported textbook selection and customized a series of student books, teacher books, and workbooks for EFL in grades 1-11. This involved making appropriate changes to the books and developing instructional videos to assist teachers in effectively using the new materials.

Nationwide distribution of the series of English textbooks for all grade levels has been completed for the 2022-2023 school year. In 2023, the LSI team conducted a Status of Instruction study focusing on adopting the new English language teaching textbooks introduced in all public schools during the 2022-2023 academic year.

Furthermore, the LSI team has led the development of an educational digital platform to house all curriculum standards and materials (including textbooks and supplemental resources) accessible to



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The program has distributed a series of English textbooks for all grade levels nationwide benefitting 40,000 teachers and six million students. In addition, the program developed an educational digital platform to house all curriculum standards and materials accessible to all 300,000 teachers in Uzbekistan.

all 300,000 teachers in Uzbekistan. The platform was launched for a pilot group of teachers in 2022, and the LSI team trained the ministry's staff on the full version in June 2023. This unprecedented effort will provide immediate and direct support to all teachers, enabling them to access materials made available by the ministry. This one-stop shop for all their curricular needs brings significant day-to-day support to teachers in Uzbekistan.



The Florida Inclusion Network

FIN collaborates with all districts and schools to provide customized services and supports ensuring all students with disabilities have the same educational, social, and future opportunities as their peers.

In partnership with districts, FIN facilitates the implementation of inclusive best practices through:

- Data-driven, student-focused planning and problem-solving across districts and schools.
- Data-driven professional development and technical assistance to increase knowledge and skills of district and school personnel.
- Coaching and resources for district and school personnel to sustain inclusive best practices.
- Sharing information to build collaborative relationships between families, schools, and districts.

Tunoze Gusoma Schools and Systems - Rwanda

During the past year, the Tunoze Gusoma Schools and Systems project team has provided intensive professional development on literacy education to 46 teacher educators drawn from Teacher Training Colleges (TTCs) across Rwanda. In order to provide teacher educators and student teachers with opportunities to practice teaching lessons using curriculum from the primary schools, 2,288 curricular books/materials were delivered to 16 TTCs. Each TTC received 143 books/materials to use in literacy-related activities.

Moving forward, we will focus on providing training on early childhood education pedagogies and training education leaders to support teacher educators and student teachers. The Teaching Practice Advisory Group has reviewed and revised the structure of student teachers' practicum and school attachment and has begun to provide training on the new handbook and materials in preparation for the new model to be piloted in the next academic year.



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Math Lions

This was the first year of the Math Lions project, funded by the National Science Foundation. In this project, we aim to 1) develop materials for a math anxiety intervention for children, 2) test the intervention's effect on math anxiety in a cluster randomized trial in schools, and 3) see whether there are subsequent effects on working memory, math avoidance, and then math achievement.

During this first year, the focus was on developing the intervention materials, including a facilitator guide, and child workbooks. We worked with collaborators in Italy and the advisory board to develop these materials through an iterative process. We are now preparing to administer the intervention to children in the lab to test out the materials and make any improvements to them before conducting the intervention in schools.



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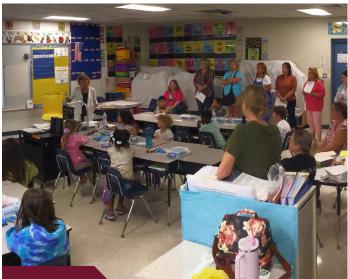
"Unfortunately, people with math anxiety tend to have a harder time with math and are less likely to take higherlevel math courses or pursue STEM careers. We wanted to address math anxiety early so we could decrease the chances of negative educational impacts later in life."

> Dr. Colleen Ganley, Associate Professor Department of Psychology & Learning Systems Institute

The Successful Start: Cognitively Guided Instruction

LSI received a two-year grant from the Children's Board of Hillsborough County to fund The Successful Start: Cognitively Guided Instruction project. The activity aims to enhance the effectiveness of early elementary mathematics in Hillsborough County by providing mathematics teacher professional development to 300 voluntary pre-kindergarten through third grade teachers in collaboration with Hillsborough County Public Schools. The program began in the summer of 2023 and will continue through the school year 2023-24 and 2024-25.

The Cognitively Guided Instruction (CGI) program provided to teachers during the Successful Start project is based on an evidence-based CGI program that meets the What Works Clearinghouse standards for moderate evidence of effectiveness. CGI is one of the few mathematics teacher professional development programs that has this level of proven evidence of effectiveness.



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This summer in Hillsborough County, Florida, 150 elementary educators have been given a chance to improve their math teaching abilities through the CGI professional development program. So far, the program has provided six days, equivalent to 42 hours, of training for these participants.



Ralph Stair Prize For Innovation In Education

Dr. Stephanie Simmons Zuilkowski, Associate Director for Research at the Learning Systems Institute, was awarded the Ralph Stair Prize for Innovation in Education. The honor is awarded biennially to an individual or collaborative team at FSU who has developed innovative education approaches that demonstrate the potential of having a great impact nationally and internationally. Zuilkowski was honored for her work leading the development of the Nigerian Center For Reading Research at Bayero University-Kano, a project sponsored by the U.S. Agency for International Development (USAID). The project to establish the research center took place over three years and was achieved despite the personal risk inherent in working in the region.



CPALMS is a unique platform developed by LSI to support K-12 education in Florida and used by millions from all around the globe. More than 260,000 K-12 Florida educators and approximately three million Florida students actively use CPALMS to access educational resources, information to help them teach and learn, and software applications to support them throughout. CPALMS is the State of Florida's official source for standards information and course descriptions. It provides access to thousands of standards-aligned, high-quality instructional and educational resources designed specifically to support standards-based instruction. Over the years, CPALMS has become a platform of tools and continues to grow the level of support it provides to the entire state and the world. During the year, the CPALMS team worked on multiple projects and grants.

CPALMS Impact

CPALMS now offers more than 12,000 high-quality educational resources developed by FSU faculty and K-12 educators. Our team has created over 1,300 original student tutorials for students to use anytime and from anywhere. These are interactive online lessons on the topics from the curriculum standards the students need to learn in math, science, English Language Arts, and social studies. During the pandemic, LSI made all the CPALMS resources accessible to students, parents, and educators around the globe to support them in teaching and learning from home. More than 20 million students depended on CPALMS during that period. Since CPALMS

started offering educational resources, more than 800 million resource views/ downloads have been delivered. During the last year, CPALMS had more than 70 million resources delivered to Florida's educators and students.

Original Student Tutorials

The CPALMS team created more than 150 new original student tutorials and maintained 1,300 tutorials throughout the year. The development of these tutorials is a collaboration between K-12 educators, subject specialists, instructional designers, graphic designers, narrators, and others who collectively spend 200-400 labor hours to create each tutorial. During the last year, several tutorials crossed a million views.

CPALMS Civics Platform and Educational Resources

The CPALMS team is working on multiple projects to develop educational resources for civics, including integrated resources that can be used in math, science, English Language Arts (ELA), computer science/coding, social studies, and fine and performing arts. Over 1,200 instructional resources, such as lesson plans, student tutorials, and videos, are being created and will be distributed on CPALMS for over 260,000 Florida teachers and 2.8M Florida K-12 students.

CPALMS will be debuting a new type of K-2 student resource, Interactive Research Pages, that will allow students to independently research and learn about civics while using ELA skills and concepts. Civics family guides were created to help families better understand the civics initiative and civics topics covered in each grade, along with ideas on how families can continue learning at home.

CPALMS was chosen to be the platform for the new Florida civics portal. Our team created the platform to deliver civics education instructional resources to all K-12 educators across the state. The portal features thousands of educational resources the CPALMS team guided during the development process to support teachers as they implement civics education, provide innovative ways to teach civics, and integrate civics into other content areas. The portal provides students and parents with resources that will enhance home-based support of civics education. While building this vast support system for the entire state, LSI vetted submissions from over 500 K-12 teachers and worked with collaborators from other Florida universities and organizations.



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More than 1,200 original educational resources were created for teaching math, English Language Arts, science, coding, fine arts, and social studies with embedded civics context. More than 500 Florida educators participated in the program this year helping to create resources that will be used by all Florida's educators and students.

CPALMS Initiative for Career Technical Education

CPALMS has expanded its support to include Career and Technical Education (CTE). In partnership with and funding support from the Florida Department of Education, the CPALMS team is designing and migrating a complex process and a massive data set to modern, efficient, and usable tools and resources for all educators. By the end of the project, CPALMS will have a CTE application to help the state manage all the programs, courses, and standards data, along with software tools and educational resources for teachers across the state. This project will lay the foundation to build support for students to explore CTE programs, careers, college degrees, and much more. At the same time, it will create a one-stopshop for CTE teachers across the state to access resources for teaching and learning.

During the past year, CPALMS staff trained 100 educators to create more than 250 educational resources that will be the first of many CTE resources featured on the new CPALMS CTE application. The resources are grounded in research-based integration and engaging pedagogy to support Florida CTE teachers who reach over 460,000 students preparing for future work.



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Professional Learning Platform

CPALMS supported the Department of Education's Civics Excellence Initiative by building an interactive online learning system featuring a 55-hour teacher professional development course. The system was created from the ground up in the CPALMS platform and was launched in just months. It includes the development of advanced and AI tools for grading and detecting plagiarism, as well as a built-in support system. More than 13,000 Florida teachers completed this online course since January, and more than 18,500 are expected to complete the course by the end of September.



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Over 500,000 hours of videos have been viewed, and more than 715,000 assignments were submitted and reviewed in six months. The platform assisted 13,000 Florida educators in completing a course, achieving a teaching endorsement, and earning a stipend.



CPALMS Professional Development

Throughout the year, the CPALMS staff hosted professional development (PD) workshops in Tallahassee and around the state. The PDs covered financial literacy, civics integration, career and technical education, and coding with Scratch. Almost 700 Florida educators participated in over 20 workshops this year.

The most ambitious PDs were held in Tallahassee in June, as nearly 300 Florida teachers came to the capital city for over 35 hours of PD rooted in researchbased pedagogy and integration methods. An essential part of these PDs in Tallahassee was offering unique immersive experiences which increased teacher content

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"Overall, the experience was wonderful. The training is exceptional. The integration and the technology use are phenomenal. The help provided is wonderful."

- Adam Bagby, teacher in St. Augustine and CPALMS Professional Development participant

knowledge while inspiring engaging lesson ideas for teaching units the participants created. Attendees visited the Florida Supreme Court, the historic Capitol building, the Florida House of Representatives, and the Senate. The teachers also took a tour from Cascades Park to Wakulla Springs to learn about water management and civic duty.

Tools Competition Finalist

The CPALMS platform, developed by staff at the Learning Systems Institute at Florida State University, was named one of 16 finalists in the Tools Competition for learning engineering tools. The Tools Competition is a multi-million-dollar global prize challenge for education technology solutions tackling the most pressing issues in education and advancing learning science. The competition awards more than \$4 million for innovative learning tools in four areas addressing pressing challenges in education. CPALMS is a finalist in the transforming assessments track. The Learning Engineering Tools Competition aims to spur the development and deployment of technologies that address pressing education issues from early childhood to secondary education while advancing the field of learning engineering.



