

## **The Planetarium Project "The Mayan Sky"**

The "El Cielo Maya" project, an educational initiative aimed at transforming education in municipalities with a low human development index in Los Altos de Chiapas, Mexico.

Our main objective is to provide care to public schools located on the outskirts of San Cristóbal de Las Casas and in communities such as Chamula, Zinacantan, Huixtán, Chanal, Tenejapa, Mitontic, Chenalhó, among others.

### **Purpose of the project:**

The "El Cielo Maya" Planetarium project brings together a multidisciplinary team of educators, astronomers, archaeologists, environmentalists, artists and linguists. At the center of this initiative is a portable planetarium where a video developed by the National Science Foundation and the University of Arizona is shown, in Tsotsil and Tzeltal. This video highlights the scientific wealth of the ancient Mayans, seeking to increase knowledge about their importance in science and generate pride in the cultural heritage among teachers and students of the schools of Los Altos de Chiapas.

### **Methodology and Activities:**

Prior to the students' visit, teachers from the schools involved experience the planetarium and participate in workshops designed to introduce methodological strategies based on STEM methodology. This ensures that teachers are well prepared to implement these strategies in their classrooms.

### **Needs and Use of Funds:**

To carry out this project, the following aspects must be covered:

1. Transportation: Provide round trip transportation for students from the different communities to San Cristóbal de Las Casas.
2. Refreshments: Offer food and drinks to students during their visit.
3. Training: Conduct training workshops for teachers, strengthening their pedagogical skills and their knowledge of the STEM methodology.

### **Project evaluation:**

The project includes a rigorous evaluation process to measure the results obtained. The appropriation of the project by communities and school authorities will be the main evaluation parameter, ensuring that the impact is sustainable and significant.

**General objectives:**

Our objective is to strengthen the training of Los Altos teachers in the STEM methodology, through knowledge of the cultural and scientific heritage of the Mayans of Chiapas. We hope that this will positively impact educational practices within bilingual classrooms, benefiting a total of 4 monthly groups of 40 children each.

**Conclusion:**

Your support will be essential for the implementation and success of "El Cielo Maya". With your collaboration, we can offer these students and teachers an enriching educational experience that will not only increase their scientific knowledge, but also strengthen their cultural pride and sense of identity.

**Potential Long-Term Impact of the Altos de Chiapas Student Planetarium Project**

The planetarium project for students in the Highlands of Chiapas seeks to address the problem of the erosion of cultural identity among young Tsotsil and Tseltal indigenous people. By integrating science, technology, engineering and mathematics (STEM) with ancient Mayan knowledge, this project has the potential to generate significant and lasting impact on multiple levels.

**Reevaluation of Cultural Identity**

- **Increased Pride and Self-Esteem:** By highlighting the scientific and mathematical achievements of their ancestors, students will develop a greater sense of pride and self-esteem, reducing shame toward their roots and fostering a stronger sense of belonging.
- **Preservation of Languages and Ancestral Knowledge:** Celebrating and teaching traditional scientific knowledge can contribute to the preservation of indigenous languages and their ancestral knowledge, reinforcing the use and transmission of Tsotsil and Tseltal.

**Enrichment of the Educational System**

- **Multicultural and Inclusive Education:** Integrating the history and scientific achievements of the Mayans into the curriculum will promote a more inclusive and multicultural education, benefiting both indigenous and mestizo students.

- **Educational Innovation:** The interdisciplinary methodology that integrates STEM and ancestral knowledge can serve as a model for other regions with indigenous populations, promoting a more culturally relevant educational approach.

#### STEM Skills Development

- **Fostering Interest in Science and Technology:** Introducing science and technology through Indigenous culture can increase interest and participation in STEM areas, opening up professional and academic development opportunities for Indigenous youth.
- **Technical and Scientific Skills Development:** Early exposure to STEM disciplines will develop technical and scientific skills, better preparing students to meet the challenges of a technological world.

#### Impact on the Community and Local Development

- **Strengthening the Community:** Strengthening the cultural identity and academic skills of young people will contribute to strengthening the community, with students becoming leaders who promote sustainable development and cultural preservation

**Economic and Social Development:** In the long term, higher levels of education and skills in STEM can generate opportunities for economic development, reducing poverty and improving quality of life in the Chiapas Highlands.

#### Influence on Public Policies

- **Inclusive Educational Policies:** The success of the project can influence public policies, promoting greater inclusion of indigenous cultural content in the official educational curriculum and greater investment in the education of indigenous communities.

### **Conclusion**

The planetarium project has the potential to generate a long-term positive impact, from the revaluation of cultural identity and the improvement of the educational system, to the development of STEM skills, community strengthening, economic development, the promotion of tourism and influence on public policies. By comprehensively addressing the erosion of cultural identity among indigenous Tsotsil and Tseltal students, this project will contribute to the well-being and sustainable development of the communities of the Highlands of Chiapas.