UZBEKISTAN EDUCATION REFORM





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TAO LEARNING INSTITUTE IGNITING CURIOSITY WORLDWIDE Igniting Curiosity: Uzbekistan



TECHNICAL BRIEF

SECTION I - SUMMARY INFORMATION

- A. Name of Applicant: Tao Learning Institute
- B. Phone number and email address of applicant:
 - a. Phone: +01-740-538-0172
 - b. Web: <u>https://taolearning.org</u>
 - c. Fax: +01-929-376-0022
- C. Lead Institution: Tao Learning Institute
- **D. Lead Institution DUNS Number:** 117004373
- E. Other HEI Partners: The Tao Learning Consortium (MIT, Harvard University, University of Berkeley, University of Texas, Boston University, Hong Kong Polytech, Columbia University).
- F. Partnering Organizations: Sunny Hive, Minecraft Education, Khan Academy, STEAM Hive, TEALS Program, The Focus Hive, EdX, Skillful.com, Geekspod Pvt. Ltd., Microsoft Education, Adobe Education
- G. Title of Concept Note: Igniting Curiosity: Uzbekistan
- H. Proposed Project Period (Estimated Start Month/Year and Estimated End Month/Year): Oct 2019 – Sept 2023
- I. Proposed Project Budget: \$19.5 Million USD
- J. **Overall Concept Objective:** We will ignite curiosity across the nation by using an innovative digital network by our Learning Consortium, covering STEAM subjects and tracking progress through our partnership with Microsoft in a GDPR Compliant program that is innovative and futuristic with its use of EduTech.

SECTION II – DESCRIPTION OF PROPOSED ACTIVITY

We will build a localized solution for Uzbekistan while using all the digital resources provided by the Tao Learning Consortium (TLC), comprised of an ever-growing list of digital resources with world-class academic partners who care about world reform in education.

Through the TLC, we will create a P-20+ solution in Uzbekistan that centralizes education completely in the digital realm. This allows everyone to collaborate throughout a multitude of partners we have and either keep their entire education online or use it as a supplement for their existing physical classes. When less then 50% of Uzbekistan teachers have Higher Education degrees, this solution allows the entire country to tap into the global education resources and experts we have partnered with.



Description of Higher Education Institution Partners

Tao Learning Consortium

Universities	Supplemental Education		
MIT	Sunny Hive		
Harvard University	Minecraft Education		
University of Berkeley	Khan Academy		
University of Texas	STEAM Hive		
Boston University	TEALS Program		
Hong Kong Polytech	The Focus Hive		
Columbia University	EdX		
Cornell University	Skillful.com		

Pedagogical leaders from various Universities will contribute their time to curriculum development, skill analysis, and program overview with US Standards. These Research Associates will meet online and custom-tailor an approach suitable for Uzbekistan's short-term and long-term educational goals.

The Supplemental Education partners have been strategically chosen for the solutions they offer over a wide range of students, known as our P-20+ Initiative that covers Preschool through Career Training. These programs are all digital in nature and offer solutions for local teachers to point students in the direction of the programs while acting as curators of all the variety we offer.

Super Librarians

We live in a society where the world is at our fingertips, only if you know how to access it. Our futuristic approach repositions the current Uzbekistan teachers into Super Librarians where they will be trained in all the tools available in the Tao Learning Consortium.

In the short-term, these teachers will not be trained in the subject matter, but instead will only be trained in the framework of how this software works, which resource is most appropriate for each student, and how to properly measure engagement, interactivity, and success. This is the same approached used for Librarians and we are taking it digital.

B. Igniting Curiosity Solution

The SMILE MethodTM - Self-Motivated Impact Learning Environment Method

This pedagogical method was developed for people from all walks of life, with the goal of igniting curiosity in literacy without the need for teachers: students are taught to coach themselves and explore their environment to learn. The method is malleable yet stable, making it easy to apply to a vast range of demographics: from pre-school children to educators, young adults to parents, and even full-time business professionals to community leaders.



We will teach the leaders in education about this approach and the success it has had around the world.



With our P-20+ Initiative, it is imperative to see the education process for a child from birth all the way to their career. Uzbekistan cannot have success unless this approach is taken, as proven by the struggles of other nations who do not support such pedagogical methods.

Sunny Hive – Preschool to 8 Years Old

In our approach, preschoolers will be introduced to elementary education, edutainment, and gamification on tablets and phones where they can tap in with teachers around the world who are fun, exciting, and always happy – to show kids that learning can be friend and can be a lifestyle. This experience introduces them to more culture, language, and technology so as to create a smooth transition into the IT Nation program in their older years. It also allows mothers to stay home with their children while giving them top-quality education, which blends well with the current culture of the normal family setting of Uzbekistan where the mother will stay home with multiple young children.

Students may also opt to take group or private lessons with expert teachers we will have in Uzbekistan and around the world. This is the future of education.

STEAM Hive – K-12 Education

In this new age of learning, children love to be challenged more than ever. Through our STEAM Hive program, they collaborate online in what is known as Hive Mentality. It is here that they get the opportunity to do Virtual Job Shadowing in many fields, interact with students around the world, and take their education experience with them anywhere. This doesn't confine them to the school buildings that are in disrepair and often times have no running water in Uzbekistan.

Khan Academy

Through our partnership with Khan Academy, students can achieve high-end training in a digital environment where we encourage the focus on all STEAM subjects: Science, Technology, Engineering, Arts, and Mathematics. Khan Academy is appropriate for kids



of all ages and can become the backbone of the testing process for the first few years while we create a long-term standardized score for the entire country of Uzbekistan. This also circumvents the problem of having poorly trained teachers and allows to reduce the overall budget for the higher education needs of school staff. Over time, the entire nation will naturally rise in education and once these students graduate and become the teaching staff of the nation, it will be very easy to find qualified teachers for all the STEAM subjects required to have success.

Gamification

We also desire to rely heavily on gamification, found in Khan Academy, but found even moreso in programs such as Minecraft Education, ALICE, and Tao Learning SMILE Scores. Each of these programs provide unique approaches to Gamification as a form of education and interactive learning.

Minecraft Education allows the children to learn while playing games and has seen great success in America. ALICE, Developed by: Carnegie Mellon University, is an introduction to computer programming. ALICE is used by teachers at all levels from middle schools (and sometimes even younger) to universities, in school classrooms and in after school and out of school programming in subjects ranging from visual arts and language arts to the fundamentals of programming and introduction to java courses.

The SMILE Score is proprietary to our approach and creates a Score on participation, engagement, interactivity, amongst many other metrics to determine how much effort and success a student is putting into their schooling. This is a game-changer as it allows us to effectively coach and track students remotely with great success. We can adapt learning modalities on the fly for each student based on the scores reported into the system.

TEALS Program

The TEALS Program, partnered with Microsoft, empowers young people to compete in the global economy and pursue careers across all sectors because it teaches students computational thinking and problem solving skills applicable in any industry. Students want to learn computer science yet most high schools are unable to offer rigorous CS courses, especially those in Uzbekistan. In this partnership with TEALS by Microsoft we have a solution to that problem as students get access to a large pool of volunteer virtual Computer Science teachers who have been screened and qualified.

After the first year of teaching this program, the local Uzbekistan teacher who has been monitoring the progress all online can then take over the program locally and no longer need to utilize TEALS teachers. This allows for deep penetration and to achieve the bold goals set with the IT Nation initiative.

The Focus Hive – Vocational Level

Through the Focus Hive, students will have access to opportunities without the need to leave home. We are bringing Silicon Valley and the Manufacturing industry of USA directly to the students.

This includes access to Job Shadowing and Internship options in all major sectors such as: Health, Medical, Tech, Manufacturing, Computer Programming, Marketing, Digital



Art, and Science. Never before has Uzbekistan had such access to enterprises that are making a difference around the world.

We achieve this by Live Streaming directly from these businesses through our partnerships, using the Tao Learning platform where the business professionals will give exclusive access to watch and follow along with what is happening in these jobs. Once students pass qualifying exams, they may participate alongside experts for virtual handson training.

EdX

If a student wants to further study a subject, our partnership with EdX allows them to take qualified courses directly from top Universities such as MIT, Harvard University, University of Berkeley, University of Texas, Boston University, Hong Kong Polytech, Columbia University.

Skillshare

Once a student is ready for a career, we will send them to Skillshare where we will create a partnership just for Uzbekistan. With this service, students will learn how to put their resume together, their LinkedIn profile, and get access to an international market for careers. As many careers shift to an online workforce, this will even allow students to work for Fortune 500s in the USA all while living and contributing to the local economy of Uzbekistan.

Harmony in Education

We will scale out all programs immediately at the start of this program and expect to see an organic ripple effect across the country. We will create a headquarters in Uzbekistan with expertly trained staff on all software and all methodologies where other teachers and educators can come and learn from.

The HEI Partners will continue to create content and curate strong UX practices for students whereby the Administrative body of the Tao Learning Consortium will create integrative translations into Uzbek so locals feel very welcomed into all the software and digital solutions mentioned.

This approach is ideal for inclusivity as it ensures people do not have to engage directly with education facilities, can study from home, and can study regardless of gender or economic status.

We will create an outreach program where we will invite educators from rural areas and we will digitally outreach to groups and sectors that would normally not be included in an education approach

The entire strategy above clearly shows support for the missions desired by USAID, GOU, and the MOPE.

C. Collaborating, Learning and Adapting (CLA)



The SMILE Network tracks the Name, Age, Gender, Education Level, and creates comprehensive Activity Reports to show STEAM literacy on the Office 365 platform. We will provide a report on Uzbekistan participants bi-annually to USAID which will share the digital activity usage (as outlined in figure below). Then, at the end of the program, we will share a list of all participants along with their full usage history.



eDiscovery: Advanced Communications Insight We will utilize Microsoft's O365 eDiscovery platform to setup automated rules on communications to ensure the SMILE Network is being utilized for positive change and impact in the communities we touch. We will provide automated reporting to USAID on select keywords desired to monitor.



Indicators of success will be clearly outlined by the SMILE Scores shown in our software. We will continue to adapt practices to continue to adapt the system for the highest engagement and the highest SMILE Score in each student: which translates to high literacy in STEAM and digital tools necessary for the IT Nation initiative.



Applicant:	Too Learning Institute					
Proposed Activity:	Tao Learning Institute Ignite Curiosity: Uzbekistan					
	Year 1	Year 2	Year 3	Year 4	Total All Years	
Personnel	\$2,000,000	\$2,000,000	\$2,000,000	\$2,000,000	\$8,000,000	
Fringe Benefits	\$600,000	\$600,000	\$600,000	\$600,000	\$2,400,000	
Travel	\$375,000	\$375,000	\$375,000	\$350,000	\$1,475,000	
Equipment	\$350,000	\$350,000	\$350,000	\$350,000	\$1,400,000	
Supplies	\$350,000	\$350,000	\$350,000	\$350,000	\$1,400,000	
Contractual/Subaward	\$0	\$0	\$0	\$0	\$0	
Other Direct Costs	\$1,800,000	\$400,000	\$400,000	\$400,000	\$3,000,000	
Total Direct Charges	\$5,475,000	\$4,075,000	\$4,075,000	\$4,050,000	\$17,675,000	
Indirect Charges	\$547,500	\$407,500	\$407,500	\$405,000	\$1,767,500	
Total USAID Funding	\$6,022,500	\$4,482,500	\$4,482,500	\$4,455,000	\$19,442,500	
Cost-Share (if any)	\$0	\$0	\$0	\$0	\$0	
Total Activity Amount	\$6,022,500	\$4,482,500	\$4,482,500	\$4,455,000	\$19,442,500	

A. Proposed Estimated Cost and Cost Breakdown

B. Contact Information for Proposed Partners

Organization	POC	<u>Title</u>	<u>Email</u>	Phone	Description
<u>Tao</u> Learning	Matthew Hackney	NGO President	matthew@taolearning.org	740 538 0172	Influencer in Education
<u>Miami U</u>	Dr. McAlees	Adjunct Professor	drmcalees@taolearning.org	Same	Biologist
<u>Brewton-</u> Parker <u>College</u>	Dr. Huffman	Program Director	drhuffman@taolearning.org	Same	Executive Coach
<u>Columbia U</u>	Baylee Stokes	Alumni	baylee@taolearning.org	Same	Social Advocate



8. Key Personnel:

Mr. Matthew Hackney: Program Director – He is the founder of The SMILE Method[™], President of Tao Learning, and is an expert on teaching entrepreneurship in STEAM. He has taught at University of California, developed the Airikai Sanctuary for mindful learning in Platanillo, Costa Rica, has led education reform in Pakistan, China, and consults with multiple Universities in the USA for their digital platforms and pedagogical approaches. He is the author of multiple books and has worked with millions of students worldwide to reshape their abilities in learning.

Mr. Hackney strives for excellence and coaches others to their highest potential. His achievements can be seen in the communities he builds and the managers he creates. He lived full-time in the Platanillo area between 2014-2015 and has worked with international community development for over 15 years.

9. Future Funding & Sustainability

As the program grows, we expect small business owners in the community to step forward and volunteer in our program to assist our organization. The partnership with the venue should strengthen ties with the US and allow other facilitators to step forward and use the same eco-system we will build with their own STEAM literacy programs.

The SMILE Method[™] teaches self-motivation which will spread through the community. It also teaches that effort must have impact. Thus, participants will be challenged to find ways their learning modality can have a positive impact in their community while simultaneously achieving their desire to learn.

If small local businesses embrace this program, they will ask for interns directly from our participants, whereby we will be able to charge a nominal stipend to work with each participant. At this point, the program could become sustainable as small business owners will provide funding to the Tao Learning Institute to work with the interns in our training program. We also expect successful participants who go on to open their own businesses to donate back so we may give more opportunities to the local communities.

We will encourage learning enterprise software such as Office 365 while encouraging the general & rural populations of Uzbekistan to Ignite Curiosity in STEAM education. We have a tried & true philosophy known as The SMILE Method[™] along with the SMILE Network that works with mobile devices and PCs with only an internet connection where we will explore the boundaries of contemporary standards in education and assessment. We have reshaped the pedagogical model to empower students and educators get out of their way as they find their own path in life with a fun and innovative method.

Through this program, we will develop a new initiative known as *Igniting Curiosity in Uzbekistan* where we train educators and students to adopt SMILE method to education and learning. Our experienced coaches, professors, and motivational speakers will lead



the program for the period of four years through multiple partnerships with GOU, MOPE and US based companies to ensure that the local educators can create sustainable educational programs transforming the current approach to the innovative and involving SMILE method which uses CLA Toolkits (Collaboration, Learning, and Adapting). Our strategy allows the educators of all levels, students and parents to receive first-hand experience and training in education which will promote the interest in learning, supplying necessary technology, providing access to the US based educational programs. The yearly summits with the US representatives who will track the development and adoption through the SMILE Score will ensure the progress and the success of the program.

After the review of the Uzbekistan's Education Sector Analysis report provided by the World Bank the following issues are going to be addressed as per the recommendations made in the report:

- Strengthening the quality of pre-school, elementary, primary, and higher education through changing the approach of educators to teaching
- Introduction of innovative and contemporary technology for all education levels by promoting tools and technology for teaching and assessment
- Teacher education to ensure professional growth
- Introduction of US based curriculum programs to improve and enrich student socioeconomic development and English language proficiencies.

We encourage learning from preschool all the way to career growth with a SMILE - a Self-Motivated Impact Learning Environment. We have trained the same individuals for over 25 years and continue to encourage, inspire, and mentor curious minds of all ages. We have been in the U.S., Pakistan, India, China, and Costa Rica for over a decade. We entered the Costa Rica market 2014 where we have made significant impact in the Dominical region by creating entrepreneurs, teaching English, and spreading ideology of the power of STEAM.

We've seen great success with this program as we have brought world leaders to the area to teach the locals from over 15 countries. We have also helped the local population embrace technology, open their own businesses, and adapt the American cultural values through our STEAM literacy programs that include training in software by Adobe, Microsoft, Google and also more general subjects such as Science, Math, English, and the Arts.

Schedule:

1. **Technology Education for teacher empowerment.** Tao Learning will provide workstations in the capital of Uzbekistan Tashkent area with a Microsoft 365 ecosystem with state-of-the-art technology, Office 365, and local community members who are fluent in the technology to provide access to these materials for educators and principles from local and regional institutions.



- 2. **Making STEAM cool**. STEAM is an educational approach to learning that uses the top fields needed in the workforce as access points for guiding student inquiry, dialogue, and critical thinking. We will host online and in-person training at SMILE Spaces in a fun and invigorating fashion. We are also very social with our students so their learning experience can become a lifestyle rather than just a modality for work.
- 3. The SMILE MethodTM Self-Motivated Impact Learning Environment Method

This was developed for people from all walks of life, with the goal of igniting curiosity in literacy and education across the globe. This Method utilizes mindful philosophies, virtual tracking tools, and teaching techniques for global success in educating individuals on a large scale. The method is malleable yet stable, making it easy to apply to a vast range of demographics: from pre-school children to educators, young adults to parents, and even full-time business professionals to community leaders.

In this method, students go through a 5-step process to encourage themselves, ignite their own curiosity, find inner passions, collaborate with like-minded individuals who share similar goals and who are discovering the same subjects, and finally to engage in community development to share wisdom back with those who need it most.

- 4. **The Curiosity Network.** Partnered with Microsoft, we utilize Office 365 to give participants a sample understanding of what Hive Mentality is. They immerse into a real-world technology experience in digital groups while learning SharePoint, MS Teams, Azure, MS Flow, and how to collaborate with basic Office tools such as Word and Excel.
- 5. Human Capital Index. By quantifying current Human Capital Index the country can assess how much income it is foregoing because of the gaps in health and education. The ability to measure the weaknesses will allow to increase the contributions and turn losses into gains. By evaluating academic levels of Uzbekistan population from preschool age the results can be compared to the international testing result to improve specific level of development. Tao Learning will help to Join International Tests & Improve Scores through PISA, TIMSS, PIRLS.
- 6. Introduction of ICT Instructions. Tao Learning will facilitate the supply of the current technology for the educational and training purposes. Educators and principles will be trained using Microsoft Office 365 to collaborate, learn, adopt the technology for educational strategies implementation. By training the educators and teachers how to introduce technology into STEAM subjects the level of curriculum will be improved throughout the country. Tao Learning platform will allow simultaneous transition to the innovative technology in teaching where the results can be continuously assessed through SMILE Score.
- 7. **Presidential Schools.** Tao Learning will further expand the territory for presidential schools that will answer the current needs and initiatives suggested by



the Ministry of Education by developing the centers in each of the 14 regions throughout Uzbekistan during the first year of strategy implementation. Students will get access to unique internship opportunities with Americans via the SMILE Network. We will facilitate counseling the participants into finding the right opportunity for them.

The participants will get access to an online English lesson that they can attend from their mobile device or at appropriate venues in Uzbekistan throughout the duration of the program and further upon its completion.

8. Short, Medium, and Long- Term Solutions. Tao Learning strategy for implementation of the Educational Reform can be separated into short, medium, and long-term goals and tasks.

Immediate (short-term)

Assessment and data management

- a. SMILE Score
- b. Test Prep
 - i. Score tracking
 - ii. Train Teachers how to create sample tests & Program for plotting scores

The first step in educational reform is the assessment of educators and students at all levels. Based on the preliminary results SMILE Score will be traced on the regularly basis to determine progress and adjust the program. The teachers will be further trained to create sample test and programs for plotting the scores and tracking their own and student progress.

Medium-term

- a. Adoption of Tao Platform
- b. English through STEAM Subjects

Teacher professional training through the adopted to Uzbek Language Tao Platform will increase IT penetration into the educational sector allowing educators to apply innovative teaching techniques to general and higher education levels. With children learning technology at the early ages will increase their familiarity with computers and internet broadening the horizons and igniting curiosity at the young age. Access to multiple US based academic programs that will be integrate universal STEAM subjects into Uzbek schools will increase overall level of intelligence and simultaneously improve English level knowledge. The Tao Lingo school currently has students from US, Pakistan, India,



Costa Rica, China, and Russia where individuals of all ages learn English through exploring various topics of from Math to Space Engineering.

Long Tearm

Teacher preparation and continuous professional development

- a. Teach the Teacher
- b. Yearly Consortiums
- c. Head teacher and school management training
- d. Strategic and organizational planning

Teacher Education and Training. We will use The SMILE MethodTM - a Self-Motivated Impact Learning Environment. In this method, students go through a 5-step process to encourage themselves, ignite their own curiosity, find inner passions, collaborate with like-minded individuals who share similar goals and who are discovering the same subjects, and finally to engage in community development to share wisdom back with those who need it most.

We will recruit and train Smile Coaches who do not hold the participant's hand through the learning process, but instead reminds participants how valuable it is to make mistakes and also reminds you to engage in impactful learning. This style of learning has tangible results in the community and in America instead of mundane homework with no real-world application. In this fashion, we are able to give virtual internships and cultural opportunities to participants of all levels within local companies, U.S. Companies and U.S. Organizations who are partnered with us.

9. Women and minority groups opportunities. At Tao Learning we are committed to supporting equal right opportunities in different areas of business. We understand that socioeconomic development and intelligence reflects on the acceptance of the groups that may be different from others. We already support Women in Pakistan, US minority groups, and Girls learning in Costa Rica. Participants education about members of minorities and the importance of women's efforts towards social and economic development of the country will take place through out the program. US motivational speakers, doctors and other leaders will visit Uzbekistan promoting right equality. Internship opportunities, participation in the cultural exchange programs, and other resources will be distributed equally among the participants of the program targeting the reform of education in Uzbekistan.