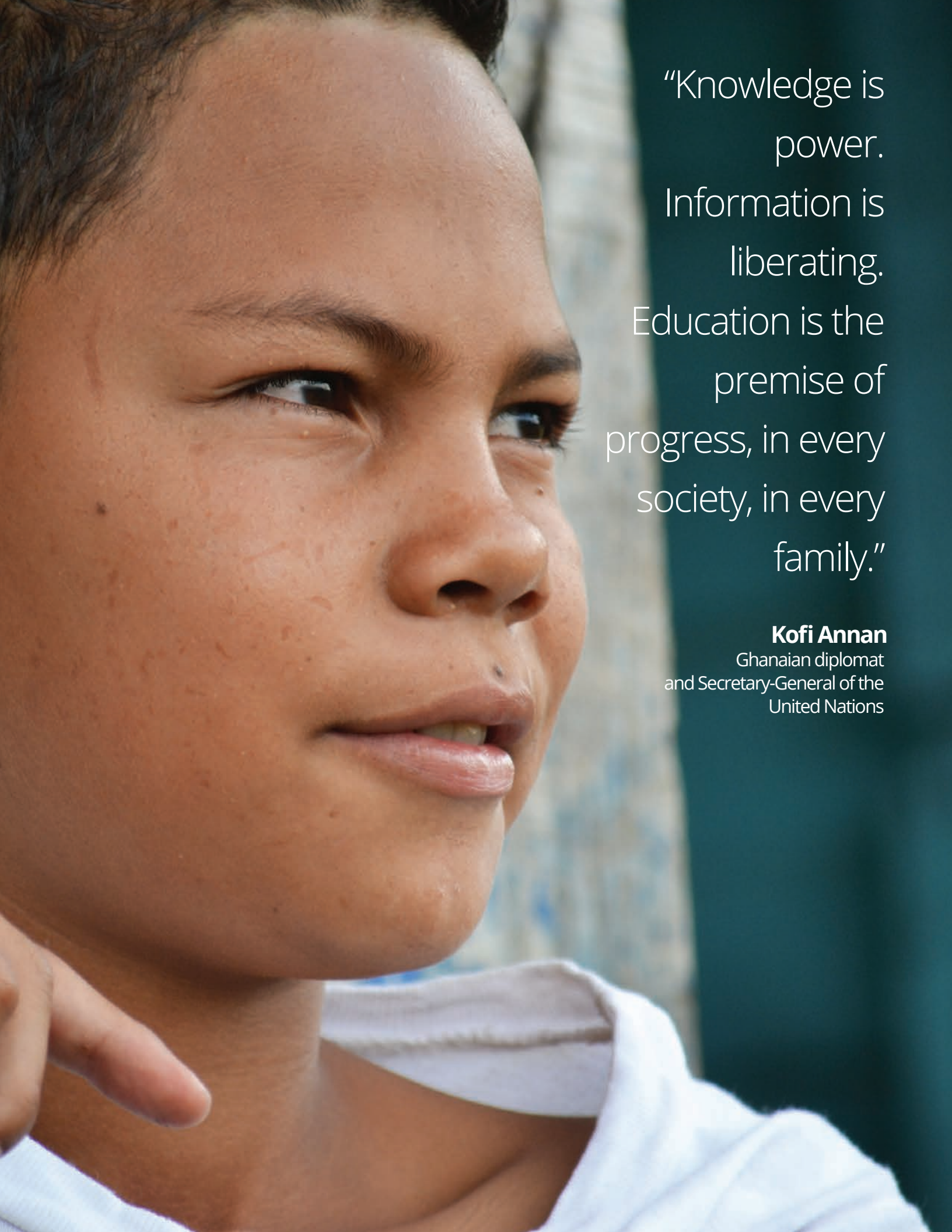




Technology

Applications for the Global
Education Community



“Knowledge is
power.
Information is
liberating.
Education is the
premise of
progress, in every
society, in every
family.”

Kofi Annan

Ghanaian diplomat
and Secretary-General of the
United Nations



Technology Applications for the Global **Education** Community



The Incorporation of Technology into Social Development Projects



Alejandro Paredes Trapero
Executive Director

The strategic inclusion of technology into projects and social development interventions allows us to optimize the limited resources that we have available. We are aware that developed countries have integrated innovation initiatives and development into their projects in order to obtain better results.

Technology is our ally that allows us to move forward, display, capitalize on, and empower everything we're doing with the purpose of creating competitive advantages for our beneficiaries.

This is why we decided to develop tools such as the Business Intelligence Dashboard and Geo-Portal Intervention Map. We at METAS Project (Mejorando la Educación para Trabajar, Aprender y Superarse) believe that the use of this tool provides real-time validated and verifiable information to accomplish better and precise management decisions.

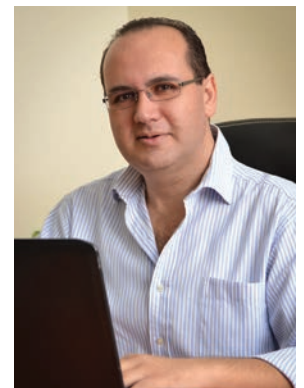


Innovative Technologies Used in Honduras

When it comes down to decision making, project directors require complete insight into their business information. They need to be able to visualize a global perspective that empowers them to analyze, review, and take action over the information they have on hand, which may include timely facts that will enable them to make an informed decision.

Nowadays information no longer needs to be accessible through only a specific business unit or area, and it can't be limited to a single workstation, computer, or spreadsheet. It should be available at any time when needed in order to undertake the best decisions.

One of the main challenges we have tried to overcome in METAS Project is providing timely information about the status of the project's indicators, targets, and achievement of established goals. Throughout the implementation of the Business Intelligence Dashboard and the METAS Interactive Mapping, we have supported real-time reports delivery and online analysis for decision makers and stakeholders, allowing them to make well-informed decisions about the project.



Munir E. Mahomar
Information Management
Director



“Education is the most powerful weapon which
you can use to change the world.”

Nelson Mandela

South African Politician and President



Technology & Education

TECHNOLOGY has proven to be one of the missing links in order to guarantee educational and workforce improvement in developing countries. METAS Project is now generating technology applications and creating an impact in the global education community through the use of innovative technologies and high-impact solutions.

The online information management systems developed by METAS Project provides relevant information to stakeholders and organizations; helping decision making positively impact at-risk youth. By bringing all these efforts together, decision making is also strengthened, through valuable and timely information presented attractively to decision makers in these organizations.

This approach illustrates how technology can be used to improve decision making and positively impact on the quality of education and workforce development. It also conveys a clear message: education stakeholders and Youth have endless opportunities to expand technological innovations in the fields of education, leadership and management, monitoring and evaluation (M&E), and workforce development, at a low cost through online libraries and open-source software.

METAS Project created two technological tools we currently use in Honduras to disseminate project results to stakeholders, elicit beneficiary feedback, and make better informed programmatic decisions: The Geo-Portal Intervention Map is an interactive map of project interventions that displays M&E data, progress toward objectives, and news and photos for each intervention. The Business Intelligence Dashboard is an information portal with graphics and real-time data that provides a detailed analysis of compliance and the influence the project has had since its inception. It delivers the progressive support METAS Project has provided to education and at-risk youth in Honduras. These tools not only provide a transparent way for contributors, beneficiaries, and other stakeholders to understand how the project interventions are creating a positive impact in the lives of at-risk youth, but also allow project staff to undertake reliable programmatic decisions.



Accomplishments

➔ Challenges & Opportunities

METAS Project has successfully implemented a Geo-Portal Intervention Map and a Business Intelligence Dashboard; these technological tools work as an improved information management system that aims to increase decision making in education and training programs.

Our Business Intelligence Dashboard

is an interactive control panel that provides results-oriented program information and data analysis. The Dashboard is aligned with the project's Performance Monitoring Plan (PMP) providing disaggregated information for targets and indicators. These tools can be easily adapted to other education and training-focused organizations in different contexts. Additionally, the Dashboard was developed with online technologies and free available development tools.

One of the main challenges was the integration of M&E processes into all the technical activities METAS Project undertakes daily. In most projects, one of the M&E challenges is the integration with technical units; when the technical units interact, they exchange information relevant mostly to audit topics. With the implementation of these technological tools, METAS Project has managed to integrate M&E into the decision-making processes, working from a completely different and improved perspective: taking in results and providing all the team members with information necessary to create a collaborative environment and to help them make better decisions.

Information is visible at a glance, and greater levels of detail are only a click away.



The Technological Tools Developed by METAS Project Empower Teams to Improve Decision Making.

They also provide a "same page" focus, since everyone, including stakeholders, is sharing the same information.

The Business Intelligence Dashboard and mapping technologies help us identify risks, analyze performance, and create improved strategies that adapt to the real scenarios. The data provided by M&E are kept up to date, and this helps project directors spend less time finding and compiling information requested by team members and stakeholders, and more time destined to analyze and evaluate the results. Knowledge of achievements and targets' compliance for technical teams and implementing partners is easily provided, which in turn helps project directors meet their objectives. Moreover, most of the tools used are available at no cost and are powerful online resources.



Benefits

Interactive Dashboard



These tools provide real-time data for quick decision making.



Users can visualize data in a more understandable way, aligned with the project's PMP indicators.



Interactive charts, graphs, and tables with detailed M&E data are provided.



Interactive Reports with detailed M&E data are easily generated.



The Dashboard shows a diversity of charts and graphs, including indicator totals by year, quarter, and current compliance with our targets. Comparative charts are disaggregated by city, sex, and age.

The Business Intelligence Dashboard provides real-time, relevant, verifiable information, validated by our M&E team.

Users can visualize their information on the go!

Real-time data with the touch of a finger through a laptop, smartphone, or tablet.



<http://dashboard.projectometas.org>



➔ Strategy

Goal

Improve decision making and information dissemination through technology

Objectives

- ➔ Incorporate the data that M&E collects with the daily decision making in METAS Project
- ➔ Increase the visibility of project results and disseminate information among stakeholders through a simple and transparent system
- ➔ Provide a better understanding of the project and all its different components as a whole
- ➔ Track the the project's progress and determine the areas that need strategy adjustments in order to guarantee the accomplishment of the established goals and objectives



Available online resources used

Google Drive: Provides database storage and access of data anywhere on the Web, on a hard drive, or on the go

Google Fusion Tables: Provides an online shared database with data visualizations (including Geo-Spatial Data)

Google Maps: Provides visualization of data in a location context (on a map)

Google Chart Tools: Provides a way to visualize charts and graphs

Smartphones with Global Positioning System (GPS): Captures location data on the field work

Bootstrap: Front-end framework for Web development





“Success is simple.
Do what's right,
the right way,
at the right time.”

Arnold H. Glasow
American Humorist

Roles & Coordination

M&E staff collect data through instruments and online surveys, using tablets and capturing GPS coordinates to collect location data for the map.

The captured data are registered, processed, and verified using the M&E's established protocols and procedures. Once the data are verified, M&E performs data quality assessments, analysis, and comparisons. Last, all information is presented to the executive levels for management decisions.

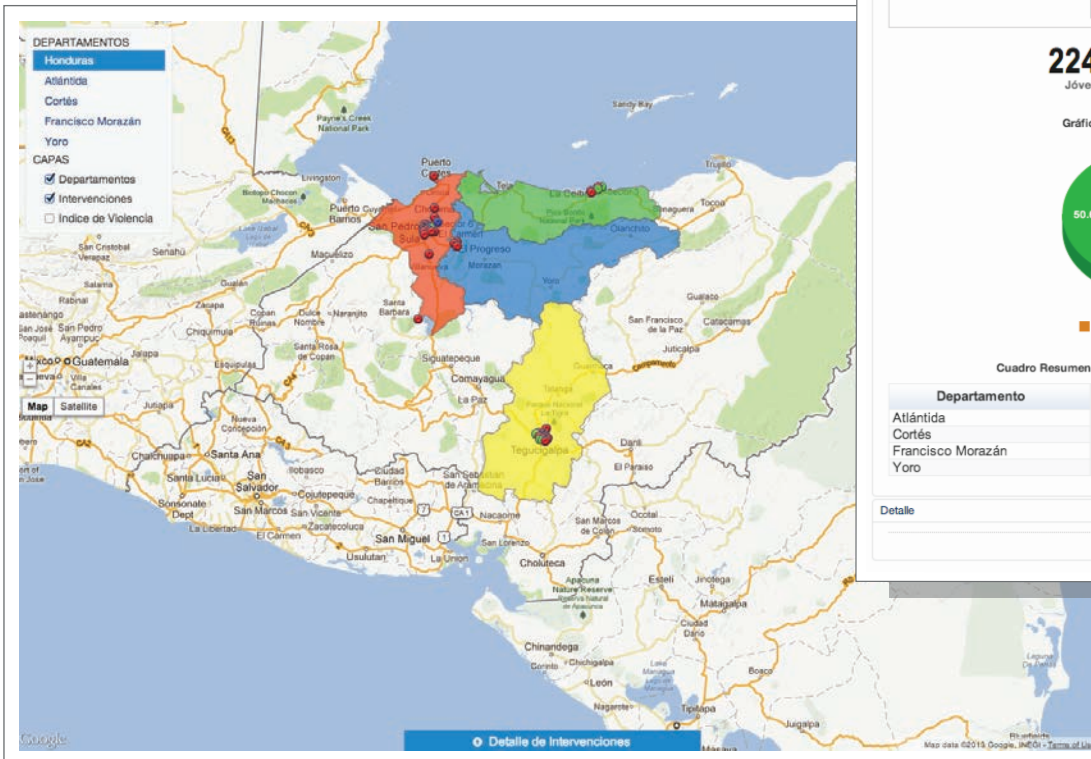
The Information and Communication Division publishes and shares the information through the Online Mapping, Dashboard, and Reporting Web apps; this allows technical teams, senior staff, and stakeholders to gain insight to make better informed decisions.

Once the information is published and shared, everyone has direct access to the information throughout the project's website.

Continual Improvement

Is an ongoing effort to improve products, services, or processes. These efforts can seek “incremental” improvement over time or “breakthrough” improvement all at once. Delivery processes are constantly evaluated and improved for their efficiency, effectiveness, and flexibility.

The METAS Interactive Map is constantly updated to provide online interactive reports, to compare our data with external data (demographic, violence index, development index), and will include the use of density surface (like heat maps) to interpolate visual comparisons and analysis of M&E data. The METAS Business Intelligence Dashboard includes a reporting section available only to authorized users that provides detailed information for each team.





Stakeholders

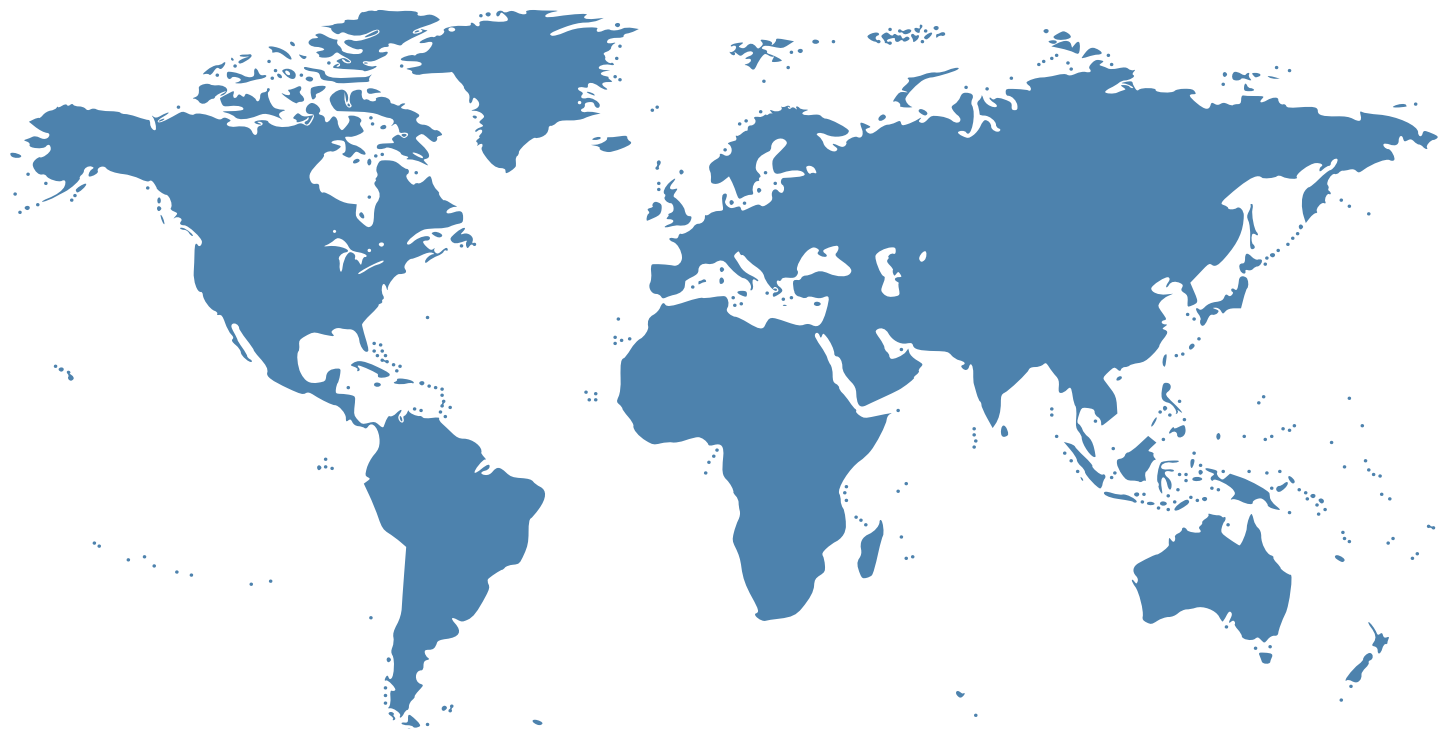


Perspective

Managing information consistently across the organization provides stakeholders with the insight necessary to make informed decisions. This consistency allows project directors to allocate resources more effectively by providing a common economic basis to prioritize initiatives. This approach also paves the way for centralized governance mechanisms and continual improvement processes. Centralized information provides better transparency around operational challenges thereby improving risk management processes. Transparency and effective risk through precise information management decreases the risk profile of projects and organizations which encourages external investment and lowers the cost of capital.

"This dashboard is fantastic. I like that it follows the instructions laid out in the METAS PMP in providing all the disaggregated information."

Malik Haidara / USAID

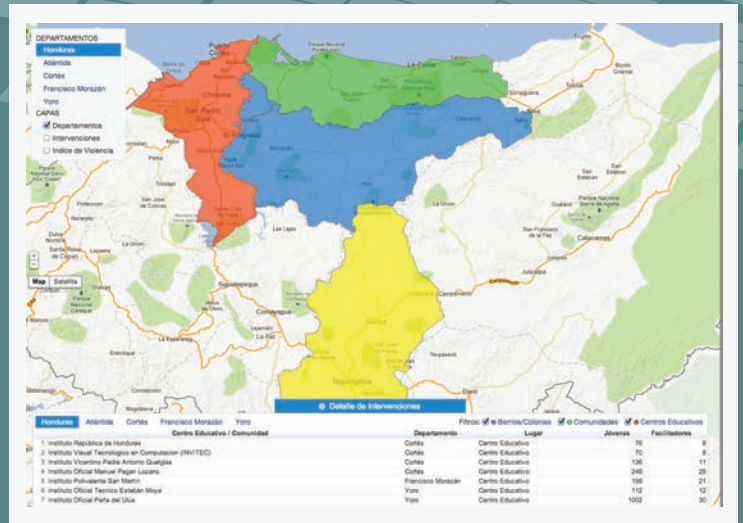


About

METAS Project

METAS Project (Mejorando la Educación para Trabajar, Aprender y Superarse) is a United States Agency for International Development (USAID) funded initiative implemented by Education Development Center, Inc. (EDC). METAS Project aims to provide the young people of Honduras the opportunity to acquire knowledge and skills for life and work, and the attitudes, behaviors, and perspective necessary to create a positive and promising future.

With a focus on at-risk youth, METAS Project will help Honduras meet changes in education and the training needs of both employers in the private sector and the large youth population whose access to acquiring basic education and training opportunities is limited. METAS Project will meet this goal through strategic partnerships with public and private institutions of technical secondary education, technical training programs, alternative education systems, nongovernmental organizations, and private sector partnerships.



Intervention Map

As part of the resources in the use of technology, METAS Project through this map demonstrates the use of information and analysis in the places where METAS Project/EDC is providing support for education and youth in Honduras, through USAID. Our goal is to illustrate the goals and progress of the project to generate a positive impact and bring together the efforts of all organizations that serve youth.

EDC

EDC is a global nonprofit organization that designs, delivers and evaluates innovative programs to address some of the world’s most urgent challenges in education, health, and economic development. Working with public and private sector partners, we harness the power of people and systems to improve education, health promotion and care, workforce preparation, communications technologies, and civic engagement.

USAID

USAID extends help from the American people to achieve results for the poorest and most vulnerable around the world. That assistance does not represent a Democratic value or a Republican value, but an American value; as beneficiaries of peace and prosperity, Americans have a responsibility to assist those less fortunate so we see the day when our assistance is no longer necessary.