

Evaluation summary

Climate change education in Latin America - Pilot in Mexico and Colombia

Country/Countries: Mexico and Colombia

Topic: Climate Change

Assessed by: Technopolis

Assessment date: February 2025

Key FFEM support data

Project name: ALEC

Project number: CZZ 2475

Amount financed by the FFEM: 1 101 000 euros

Project grant date: June 2019

Duration: 5 years (2020-2024)

Context

The implementation of the Paris Agreement and the required changes in behavior depend on the support of populations, particularly the younger generations. In this context, education and awareness-raising are essential levers. However, teacher training in this area remains inadequate overall, and there is a lack of suitable educational resources. What's more, the interdisciplinary approach required for these awareness-raising initiatives often runs counter to existing teaching practices.

Participants and operating methods

The Office for Climate Education (OCE), project owner, was created in 2018 under the aegis of the Fondation La main à la pâte to address these issues. It steered the operational implementation while ensuring methodological consistency and regional capitalization. This configuration enabled flexible deployment, adapted to national contexts.

The Mexican and Colombian partners in the pilot phase are both scientific institutions and organizations (academies of science, universities, local IPCC and IRD correspondents, etc.) and NGOs or educational networks (Innovec, Centre Mario Molina, Fondo Accion, etc.). Most of these organizations are already working with ministries in charge of education, as well as with other OCE partners, notably in Canada and the United States.



Objectives

The overall aim of the project has been to promote and improve climate change education for primary and secondary school pupils, internationally, with the aim of driving changes in behavior that will accompany the ecological transition. While OCE's ambition is to reach all regions of the world, the present project, as part of a pilot phase, focuses on a limited number of countries in Latin America: Mexico and Colombia, each with its own educational, institutional and environmental dynamics.

Objectifs spécifiques :

- Create a set of educational resources for teachers and trainers, based on the IPCC reports;
- Train and support primary and secondary school teachers;
- Create a multi-scale network of educators in the field of climate change;
- Coordinate and evaluate the project, and define an extension strategy enabling the initiative to be rolled out in other regions of the world beyond the pilot phase.



Performance appraisal

Relevance

The ALEC project is considered highly relevant and adaptable, enabling teachers to address local environmental and socio-economic issues, such as the protection of the Montaña Malinche nature reserve in Mexico or flood prevention in Boca del Río. Its integration has been facilitated by favorable national policies and a decentralized education system, enabling teaching resources to be adapted to the specific contexts of individual schools. Teachers have noted a positive impact on students, who have developed more responsible behaviors and feel able to raise awareness of climate change among those around them. Despite the success of the training courses and the quality of the resources (videos, games, activities), there is still a need for more localized content and adaptation for younger grades.

Coherence

The ALEC project has shown strong internal coherence thanks to the complementary nature of its partners: Stem Academia and Innovec have ensured the adaptation of resources and training, Fondo Acción has steered dissemination and advocacy, and the Universidad del Rosario has guaranteed quality and evaluation, each recognized and legitimate by the educational authorities. The project's external coherence was underpinned by a favourable national context - a favourable political framework, a decentralized education system, flexible school curricula and a high level of awareness of climate impacts - which facilitated the project's integration and strengthened its acceptance.

Effectiveness

The ALEC project has been effective in producing innovative, high-quality and relevant teaching resources (such as the module on eco-anxiety and climate justice), training teachers from diverse backgrounds and promoting active pedagogies. The training courses have significantly boosted teachers' knowledge, confidence and commitment to climate education, resulting in concrete projects involving students, families and local communities. Although collaboration between teachers has increased thanks to the training courses and events, more structured follow-up and formalized networks are deemed necessary to sustain and expand these initiatives. Finally, the COVID-19 pandemic required the project to adapt by creating virtual course formats and using digital exchange platforms.

Efficiency

Despite significant delays linked to Covid-19, the project met and even exceeded its initial objectives, particularly in terms of teacher training. To support local implementation, the budget allocation between partners was adjusted upwards in a targeted manner, without compromising the overall balance of the budget. Unit costs for the main actions (training, local coordination, teaching materials) proved realistic and competitive. This budgetary efficiency is confirmed by the reproducibility of the model: the extension phase in Latin America and an inspired program in Africa use a comparable cost structure.

Impact

The project has improved climate education for thousands of primary and secondary school pupils in Colombia and Mexico, thanks to training and adapted teaching resources. These activities have strengthened teachers' knowledge and skills, stimulated critical thinking and student commitment, and promoted behavioral changes within families and communities, for example by raising awareness of waste reduction and water saving. The project has helped to integrate climate issues into national educational priorities, involving institutional players such as the Ministry of Education and Bogotá's Education Secretariat.

Viability/Sustainability

The sustainability of the project was ensured by making the teaching resources modular and freely accessible, by training not only teachers but also actors in the education system, and by developing partnerships with public and private institutions to guarantee financial and institutional support. The need for regular follow-up, structured professional networks and digital platforms was identified to reinforce ownership and long-term impact.

Added value of FFEM support

The FFEM's support has anchored the approach in a systemic vision, linking education and cooperation. It also facilitated transnational implementation. This pilot phase served to identify best practices and mobilize key local players in order to scale up.

Recommendations & learnings

The ALEC project has shown that adapting resources and methods to local contexts is essential to staying relevant and effective. Involving communities and families amplifies the educational impact and promotes concrete changes in behavior.

Strategic partnerships with education authorities and NGOs have extended the scope of the project, combining online and face-to-face training. Institutional support and official certification reinforce teacher motivation and the sustainability of initiatives.

The use of contextualized training, active pedagogy and collaborative networks strengthened teacher learning and mobilization, as well as the dissemination of best practices.

Linking school activities to local environmental issues engages students and anchors projects in their reality. Finally, providing digital and printed resources that can be accessed offline promotes flexibility, inclusion of rural schools and equity.

Overall, the impacts observed on educational practices are promising for regional scale-up.

Recommendations

- Disseminate training via official institutional channels and reinforce the interdisciplinary approach by involving several teachers from different subjects per school.
- Creation of local leadership figures and digital networks to facilitate follow-up, support and exchange between peers. Designing age-appropriate materials and providing more printed versions for areas without Internet access.
- Official recognition of the pedagogical value of training courses would encourage participation and the sustainability of climate education.
- Strengthening collaboration with local governments to ensure sustainable integration of training and resources into education systems.

