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ART, SCIENCE AND TECHNOLOGY IN COMMUNITY DEVELOPMENT.

The Instituto de Pesquisas em Tecnologia e Inovação - Institute for Research in Technology and Innovation - IPTI - is a not-for-profit institution working in art, science and technology, whose aim is to generate technological innovations capable of promoting human development, using the creation of Social Technologies focussed on the areas of Primary Education and Entrepreneurial Education, also taking into consideration issues in Health that contribute to people's well being.

IPTI took its first steps in October 2003, in the city of São Paulo. In 2009, the organization decided to move its headquarters to Santa Luzia do Itanhy, in southern Sergipe state, one of the poorest municipalities in Brazil, so that together with the community it could develop solutions that would be effective in a context of extreme vulnerability and that would be sustainable and have great potential for scalability.

Santa Luzia do Itanhy is our global incubator for Social Technologies, where we first conceive, develop and fine-tune innovative solutions that can be re-applied in different regions of Brazil and the world.



To promote human development by building innovating solutions, with scalability potential, for social problems, by means of methodologies that associate Art, Science and Technology, in partnership with the communities.

VISION

To be a world reference in solutions that really improve conditions for life in the communities.

VALUES

- Local roots for global articulation;
- Commitment to innovation;
- · The poetry of difference;
- · Visible and invisible dynamics;
- Empathy;
- Confidence, perseverance and resilience.







HOW DOES THIS ALL WORK?

IPTI always acts by respecting and appreciating the immaterial assets of each region, and understands that the collective construction of knowledge is a powerful tool in finding solutions to the varied problems in the communities where its work is developed.

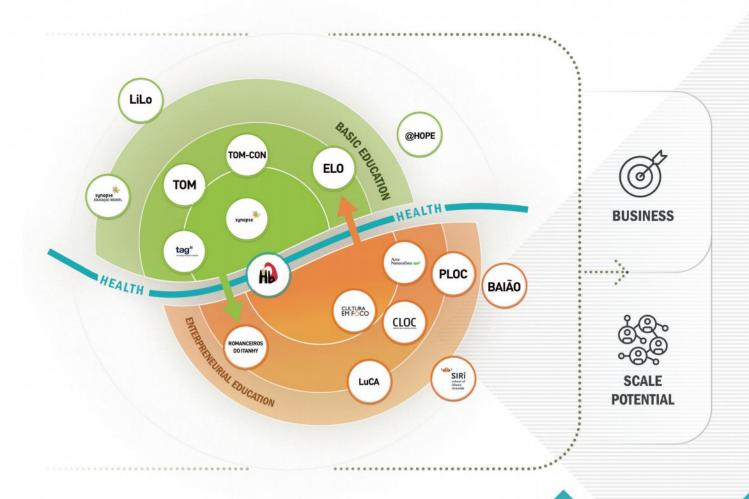
Each project therefore results from a real social necessity, always based on a commitment to innovation, effectiveness and scalability. Everything is planned to work in a systemic manner, that is, as well as being returned to the community, the results must also fit the needs of other Social Technologies developed by IPTI. Moreover, the projects are carried out in such a way that, at a given moment, they can be transformed into social businesses to make scalability and sustainability viable.

IPTI'S HUMAN DEVELOPMENT MODEL

IPTI believes that the association of art, science and technology, in a situation together with society, transforms education, encourages youth participation, and broadens the entrepreneurial vision of that society, offering new opportunities for living.

We develop solutions that are effective, scalable innovators, directed toward enterprise and aimed at ensuring sustainability.

Currently the IPTI systemic model has 17 social technologies, 8 in scalability and 9 in development.









The Sergipe Government believes that science, technology and innovation are the pillars of economic development. For us in the government, innovation is a choice for remodelling social realities, which constitute great challenges for government initiatives, aimed at confronting adverse regional realities.

Based on this belief, the State Economic Development Secretariat for Science and Technology (SEDETEC) has supported various strategic projects, whose actions are implemented based on innovative social technologies. This is the commitment signed off in the Secretariat's brief, mainly in the sense of remodelling social, economic and productive areas in the less favoured areas of Sergipe state. For us, science, social technology and innovation will always be the tools of transformation.

Finally, we believe that the implementation of projects with great social impact requires strategic partners. The Institute for Research in Technology and Innovation (IPTI), fits into this context, where its contribution has been shown to be opportune and decisive in the viability of creative alternatives for a model of economic development that has a determining impact on the social life of the regions in which it is inserted.

JOSÉ AUGUSTO PEREIRA DE CARVALHO

STATE SECRETARY FOR ECONOMIC DEVELOPMENT, SCIENCE AND TECHNOLOGY





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THE REPORT FROM PREVIOUS YEARS.



IPTI Social Technologies

- SOCIAL TECHNOLOGIES FOR BASIC EDUCATION
- SOCIAL TECHNOLOGIES
 FOR HEALTH
- SOCIAL TECHNOLOGIES
 FOR ENTREPRENEURIAL
 EDUCATION

FOLLOW THE EVOLUTION OF OUR PROJECTS IN THE PAGES THAT FOLLOW.



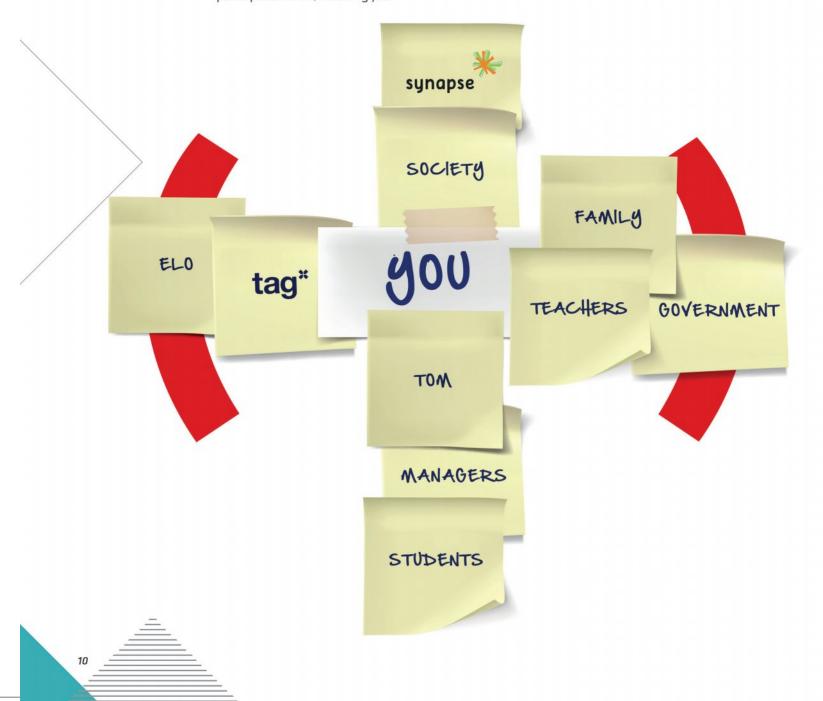




SOMOS PROJECT

Technology and Innovation in favour of education, conceived by those familiar with the reality of public education and able to carry it forward.

Four social technologies, a single goal: to transform public education with the participation of all, including you.



FIND OUT ABOUT THE ESSENCE OF IPTI'S SOCIAL TECHNOLOGIES COMPOSING SOMOS:

Synapse

A teaching methodology that combines the knowledge of neurosciences with the experience of public education teachers in the classroom, the goal of which is to improve teaching and learning of the Portuguese language and Mathematics in the first years of elementary teaching.

A computer system for school management and the facilitation of school administrative tasks. TAG issues main reports, and is integrated with Educacenso (national education census) and works both online and offline, in synchronisation, allowing the integration of rural units and schools in areas of difficult internet access.

TAG

TOM

Participatory building of management processes for quality in the school with the aim of improving the schools' reality and contributing to the improved performance of students, teachers and staff.

This social technology aims to improve the family-school relationship through integrated mediation action for conflict resolution and the appreciation of education and knowledge in the community.

ELO















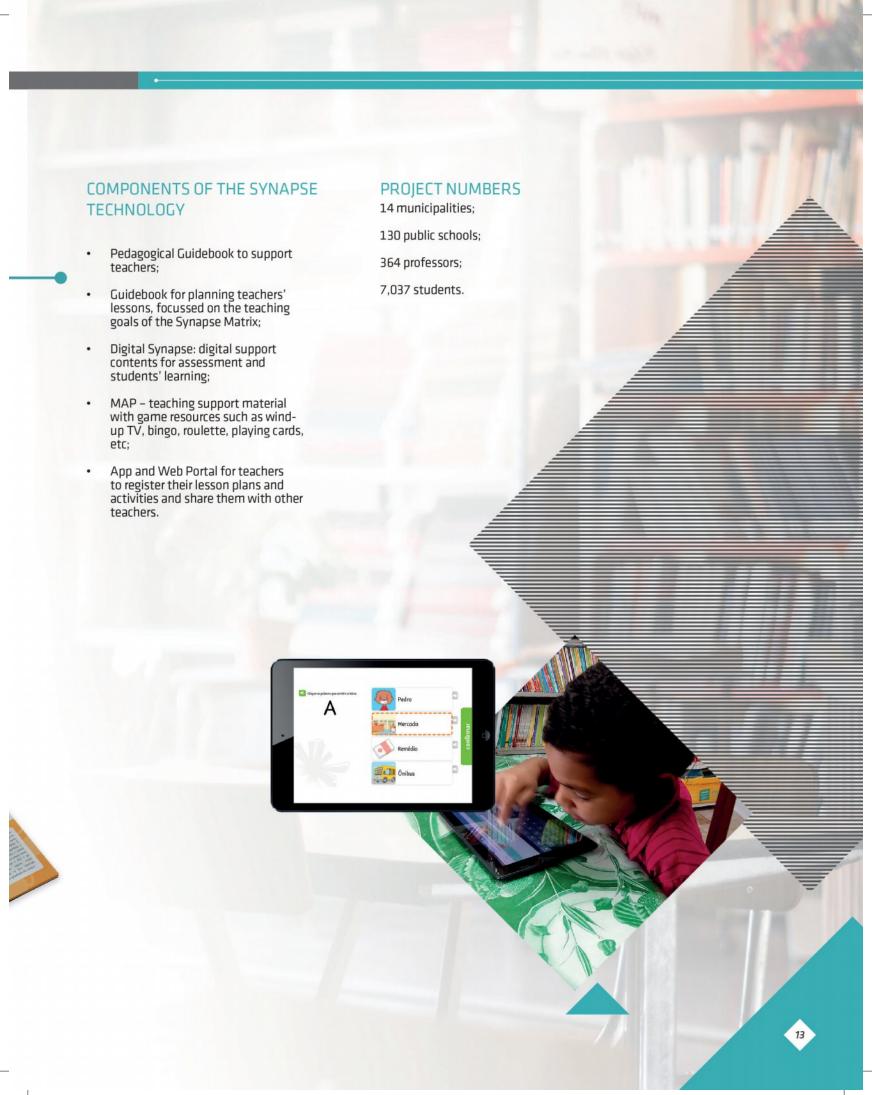
Synapse is a teaching methodology that combines knowledge of the neurosciences with experiences in the classrooms of public education teachers, the aim of which is to contribute to improved quality in teaching and learning Portuguese and mathematics in the first three years of Elementary School in Brazil's public education system.

The development of this technology was begun in 2010, extending to the end of 2014, when we produced the first effective and re-applicable version of Synapse, comprising the Teaching Guidebook and Lesson Plan, Digital Platform and educational games resources for use in the classroom (Teaching Support Material – MAP). This whole process was carried out in a participative form, involving the IPTI team and a group of teachers from Santa Luzia do Itanhy's municipal schools.

At the end of 2015, a partnership between IPTI and the State Education Department of Sergipe (SEED) allowed for a scalability experiment with the re-application of Synapse in all the municipal and state schools in the 13 municipalities of the Lower São Francisco Region, in the north of the State.

Synapse is constantly evolving, and in 2017 the integrated volumes of the Literacy Cycle and of the Lesson Plans were launched, and developed the new digital platform version, Synapse Edu, aimed at students. In 2018 we launched a new version of Synapse teaching resources, incorporating contributions from more teachers from the participating schools and further fine-tuning the technology to the reality of public schools in Sergipe.







I'm a teacher in a multilevel class, with students from the first to fourth year of elementary education, and I've always found it difficult to work with the usual material, with no contextualisation of the realities in which the children live. I've always wanted to find a way that would facilitate learning for these students. I've been a part of Synapse ever since the project began.

When Synapse came along I was delighted, as I saw in it a chance to produce teaching content based on our local experience and reality. Being as it was a part of the construction of a technology aimed at helping teachers and students in the educating process, this learning process was a watershed in my professional life. My teaching is now much better as my understanding of planning has increased and, in addition, we use material that functions like a syllabus, pointing out distortions in the expected results, an important tool helping us in the search for continuous improvement in our procedures.

I am proud to be part of a project that takes the student's reality into consideration. IPTI has provided us with the opportunity to do the same work, but with different procedures and results."

ALINE DOS SANTOS ARAÚJO

AGE: 39, SYNAPSE TEACHER AT THE EMEF EDMAR JOSÉ DA CRUZ, IN THE SMALL VILLAGE OF PRIAPU, SANTA LUZIA DO ITANHY/SERGIPE

SOCIAL TECHNOLOGIES FOR BASIC EDUCATION







Technology for Support and Management

TAG is a computer system initially developed to support school administration, with a special focus on small municipalities that do not yet have computerised information systems.

This social technology was developed in a partnership involving administrative staff from municipal schools in Santa Luzia do Itanhy. It works both on and offline, taking into account those rural areas that do not have Internet access, and allows for synchronisation via pen drive and soon via mobile. The TAG allows more practicality and greater speed in enrolment, registration of students and teachers, lesson plans, more efficient document delivery, organisation of reports and support to management of the Bolsa Família Program, as well as being integrated with the Education and Culture Ministry's EducaCenso system and SIAE – the Integrated Educational Administrative System at the Sergipe State Education Secretariat, SEED/SE.

In 2015 the TAG was chosen by the Education Ministry (MEC) for its Guide to Educational Technologies, a document with recommendations for technologies to be used by states and municipalities.

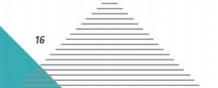
Based on the version for school management, TAG was developed to also support information management in the areas of health and social assistance in municipalities.

TAG IN HEALTH

Support for the Hb social technology, enabling monitoring of the diagnosis and health campaign against iron-deficiency anaemia in schools, including the identification of nutritional problems such as obesity and malnutrition among pupils.

TAG IN SOCIAL ASSISTANCE

The TAG module developed for social assistance equipment, CRAS (Centre for Social Assistance Reference), allowing management of information on families referenced in the municipality and appointments carried out daily at the CRAS.



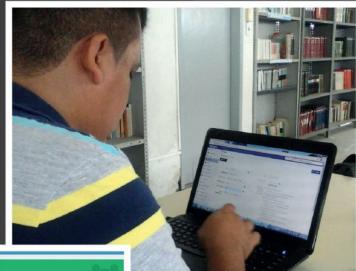
SOCIAL TECHNOLOGIES FOR BASIC EDUCATION

PROJECT NUMBERS

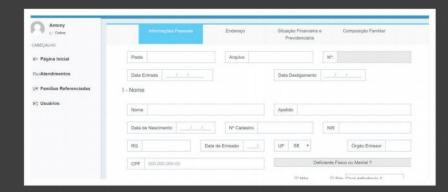
- 16 municipalities;
- 185 schools;
- Over 60,000 students in the TAG database.

NEXT CHALLENGES

- Expansion in the use of technology by other Sergipe municipalities and in other Brazilian states;
- Development of new functions for social assistance and health;
- Using elements of AI to improve data management and support decision making.









IPTI

TOM

In any organization, the existence of effective management processes maximizes performance and allows planning and decision-making based on evidence. In most Brazilian public-sector schools difficulties in implementing management processes exist for various reasons, whether from lack of suitable information on the part of managers or even due to Brazil's cultural bias against planning and management actions.

Among the main management challenges are those concerning communication and the accumulation of duties upon the school manager, compromising the performance of the school as a whole.

In this situation, IPTI has developed the TOM social technology, the aim of which is to promote continued improvement in school management.

The stages in the TOM's development are carried out in partnership with the schools' management, and start with the mapping of processes which, in turn, generates the production of the self-evaluation instrument for the school's management.

In 2017 we perfected the diagnosis instrument to diagnose the level of maturity in the schools' management, and made progress in defining priorities for each school by means of participatory activities, and we arrived at the preliminary proposals for methodologies to solve the problems, treating six municipal schools in Santa Luzia do Itanhy as pilot schemes. Throughout 2018 we worked on developing action plans for schools that had priority problems due to the lack of, or outdatedness of the School Statutes and the PPP and a lack of knowledge about these documents among the school community, for which we finalized a methodology for drawing up the Statutes for a school in Santa Luzia do Itanhy. The other actions are in the development process.

Tonceptualizing Schools Application Stages Conceptualizing Solutions LEARN ABOUT THE FIRST TOM IN SCHOOLS Application Stages 1 School Management School Management and Prioritzation Of Problems 4 Application of the New Instrument in School Management 3 Conceptualizing the New Instrument for Evaluating School Management

PROJECT NUMBERS

- 6 Diagnoses of management maturity, that is, one per school;
- 6 Action plans designed for priority management problems, that is, one per school;
- 1 instrument for self-assessment of the degree of maturity in school management, now in its second version;
- 1 solution developed (preparation of the school statute for one school);
- 2 solutions in the construction process (preparation of the PPP and strategies for disseminating the finalized School Statute).

SOCIAL TECHNOLOGIES FOR BASIC EDUCATION



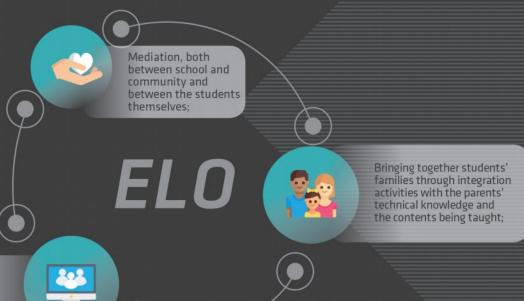
ELO

Family-education and family-school relationships together are one of the great problems affecting the wellbeing of the teaching units.

In a diagnosis undertaken by IPTI and educators together with the families of some of the municipal schools in Itanhy, problems such as low self esteem, psychological strain, a feeling of powerlessness and lack of prospects were identifies. In the case of the children, the main problems identified are related to health, behaviour, performance and affection.

The ELO social technology's aim is to improve the relationship between family and school by means of integrated mediation actions for conflict resolution and the appreciation of education and knowledge in the community.

THIS TECHNOLOGY'S PROPOSAL IS BUILT ON THREE PILLARS:

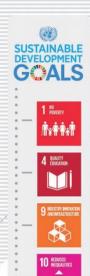


Improved trust in the child protection system, through developing the application for schools to report events and monitor the measures taken by the responsible organs.

PROJECT NUMBERS

- Between 2017 and 2018 we made progress with the premises referring to mediation between school and community and the process of bringing the families closer together with the Teaching in the Community project, with emphasis on the performance of the municipal school Raimundo Carvalho de Menezes, in the village of Rua da Palha.
- This project had to be paused in mid-2018, due to the priorities defined by the sponsor, but we hope to continue with it beginning with a new version, already incorporating the lessons obtained.





LILO LANGUAGE AND LOGIC

Since little, we are inserted into a world where we use Mathematics informally, learning how to count small groups of objects in the family or playing with toys that require logical reasoning and strategies. Mathematics is essential to our lives and if not worked with from an early age, in a fun way, it could become the cause of a large part of difficulties faced in the future, when we meet it again in a more complex form, in Elementary and High School.

With this in mind, in mid-2018 Lilo – Language and Logic was created, a project that proposes a teaching of mathematics that respects cognitive development, replacing the abstraction of mathematics for a more contextualized character, using language to work with the logic of mathematics in the first few years of elementary school.

The methodology used by LiLo relies on the application of three elements:

PEDAGOGICAL SUPPORT KIT

Prepared in partnership with teachers from five schools in Santa Luzia do Itanhy, the aim of the Kit is the contextualization of mathematics teaching through games and interactive activities. They approach subjects such as numerals, the base 10 system, sequence, the idea of size, basic operations and the monetary system, at the same time as a having simple discussion on the municipality's socio-economic reality.









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SOCIAL TECHNOLOGIES FOR BASIC EDUCATION





GROUP OF STUDIES FOR COMPETITIONS SUCH AS THE OBMEP - BRAZILIAN MATHEMATICS OLYMPICS IN PUBLIC SCHOOLS

The group of studies is aimed at developing an atmosphere that highlights the best students so as to empower the student body through example with recognition of those with the greatest aptitude. Twenty of the best performing students in mathematics in the region were chosen, and, through the group of studies, they are made ready for participating competitively in the Mathematics Olympics.

PRODUCTION OF THE LIVE-ACTION SERIES

the series "1 Pé de Banana Nanica" (1 Dwarf Banana Plant) is another tool for teaching mathematics in the initial years of Early Childhood Teaching, broadening and setting up situations of teaching-learning related to the process of learning mathematical literacy in a fun and contextualized manner.

The aim of the series is to call attention to the real use of mathematics in the everyday and through this stimulate interest in the subject. Concepts dealt with include infinity, patterns, geometry, addition, subtraction, fractions, unit of distance measurement, the monetary system, financial responsibility, the phases of the Moon, the calendar, musical notes and the clock.

The 13 YouTube episodes will be created and produced exclusively by a work nucleus composed of adolescents and children that have developed their skills in other IPTI projects, such as PLOC, Storytellers of Itanhy, SIRI and LuCA. This nucleus has set up a partnership between the activity areas and will provide an opportunity to produce an audiovisual putting into practice activities such as screenplay, plot, soundtrack, directing, photography and acting.



THE SERIES, CHARACTERS AND THEIR STORIES

The stories take place in the small village of Rua da Palha and the subjects dealt with by the characters are the events of the rural lives of their families and friends, such as domestic chores, games, walks through the mangroves and woods, most of which need logical reasoning and mathematical knowledge to be fully exploited. The narrative of the series occurs in a conjuncture of education and entertainment in such a way that the resolution of the programmed didactic content has an outcome at the end of each episode.

It is supported by five principal characters.

Dada, a girl around ten years old, black-skinned, vain and curious, who uses her sensory perception to assess and discover the world around her. Dadá's cousin Mané, a spirited and carefree boy with a great sense of fun and adventure. Auntie Nena, a black woman, her wisdom expressed in the little sayings and bits of advice she gives the girl. Guigó, a small monkey that communicates with humans, curious, playful and Dada's friend. And Maria Bonita, the house's pet hen: jealous, a talker and quick-tempered, she plays the role of the antagonist.







THE LILO

- Develop interest in the processes of teaching/learning by creating an emotional attachment to the use of mathematics;
- Provide differentiated teaching material suitable to the development of the practice in the classroom;
- Emphasize and broaden those students' possibilities with an aptitude for mathematics.

THE PROJECT IN NUMBERS

- 440 young and adolescent students taking part;
- 20 teachers taking part.

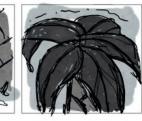
NEXT CHALLENGES

- Test the prototype lesson created in the classroom;
- Promote integration with the Synapse methodology, in terms of the teaching and learning of mathematics;
- Production and propagation of episodes of the series "1 Dwarf banana Plant".















CHILD EDUCATION

The Synapse Child Education (Synapse EI) project, started in mid-2018, aims to build a Social Technology aimed at improving the quality of child education (children from 2 to 5 years old), by developing cognitive and non-cognitive skills, and to collaborate in the formation of new generations of students who are better prepared and better able to learn in elementary school, in alignment with Social Synapse Technology.

The methodology is based on an initial stage of mapping the main difficulties found in the classroom and preparing the planning of activities and the systemization of the educational reality in schools, through a participative process, involving the local teachers. The intention is then to set up a routine of meetings to cooperatively create lesson plans and teaching activities which are subsequently validated in the classroom and transformed into the Teaching Guidebook and the Lesson Plan according to the Synapse version for Child Education.

By December 2018 the project had carried out the visits for mapping in the schools and training meetings in the principles of the Waldorf Teaching Principles, which helped define the strategy for activities to be developed in 2019. The final expected result for 2019 is the preparation of a first effective version of the Teaching Guidebook and the Lesson Plan, in this case totally aligned with the Basic National Common Curriculum (BNCC), and also a first version of the scalability model for teacher training, to be tested in 2020 in the schools of Santa Luzia do Itanhy.

PROJECT NUMBERS

2 Pilot Schools;

11 teachers involved.

NEXT CHALLENGES

- Prepare the Teaching Guidebook and the Lesson Plan;
- Prepare the reapplication textbook so the project can be scalable;
- Preparation of Teaching Support Materials (MAP), in cooperation with the local teachers, as a support for early childhood education activities.



SOCIAL TECHNOLOGIES FOR BASIC EDUCATION

SUSTAINABLE DEVELOPMENT GALS











TOM-CON

TOM-Con is a social technology aimed at improving services offered by the Child Protection Services and Municipal Children's and Adolescents' Rights Council (CMDCA), by improving the management and communication procedures through integration between the actors composing the Protection Network, by using a digital system.

The building of the technology in 2018 prioritised the Child Tutelage Councils, and all the stages of the process have been carried out in a participatory manner, in partnership with the Councillors of Santa Luzia do Itanhy. The TOM-Con involves the mapping of the Councils' management and communication services, the building of solutions for priority problems and, to help in the management and monitoring of the cases, a module was created linked to the TAG, the database system supporting the management developed by IPTI

This computer system facilitates the registration and monitoring of complaints by the user and the issuing of reports by Councillors. In addition, it has been designed to allow integration with other players in the Protection Network. With this, it will be possible to obtain greater efficiency with other players in the Support Network such as the Public Prosecutors Office and the State Public Safety Secretary, among others. It will also be easier to obtain greater efficiency in the municipalities' Child and Adolescents Rights Guarantee System (SGD).

The stages of the Tom Con are in the implementation phase at the Child Tutelage Council, with adjustments to the solutions and the computerised system, while the CMDCA is in the phase of mapping the processes. This experience is planned to be systemized to allow future applications in other Brazilian municipalities, giving the model scalability.

PROJECT RESULTS

- involvement of 1 Child Tutelage Council and 5 councillors;
- Building of processes management for the Child Tutelage Council in accordance with the reality of Santa luzia do Itanhy;
- Implementation of the computerised system for registration and monitoring of tutelage council cases.

IMMEDIATE CHALLENGES

- Implement continued training courses for the members of tutelage councils;
- Include the Municipal Child and Adolescent Council and integrate the tutelage council into the CMDCA and other bodies constituting the Protection Network;
- Encourage the interface between the TAG and the CMDCA.





@HOPE

ART & TECHNOLOGY FOR HEIGHTENED OPPORTUNITIES IN PUBLIC EDUCATION

The @Hope project is a social technology proposal for the creation of municipal schools with a suitable space for the promotion of human development, the pedagogical model of which includes the integration of social technologies in Primary Education, Entrepreneurial Education and Health, developed by the IPTI.

The Paulo Fernando Ribeiro Soutelo municipal school was chosen with this in mind. The school welcomes children from the nursery age (from 9 months old) to the 5th year (around 11 years old) to be the pilot for this experiment. The school is located in one of the poorest communities of Santa Luzia do Itanhy - Pedra Furada, a small fishing village where the daily earnings per person is less that U\$ 1.

The architectural project was developed in close partnership with the community related to the school (council, teachers, staff, director, students and parents), developing a detailed reference document that can be accessed in the link below.

SCAN THIS CODE WITH YOUR SMARTPHONE AND GET ACCESS TO THE LINK.



The project was awarded a prize from the Brazilian Institute Of Architects, São Paulo department (IAB-SP), at the end of 2018, as best project in the category "Institutional Buildings – works not yet built".



The proposal is for this school to be a showcase for IPTI's social technologies and that inspires other schools to follow the same path to transformation.



WHAT WE HAVE DONE SO FAR

With the resources raised for @HOPE in 2018, the main effort was in the shared planning of the school's architectural project. Nevertheless, the kitchen of the current school was totally reequipped, enabling us to provide two daily meals. We also reapplied the Hb social technology, for diagnosing and combating iron deficiency anaemia, identifying a prevalence of 19% of students with anaemia, who began receiving medical treatment and medication to reverse this situation.

NEXT CHALLENGES

The main challenge is to raise the funds needed to build the school, which will be built on 900 square metres, at a total estimated cost of R\$ 1,350,000. IPTI plans to simultaneously implement activities in primary education (Synapse literacy programme) and early childhood education (Synapse EI), health (Hb, eyesight corrective surgery and nutritional security) and art and technology (illustration, programming, robotics and music) throughout 2019, and build a mechanism to monitor the results and recompense our education professionals for their performance.



SUPPORTER



SUPPORTER









Hb is a social technology for the diagnosis and treatment of iron deficiency-caused anaemia in schools, the world's most widespread nutritional disease, according to the WHO (World Health Organization). It is based on the use of a portable mechanism, low-cost and simple to use, to measure the amount of haemoglobin in the blood and on an awareness campaign for the detection, treatment, and teaching of more healthy eating habits.

Between 2010 and 2013, the technology was produced with the help of technicians from the municipal health and education departments, starting with a campaign to combat iron-deficiency anaemia, suited to the human resources and budget limitations of the smaller municipalities with lower indices of human development - IHD.

The Hb technology was able to reduce the average occurrence of iron-deficiency anaemia from 32% to less than 6% in the schools of Santa Luzia do Itanhy, and as of 2015 scalability was made possible, when the most experienced technicians began to act as replicators of the Hb technology in other municipalities, with the support of the project's reapplication guidebook.

To make progress in raising awareness and mobilising the population over the disease, a series in HQ was created entitled Artery Wars, used in the campaign carried out in the schools. A version of TAG was also created, TAG Hb to manage the campaign, including the evaluation of both undernourished and obese students.



With the obsolescence of the diagnosis equipment initially used in the Hb, we set up a partnership with the Chemistry Institute in São Carlos, São Paulo State (IQSC/USP), for the development of a new and more simplified device to measure the level of haemoglobin in the blood, using microfluidics paper-based analytical devices (µPAD). The intention is for the new device to also perform other tests, such as for glycemia, glycated haemoglobin, cholesterol, bilirubin and lactose intolerance.





SOCIAL TECHNOLOGIES FOR HEALTH

STEP BY STEP

The HB application works like any health campaign obeying the following stages in any municipality:

AWARENESS

Call the schools and parents attention to the problems of iron-deficiency anaemia and to the importance of supporting and taking part in the project.

PARENTS' AUTHORIZATION

Seek the parents' permission for the collection of a drop of blood from the students.

STUDENT'S DATA

Request information from the school on the students' age, sex, weight and height.

ENGAGEMENT

Engage and train the campaign team, formed of professionals in the municipality's health and education departments.

MEASUREMENT

The health team examines the children using the haemoglobin measurement device "Hb", developed by EXA-M, an IPTI partner company.

DIAGNOSTIC

Software crosschecks the student's data for the haemoglobin measurement and identifies those students diagnosed with anaemia.

MEDICAL ASSESSMENT AND PRESCRIPTION

A doctor evaluates, confirms the diagnosis, and provides the prescription for treatment.

MONITORINGHealth agents monitor the patient for postexamination awareness and for two further checks: one after 6 weeks, and a second 12 weeks after the start of treatment.

PROJECT NUMBERS

- Reduction from 32% to 6% in the numbers of iron deficiency anaemia among students in Santa Luzia do Itanhy/SE:
- Reduction from 25% to 4.8% in iron-deficiency anaemia in the students in Boquim/SE;
- Reduction from 59% to 3.9% in the level of iron-deficiency anaemia among the students of Anixim Borba/Amazonas State;
- 1st place in the Banco do Brasil Foundation Prize in Social Technology 2013);
- Experience in Axinim (AM) won the selection Brazil "Here is SUS 2017" in the category WEBDOCS CONASEMS PRIZE.

THOSE BENEFITING

Over 8,000 children



NEXT CHALLENGES

- Conclusion of development and validation of the new device for diagnosis of haemoglobin levels in the blood;
- Broaden the reapplication of the technology to other Brazilian towns.



















Arte Naturalista



NATURALIST ART

Naturalist Art is a social technology to identify and develop local talent in drawing, training future illustrators qualified in various illustration techniques (watercolour, pointillism, pencil and pastel) with special emphasis on portraying the mangrove ecosystem.

Inspired by the local scenery, these young people learn to illustrate the flora and fauna of the Santa Luzia do Ithany mangroves, highlighting the importance of saving this environment and strengthening the process of building an identity in the community, through appreciation of its way of life and its knowledge.

As the students develop their skills they also become part of a group of illustrators with the job of reapplying the teaching of art in the community's schools.

At the end of each cycle, the nucleus seeks to develop the ability to consider business with high potential, based on the principles of the creative economy in areas such as fashion, graphic design and product design, among others.

As a result of this initiative, in 2016 the Casa do Cacete came about, a contemporary design business, with a focus on illustration and printing.

REAPPLICATION OF NATURALIST ART

Confirming its potential for scalability, Naturalist Art continues the commitment to have the best artists teach illustration in Santa Luzia do Itanhy's municipal schools, ensuring continuity in the training process and opening opportunities for the discovery of new talent.

PROJECT NUMBERS

- 1,800 children and adolescents benefitting;
- · 4 technical training workshops;
- · 5 partnerships with businesses.

IMMEDIATE CHALLENGES

- Expansion of reapplication to other villages near Santa Luzia do Itanhy (Pedra Furada) and in the municipality of Indiaroba/SE;
- Holding of an illustration workshop in Murais aimed at developing new visual arts techniques and broadening possibilities in the field of entrepreneurship;
- Produce outdoor panels in the villages where the Naturalist Art project is already present to emphasise and give visibility to the work being produced by the young artists;
- Consolidate the Casa do Cacete business, with regular collections and expansion of sales channels.





CASA DO CACETE - CDC

Formed of illustrators trained by the Naturalist Art project, the Casa do Cacete has put the learning acquired in this social technology into practice, establishing a dialogue with the world, without frontiers. In 2017/2018 the Casa do Cacete forged important partners in Brazil and abroad.

RESULTS IN 2017/2018:

BANESE - BANCO DO ESTADO DE SERGIPE (SERGIPE STATE BANK)

A partnership with the Banese Institute and the designer Daniel Moraes – from Graphique Design studio, for the creation of a personalized logo for the bank's public relations. November 2017

ALPHA'A INC AND GALERIA WEST ELM

Launch of a collection produced by CDC, in partnership with designer Daniel Moraes and the support of Alpha Inc, a platform connecting artists and the public from around the world, gaining visibility at the West Elm Gallery, in New York City. August 2018.

OSKLEN – PRINTS FOR THE SUMMER COLLECTION - 2019

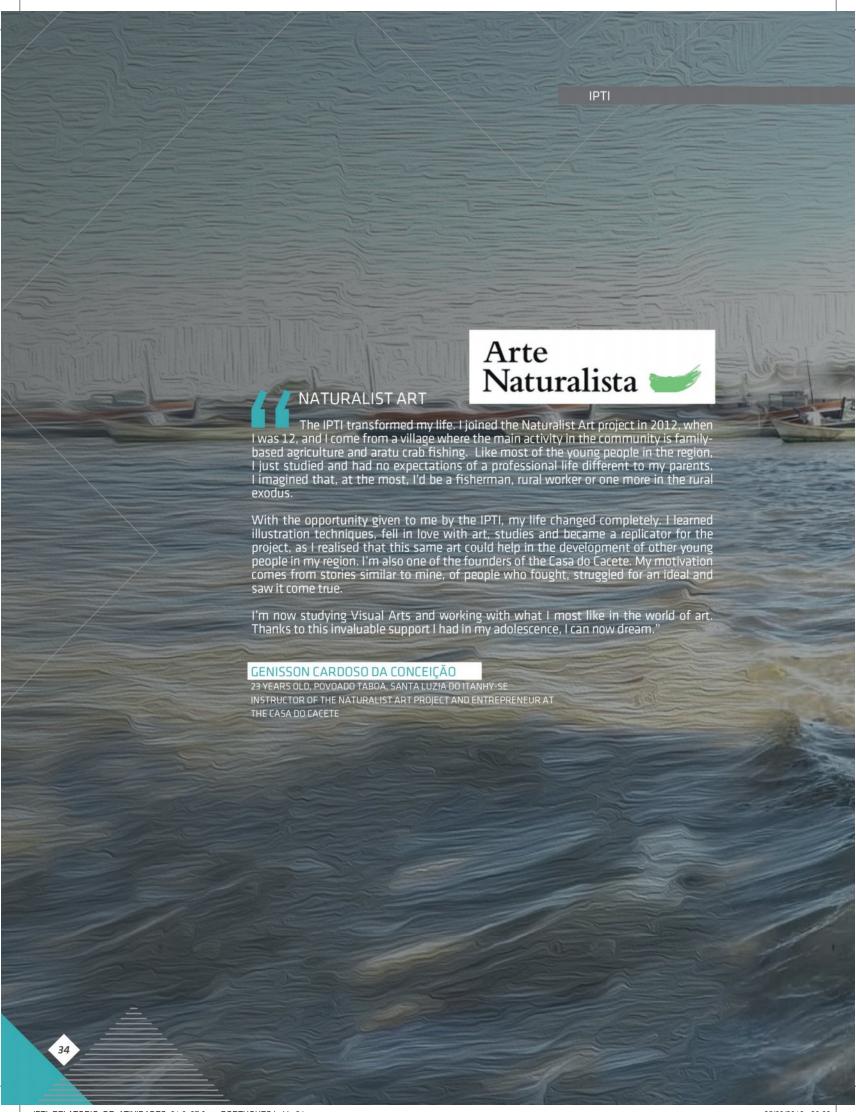
Osklen and the Instituto-E, in partnership with the IPTI and the Casa do Cacete, created a joint project for the producing of the brand's Summer and High Summer collections. At the invitation of Osklen, the illustrators were welcomed by the company's design team for an immersion into the brand's headquarters in Rio de Janeiro. This exchange of experience and knowledge resulted in the co-creation of the prints for the ASAP Oceans Summer 2019 collection, with extensive publicity in specialised media across the country.

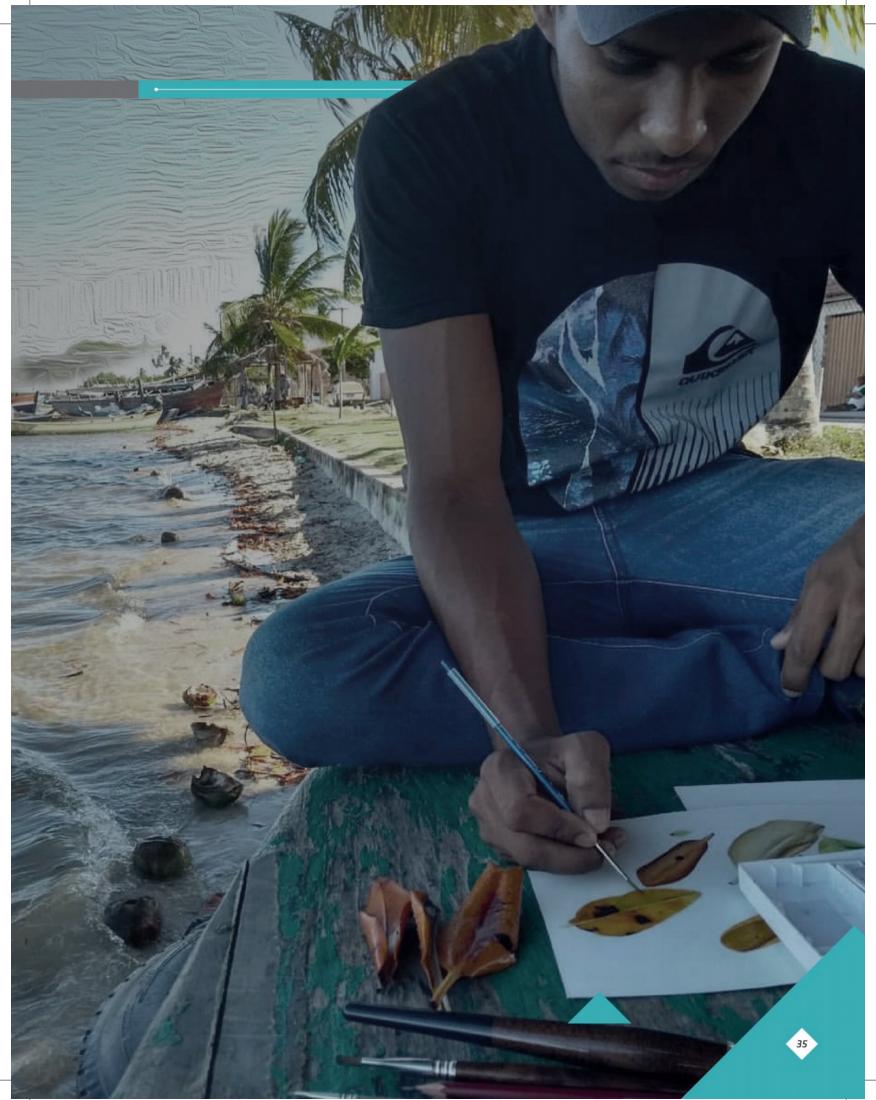














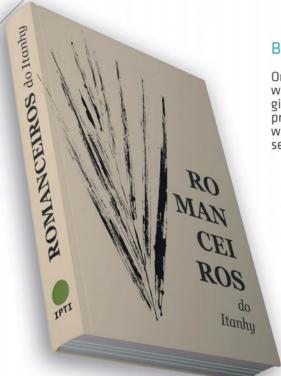


STORYTELLERS OF ITANHY

The Storytellers – Romanceiros - of Itanhy was begun in mid-2017, inspired by the experience of the First Book social technology thought up by Portuguese Language professor Luis Junqueira, who encourages the literary and linguistic skills of children and youth through the production of stories and the publication of their own books.

Through a process of selection, 20 adolescents from Santa Luzia do Itanhy, interested in literature, get mentored and over time develop a deeper understanding and appreciation of the written word, moving beyond spelling and semantics, bringing a greater focus on affective and structural processes involving the construction of a narrative.

Through weekly meetings exploring the various languages within literature, music and the audiovisual, the students were bit-by-bit encouraged to write their own stories.



BOOKS AND THEIR STORIES

One year of teaching resulted in the production of seven books with both fictional and non-fictional stories. The students were given total freedom of expression and took part in each stage of the process, including the art production for the covers and illustrations within the book. We are expecting these books to be printed by the second half of 2019, and a night of book-signing will be held.



SOCIAL TECHNOLOGIES FOR ENTREPRENEURIAL EDUCATION

NÚMEROS DO PROJETO

- 20 students benefitted;
- 7 books produced.

GENERAL GOALS OF THE STORYTELLERS OF ITANHY:

- Offer students a deeper understanding and appreciation of the written word;
- Stimulate the imagination and creativity;
- Strengthen self-esteem, stimulating the construction and reaffirmation of identity and of self-knowledge;
- Provide a safe environment for the exercise of freedom of expression;
- Develop logic and critical capacity through reading and debate in the classroom.

NEXT CHALLENGES

- Increase the number of adolescents taking part in the project;
- Develop a dialogue between the PLOC, CLOC and LuCA projects, seeking a greater focus on the training of scriptwriters, with the aim of encouraging a creative environment in the productive chain of the audiovisual and in games.













BAIÃO

(A traditional song and dance of Brazil's Northeast)

Created at the end of 2017, the Baião project's aim is to preserve the region's traditional music, through teaching the playing of the zabumba bass drum, triangle and accordion instruments. Twenty adolescents and youngsters were chosen, who, through a process of listening to music, had developed and awoken a taste for the music, a sense of rhythm and of creativity.

These young people had lessons twice a week, which as well as developing the technical part, also aimed at exploring the language of music to emphasize the importance of preserving our musical memory and discovering the value of our cultural roots through music.

Our social technologies become stronger with the potential of scale and the sharing of experiences. In this sense, the Baião project interacts with the PLOC project, creating a positive environment for innovation and experimentation mixing the traditional with the electronic, with the prospective widening of horizons and professional possibilities resulting from the project.

STANDOUTS OF THE BAIÃO PROJECT THROUGHOUT 2018:

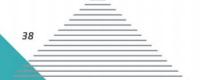
PLOC AND BAIÃO

Joining the PLOC and Baião projects together began to bear fruit with the entry into production phase of a CD by the Orquestra Imaginária PLOC, composed of young people from the two projects, with experiments mixing regional sounds together with varying harmonies in their own compositions.



In June 2018, several of the Baião students gave a show at the invitation of EMEI – "Sítio do Pica Pau Amarelo" (a famed children's TV show) – in the village of Crasto, during the school's June festivities.





SOCIAL TECHNOLOGIES FOR ENTREPRENEURIAL EDUCATION

In October 2018, a group from the Orquestra Imaginária PLOC, under the command of DJ Dolores, put on a musical show during the Gala night of the Brazil Foundation, in São Paulo, launching "Coco de Santa Luzia", a song written for the event.



PROJECT NUMBERS

- Benefitted: 20 children and adolescents;
- 2 shows;
- Production of CD.

PRÓXIMOS DESAFIOS

- Reapplication of learning in the second semester of 2019, with instructors trained from the first class;
- Greater integration with the Orquestra Imaginária PLOC for new groupwritten productions;
- Further professionalization of the group for shows at national festivals.

















CLOC is a social technology whose goal is to structure a highly qualified nucleus in advanced programming, composed of young talent chosen from state schools, capable of inserting computer programming into teaching in these schools, in a sustainable manner, and able to generate IT business.

In an evolving sequence, the CLOC students learn to develop logical reasoning, learning Scratch, java script, HTML5 and CSS, until reaching a more advanced level - Database and PHP. When the students reach the database level they are invited to act as programming instructors in their respective village schools, ensuring continuity and scale and generating opportunities for the discovery of new talent.

In 2016, students from the first two classes of CLOC began the introductory course on programming and production of low-cost robots, using Arduino, then to use it in support of the Synapse technology, helping students to learn Portuguese and mathematics in a fun way. Also in 2016, this group developed the first operational system in PHP.

In 2017 and 2018, the students tested and fine-tuned the robot prototype in the schools of Santa Luzia do Itanhy, interconnecting successfully with the Synapse technology through initial experiments in the use of the robots in learning Portuguese literacy and mathematics, in the classroom.





NÚMEROS DO PROJETO

- CLOC nucleus formed of 68 programmers, 13 already active and 55 in training;
- 800 students benefitted;
- 5 municipal state schools benefitted;
- 1 application developed;
- 1 operational PHP system;
- 1 software;
- 1 robotics kit.

NEXT CHALLENGES

- Create the first IT company in Santa Luzia do Itanhy;
- Reformulate the CLOC social technology reapplication model;
- Begin the reapplication of the CLOC Robotics in the municipal schools;
- Achieve financial independence by December/2019.





















PLOC

PLOC is a social technology whose aim is to create opportunities for young people to perceive and explore the local musical landscape as a possible route to cultural and economic development.

In 2017, after the selection of adolescents with the greatest aptitude for the project, we held a series of workshops for training in sound recording and editing, using advanced digital technologies, aiming to work in the market as future sound engineers, record producers, sound designers and audiovisual artists.

For this, technical workshops with in-studio and outdoor recording were provided, with training in sound editing, etc., and workshops in instrument-making, musical composition and improvisation to encourage creativity among the students.



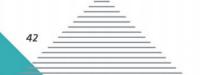
Under the coordination of DJ Dolores, several students formed a group to create electronic music called Orquestra Imaginaria PLOC and began to produce tracks for their first album, which will also have students from the Baião project participating.

FEATURES FROM THE PLOC PROJECT, 2017-2018:

PLOC, LUCA AND BAIÃO

The PLOC, LuCA and Baião projects often use complementary methodologies and these tools facilitate the teaching/learning process. This integration process facilitates the relationship between the areas of interest and has produced great results.

- Production and launch of video-EP with four tracks by Capitão Cook, in Aracaju/SE;
- Technical production of a videoclip by the group Demetrio;
- Show at the Reciclaria Casa das Artes, in Aracaju/SE, in 2017, directed by DJ Dolores;
- Performance of the Orquestra Imaginária PLOC at the Brazil Foundation's V Gala São Paulo, at Casa Fasano, in November 2018.



SOCIAL TECHNOLOGIES FOR ENTREPRENEURIAL EDUCATION

PROJECT NUMBERS

- Benefitted: directly reaching 20 adolescents
- Production of 1 videoclip
- Holding of 12 technical training workshops
- 3 shows by the Orquestra Imaginária
- Building of the reapplication methodology

SCALABILITY

Part of the essence of our social technologies' reapplication, in 2019 we began a new cycle of the PLOC project bringing to municipal schools a training in sound engineering programme, with students from the initial PLOC group acting as multipliers of the knowledge acquired.

NEXT CHALLENGES

- Initiating the reapplication of technology stage in 3 villages;
- Launch of the PLOC Orquestra Imaginária CD;
- Creation of a sound database for marketing;
- Initiating dialogue with the audiovisual project for the creation of a local producer.



















Luca Lights, camera, action

LuCA is a derivation of the Art with Science social technology, the main aim of which was to train high school students in the production and sharing of educational audiovisual objects.

With a focus on audiovisual language, the LuCA selects and trains adolescents in the municipal schools of Santa Luzia do Itanhy. In 2017 and 2018, in weekly classes and workshops, these young people learned filming techniques with digital cameras and mobile phones, as well as how to use image capture software, editing techniques, sound tracks and completion.

Various skills were used, from writing in the creation of a script, costume and stage prop production, to the filming of images and acting. Every student can identify with several of these, and, as a result, as well as an audiovisual product, the project allows for the sum of these efforts to promote socialisation of knowledge and shared experiences.



NÚMEROS DO PROJETO

- Benefitted: 20 adolescents directly;
- Production of 5 short films;
- Training of 10 new teachers for the reapplication of the social technology;
- · Holding of 8 workshops



With the closing of the second cycle of the project's activities, 10 students from the LuCA were judged to possess a good level of achievement and the potential to act as replicators in the municipal school, which we intend to begin in 2019, with introductory courses in cinema, photography and video, an idea of scriptwriting and audiovisual production.

PRÓXIMOS DESAFIOS

- Producing and recording 13 episodes of the series 1 Pé de Banana Nanica (One plant of dwarf banana) from the LiLo social technology;
- Begin the reapplication phase;
- Set up the first audiovisual production company in Santa Luzia do Itanhy.













SIRI

school of idioms riverside

In an ever more connected world, fluency in English is a crucial tool for promoting human development. The result was our project, SIRi - School of Idioms Riverside, an English teaching project that gives value to imagination and interactivity using games and challenges that relate to the children's everyday reality.

The project begun in March, 2018, in Santa Luzia do Itanhy, with twice weekly lessons in school, for adolescents and young people from five villages in the Santa Luzia do Itanhy municipality.

The SIRi project includes plans for the best students to have conversation classes through contact with the students of New York (USA) high schools, using digital communication technologies such as Skype. The latter students will receive certificates of community services for the hours spent in dedicating their voluntary support to the project.



SIRï

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SOCIAL TECHNOLOGIES FOR ENTREPRENEURIAL EDUCATION

PROJECT NUMBERS

• 60 adolescent and young people benefited.

SIRI GOALS

- Broaden possibilities for youth development in global entrepreneurial projects through learning/fluency in English;
- Creation of, and participation in a reapplication methodology for the best students to teach basic English in their respective village schools.

NEXT CHALLENGES

- in 2019, the project will extend its frontiers offering students attaining good marks the opportunity to take part in conversation classes with volunteer adolescents in American schools;
- Systemisation of methodology to allow the best students in SIRi to be basic English teachers in schools in their respective villages, starting in 2020.







Focus on Culture

The IPTI built a development model for the traditional crafts sector emphasising the appreciation of Brazil's non-material heritage and the professionalization of the artisan's work.

This model is based on establishing a permanent cycle of innovation and increased competiveness based on integration between contemporary design and handcrafted processes, improving the product portfolio and increasing added value.

To do this, a methodology was developed where each stage of the creative and productive process was assessed and reformulated, to attain effective results. From the selection of participating communities and artisans, integration with invited designers and development of new articles, to the delivery of the final standardised product, as well as its marketing in qualified markets, Focus on Culture presents a solution that directly confronts the main problems found in the handicraft productive process.

At the end of the cycle, the craftspeople involved end up having a much more professional working process and have opened their minds to the relevance of their work, with the ability to establish a recurrent source of income.

This methodology has already benefitted six handicrafts organisations, launched five collections and more than 400 new products have been created, with high added value, signed by designers. In addition, Focus on Culture exhibited at trade fairs and domestic and international exhibitions.

At the end of 2017, as a result of Focus on Culture, the IPTI began the Origine-SE project, the aim of which was to create handcrafted products with quality and originality, from six Sergipe municipalities, for the tourism market.



SOCIAL TECHNOLOGIES FOR ENTREPRENEURIAL EDUCATION



EXHIBITION AT ALBUQUERQUE MUSEUM AND AMPARO MUSEUM (MEXICO)





origine-se

Origin-SE

Originality is essence. What reveals a place's soul, a tradition perpetuated through time, crafts inherited through generations. It's a heritage's worth - material and immaterial – made real in products wrapped in their cultural narrative. The fusion of design with handicrafts preserving an identity given potential through the authentically Sergipean techniques. A boost to the Creative Economy printed on the label certification "Origin-SE" the ancestral handicrafts, the vestiges of memory and the bonds of belonging. All that is original is unique. $\ensuremath{\mathbb{N}}$

In 2018, the project launched the first batch of products with the label "Origine-SE", produced in six municipalities: Santa Luzia do Itanhy, São Cristóvão, Laranjeiras, Santana do São Francisco, Canindé de São Francisco and Poço Redondo.









2017

The IPTI's annual event in 2017 was held at the Yale Club, in New York City, for 150 guests. The night began with a cocktail where we exhibited our items for silent auction donated by various friends. The cocktail was followed by a dinner where our guests had the chance to meet Matheus, an inhabitant of the village of Crasto, in Santa Luzia do Itanhy municipality, one of the beneficiaries of the Naturalist Art project. This project identifies and develops local talent in illustration (watercolour, pen and ink, pencil and pastel). As the students develop their skills, they also become part of a nucleus of illustrators with the role of reapplying the teaching of art in the schools of their respective communities. Matheus told the guests how this project changed his life. Now a drawing teacher and one of the founders of an illustration / design / fashion company called Casa do Cacete.





SPONSOR





IPTI [us] chamber annual event

2018

The 2018 IPTI Annual Event followed the same style as the 2017 event, with the main emphasis of this edition being the CLOC project. Ivia Tainá, a 17-year-old adolescent who is one of the beneficiaries of the CLOC went to the event to show a robot developed by her, and she spoke of how the project had changed her life. She is now a programming teacher and intends soon to open a software programming business with some colleagues. The CLOC is a Social Technology Social that identifies and develops local talent in programming, aiming to create a highly qualified nucleus in advanced programming, capable of inserting the teaching of programming in public schools in a sustainable way and generating business in T.

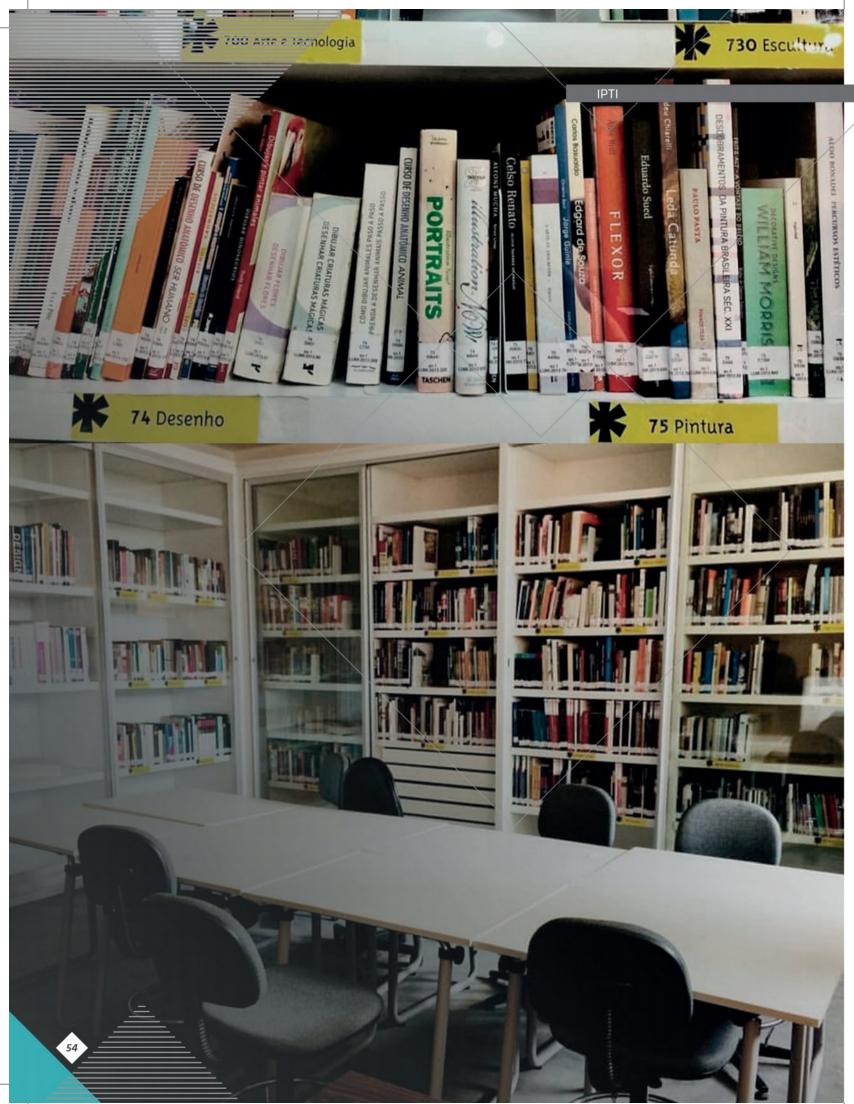






SPONSOR





Luminescence Library

The idea of creating a library is part of our strategy to promote human development, through integrated actions in art, science and technology. The Luminescence Library acts as a great stimulus to the arts throughout the community of Santa Luzia do Itanhy, principally for young people and adolescents in the village of Crasto, where it has been installed since 2013.

The library specialises in Visual Arts, but also has publications in children's literature due to being located next door to the kindergarten school Sítio do Pica Pau Amarelo. Inside is a varied collection of 1,272 volumes, organized according to the Universal Decimal – CDU classification and using the Dewey Cutter authors table. In addition to the collection, other initiatives are developed aimed at developing interest in the arts.

The name Luminescence is a reference to the phenomenon of bioluminescence, common in the region of Crasto, due to the presence of dinoflagellates (microorganisms that emit light when agitated) in the coastal environment. The name also relates to Santa Luzia, the patron saint of the eyes, and, of course, to the power a library has to illuminate the lives of those seeking knowledge.

PARTNERS

PUBLIC ADMINISTRATION









































PUBLIC ADMINISTRATION







SECRETARIA DE ESTADO DA EDUCAÇÃO DE SERGIPE Prefeitura de SANTA LUZIA DO ITANHY

Ministério da Ciência e Tecnologia

Ministério do Planejamento, Orçamento e Gestão Ministério do **Turismo** Ministério da Cultura



INTERNATIONAL PARTNERS





























UNIVERSITIES











FINANCIAL STATEMENT

Título	Ánna da Cambasimanta	Período	
PROJETOS	Área de Conhecimento	do Contrato	
Arte, Ciência e Tecnologia para o Desenvolvimento Humano	Economia Criativa e Educação	2017	
BAIÃO	Economia Criativa	2017	
Alba - Academia de Linguagens e Belas Artes	Educação	2017	
CLOC - Criatividade, Lógica, Oportunidade e Crescimento - (Fase 4)	Economia Criativa e Educação	2016	
CLOC - Criatividade, Lógica, Oportunidade e Crescimento	Economia Criativa e Educação	2016	
PLOC	Economia Criativa e Educação	2016	
Arte, Ciência e Tecnologia para o Desenvolvimento Humano - (Fase 2)	Economia Criativa e Educação	2018	
CLOC - Criatividade, Lógica, Oportunidade e Crescimento - (Robótica)	Economia Criativa e Educação	2018	
CLOC - Criatividade, Lógica, Oportunidade e Crescimento - (Fase 5)	Economia Criativa e Educação	2018	
PLOC (Fase 2)	Economia Criativa e Educação	2018	
Lilo	Educação	2018	
BAIÃO - 2º ano	Economia Criativa	2018	
Educação Infantil - Fase 1	Educação	2018	
Gestão e Otimização da Rede de Proteção à Criança e ao Adolescente	Educação	2018	

CONTRATO DE GESTÃO		
Contrato de Gestão 01/2013	Po-D e Economia Criativa	2013
Contrato de Gestão 01/2016	Pc-D	2016
Contrato de Gestão 034/2015	Educação	2015
Contrato de Gestão 075/2015	Educação	2015
DOAÇÕES		2017- 2018
DUAÇUES		2017-2016
SERVIÇOS		
HB: Tecnologia Social de Combate à Anemia Ferropriva	Saúde	2017
Execução do Fomento à Qualidade do Artesanato Adequado à Demanda Turística	Economia Criativa	2017

	Valor Contratado	Valor Recebido	Valor Recebido	Fonte de Recursos	
	Valor Contratado	em 2017	em 2018	Público	Privado
2018	R\$ 129.600,00	R\$ 129.600,00	-	-	100%
2018	R\$ 21.240,00	R\$ 12.720,00	R\$ 8.520,00	-	100%
2018	R\$ 237.893,68	-	R\$ 214.971,88	-	100%
2018	R\$ 135.000,00	R\$ 135.000,00	-	-	100%
2017	R\$ 50.000,00	R\$ 10.350,00	-		
2018	R\$ 210.240,00	R\$ 210.240,00	-	-	100%
2019	R\$ 126.000,00		R\$ 126.000,00	-	100%
2019	R\$ 211.500,00	-	R\$ 211.500,00	-	100%
2019	R\$ 22.500,00	-	R\$ 22.500,00	-	100%
2019	R\$ 198.000,00	-	R\$ 198.000,00	-	100%
2019	R\$ 81.200,00	-	R\$ 81.200,00	-	100%
2019	R\$ 26.400,00	-	R\$ 6.600,00	-	100%
2019	R\$ 153.000,00	-	R\$ 153.000,00	-	100%
2019	R\$ 270.000,00	-	R\$ 270.000,00	-	100%

2017	R\$ 1.217.850,00	R\$ 55.781,00	-	100%	-
2020	R\$ 958.568,00	R\$ 308.788,00	R\$ 218.067,00	100%	-
2017	R\$ 335.840,00	R\$ 146.032,00	-	100%	-
2019	R\$ 7.464.774,92	R\$ 1.584.000,00	R\$ 771.886,74	100%	-
	-	R\$ 286.926,07	R\$ 500.214,44	-	100%
2017	- R\$ 93.816,00	R\$ 286.926,07 R\$ 93.816,00	R\$ 500.214,44	-	100%

Audited by BDO Brasil.



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