

INTI MINDS

in collaboration with:



Inti Minds is a network of educational clubs that expands access to innovative learning for students in Peru. **The project will start with a pilot at COAR Lima, my former high school,** and later expand to provincial schools with limited access to STEM and entrepreneurship education. **Through workshops in finance, STEM, robotics, mathematics, and project creation, students will develop practical skills and create solutions for their communities.** **The program will also promote opportunities such as scholarships and international competitions, including UNESCO initiatives.** Supported by teachers and volunteers, Inti Minds fosters leadership, innovation, and equitable access to quality education.

CONTEXT & SDGS

4 QUALITY EDUCATION



The project focuses on United Nations Sustainable Development Goal 4: **Quality Education**, which aims to “ensure inclusive and equitable quality education for all.” This SDG is **particularly relevant in Peru** because significant **educational inequalities still exist between urban and rural areas**.

In Latin America, **75% of rural students do not reach minimum proficiency in reading and science**, and nearly **90% fail to do so in mathematics**, showing a large educational gap between rural and urban areas (Kozodij, 2026).

In rural areas, **more than 50% of people have not completed secondary school**, showing strong educational inequality (ComexPerú, 2024)



In 2023, 89.8% of the population in Lima Metropolitana had Internet access, compared to only 51.8% in rural areas, limiting students' access to online learning, technology, and educational opportunities (Kozodij, 2026).

Because of these disparities, **the project also contributes to SDG 10: Reduced Inequalities**, by bringing educational opportunities such as STEM (engineering, mathematics), financial education, and innovation clubs to **students in provinces who often lack access to these resources**.

10 REDUCED INEQUALITIES



Figure 1 shows that 68% of students have limited access to innovation education, while only 32% have adequate access. Figure 2 reveals high interest (55%) and moderate interest (30%). **This gap shows that students are motivated, but lack opportunities, reinforcing the need for programs like Inti Minds.**

Figure 1

Access to Innovation Education

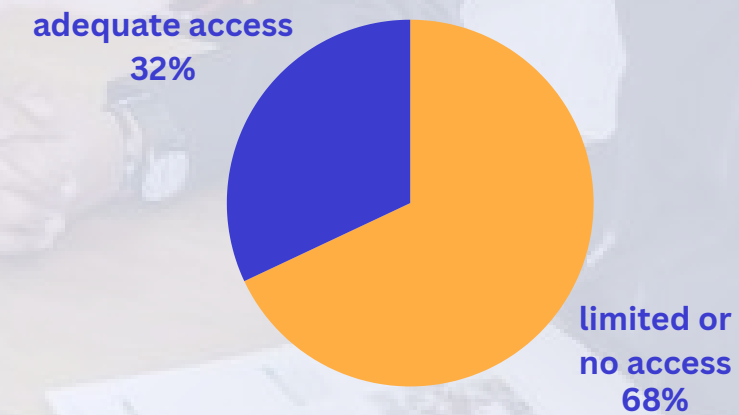
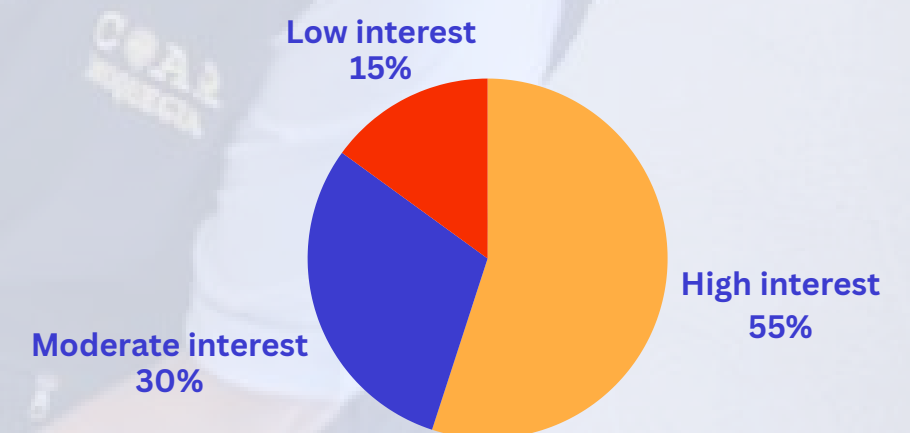


Figure 2

Interest in Learning STEM and Innovation Skills



The Sustainable Development Goals motivate my commitment to becoming an agent of change. I believe education creates opportunities and drives social progress. SDG 4 and SDG 10 guide my efforts to expand access to quality education and promote equity, empowering individuals and strengthening communities.

WHAT PROBLEM WILL IT ADDRESS?

EFFECTS/CONSEQUENCES

CORE PROBLEM

ROOT CAUSES

Lower development of STEM and innovation skills

Fewer opportunities for leadership and entrepreneurship

Persistent educational and opportunity gaps between Lima and other regions

Limited capacity to solve local community problems

Limited access to quality, innovation-based educational opportunities (STEM, financial education, robotics, mathematics, and project creation) for students in public schools in Lima and provincial schools across Peru.

Strong educational inequality between urban (Lima) and rural/provincial regions

Lack of mentorship and extracurricular learning opportunities

Socioeconomic barriers affecting students from low-income and indigenous backgrounds

Limited access to STEM, financial, and innovation programs in public schools

Digital divide, especially in rural areas with lower internet access



Problem

- Limited access to STEM, financial education, and project-based learning in public schools
- Education is often theoretical, with few opportunities to apply knowledge
- Lack of mentorship and spaces for innovation

Existing Alternatives

- Traditional education (mainly theoretical)
- Online resources (not always accessible)
- Short-term workshops without continuity

Solution

- School-based innovation clubs
- Workshops in STEM, financial education, and project creation
- Development of student-led projects solving local challenges
- Access to scholarships, competitions, and opportunities
- Support through a mentorship network

Key Metrics

- % of students improving skills (pre/post surveys)
- Number of projects developed and validated
- % of students continuing their projects
- % of students accessing opportunities (scholarships, competitions)

Unique Value Proposition

Empowering public school students in Peru with practical skills in STEM, finance, and innovation to solve real-world problems.

High Level Concept

A school-based club model that integrates STEM + financial education + project creation, supported by mentorship and real-world application.

Unfair Advantage

- 112 pre-recruited volunteers and mentors (engineering and business backgrounds)
- Project continuity model (students continue developing their solutions beyond the program)
- Peer-mentor system (former students guide new cohorts)
- Direct access to the COAR network

Channels

- Partnerships with schools (COAR and public schools)
- Social media platforms
- School communication
- Volunteer recruitment

Customer Segments

- Secondary students from public schools, especially those with limited access to innovation opportunities
- Students interested in STEM, finance, and project creation
- Schools seeking practical and innovation-based learning programs

Early Adopters

- Students from COAR Lima
- Highly motivated students interested in innovation and leadership
- Students from low-resource contexts seeking new opportunities

Cost Structure

- Educational materials (worksheets, printed guides)
- Basic supplies for activities and prototyping
- Program coordination and logistics
- Minimal operational costs due to volunteer-based model

Revenue Streams

- Grants and funding from educational or social impact organizations
- Donations
- Strategic partnerships
- Future sponsorships to support scaling

ABOUT THE PROJECT

Inti Minds Learning Model

To ensure a structured, impactful, and replicable learning experience, Inti Minds implements a clearly defined methodology that transforms knowledge into real-world application and community impact. **The model is based on a four-stage cycle:**

- **Explore:** Students are introduced to key concepts in STEM, financial literacy, and innovation through short, interactive sessions that build foundational knowledge.
- **Apply:** Students engage in hands-on challenges to apply concepts and develop practical understanding.
- **Create:** Students work in teams to identify real problems in their communities and develop solutions using tools such as brainstorming, Lean Canvas, and basic prototyping.
- **Impact:** Students present their projects, receive feedback from mentors and peers, and validate their ideas through real-world perspectives, encouraging continuation and potential implementation.

This cycle is continuous, allowing students to move from learning to action while developing practical skills and generating real community impact.

Learning Focus Areas

The clubs focus on developing key skills through workshops and practical activities in areas such as:

- STEM education (science, technology, engineering, and mathematics)
- Robotics and technological innovation
- Mathematics applied to real-world problem solving
- Financial literacy and personal finance
- Entrepreneurship and business development

In addition, the program promotes access to opportunities such as scholarships, competitions, and international programs, allowing students to connect their learning with real-world experiences and future pathways.

Skills Developed	
STEM	Analytical thinking
Robotics	Engineering and design
Mathematics	Problem-solving
Financial literacy	Economic decision-making
Entrepreneurship	Innovation and leadership

Pilot Implementation

The **Inti Minds** pilot will begin at **COAR Lima**, my former high school. This environment provides existing connections with students and teachers. The project will test the club model and evaluate student participation. **The results will be used to refine the methodology before expanding to other schools in Lima and across Peru.**

Pilot Cohort

The pilot will include one cohort of **30 students participating** in the Inti Minds innovation club. **The program will run for three months with biweekly sessions focused on STEM, financial literacy, entrepreneurship, and innovation through interactive workshops and project development.**

Mentorship and Partnerships

The pilot will include mentorship from teachers and external mentors, **including university students and young professionals in engineering, technology, and business.** This will be supported through Sparks Lab, a foundation I **co-founded and registered with the Ministry of Peru**, which will help connect mentors to guide projects and support student learning.

Student Selection

Students will apply to join the club through a short application process. **Selection will prioritize students who demonstrate motivation, curiosity, and interest in innovation and collaborative learning.**

Final Project

At the end of the three-month pilot, students will present a final innovation project addressing a community challenge, **applying their skills through prototypes or project proposals.**

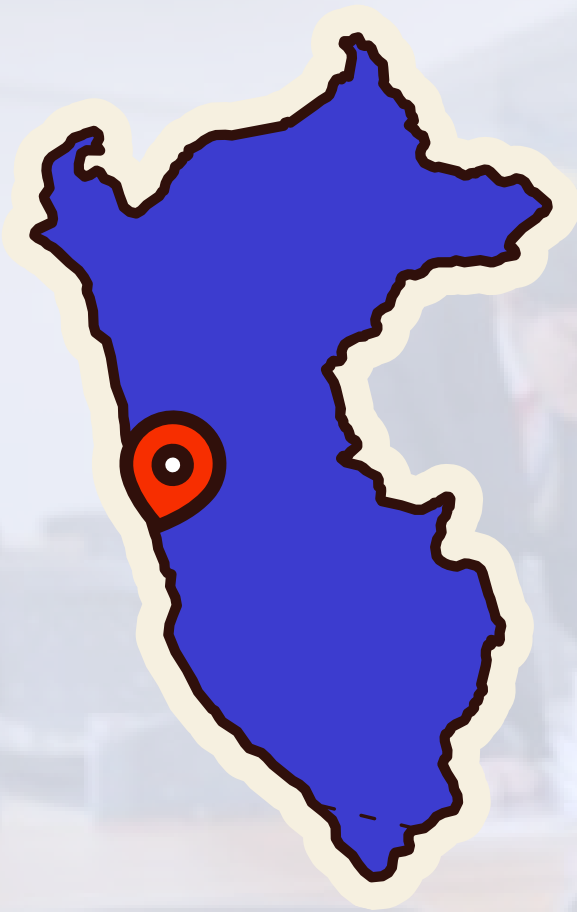
Community

To ensure continuity, Inti Minds **will empower students from the first cohort to take active roles in future cycles.** Highly engaged students will be invited to continue as volunteer peer mentors, supporting new members, guiding projects, and assisting in learning activities. This peer-learning model enables knowledge transfer while strengthening leadership and collaboration. **The program will run two cohorts per year**, allowing new students to join while maintaining continuity through experienced participants. **Over time, this structure will build a strong student community and support the expansion of Inti Minds to other schools across different regions of Peru.**



Expected Outcomes

- 30 students trained
- 6 workshops delivered
- 5–8 student innovation projects developed
- A first generation of student peer mentors



Primary Beneficiaries

The primary beneficiaries of Inti Minds are secondary school students from public schools in Lima, particularly those with limited access to opportunities in STEM, innovation, and entrepreneurship.

COMMUNITY & BENEFICIARIES

School and Local Community

The project will initially be implemented within the **COAR Lima school community**, where students will actively contribute to a culture of innovation through project development, collaboration, and knowledge sharing. **Following the pilot phase, Inti Minds aims to expand to public secondary schools in Lima**, prioritizing those with fewer opportunities to access innovation-based programs. **This expansion will replicate the club model while adapting it to each school's context.**

Indirect Beneficiaries

The project will also benefit teachers, who will gain access to practical learning methodologies; future students, who will join subsequent cohorts; and local communities, as students develop projects to address real challenges. **All projects will be community-focused, applying knowledge to solve local social, technological, and economic problems.**

WHOSE NEEDS ARE BEING PRIORITIZED IN THIS PROJECT?

This project prioritizes secondary school students from public schools facing socioeconomic disadvantages, **including those from low-income or extreme poverty contexts**. It also promotes diversity by **prioritizing students from underrepresented backgrounds**, including those who **speak indigenous languages such as Quechua or Aymara**. Selection will be based on **socioeconomic conditions, access to educational resources, and student motivation**, ensuring the program reaches those who can benefit most while fostering an inclusive learning community.

PREVIOUS EXPERIENCE



In 2024, I implemented an educational initiative in Lima with 20 students from a public school in San Juan de Miraflores. The program, Start from Scratch, taught basic programming, digital design, and Design Thinking. The students developed projects related to bullying in their schools or medical health in clinics. This experience helped me understand student needs and **informed the design of Inti Minds as a more scalable initiative.**

IMPLEMENTATION

Phase 1 – Preparation and Setup (Pre-implementation)

Before launching the program, a structured preparation process will take place:

Institutional Coordination

- Confirm authorization with school authorities
- Assign a classroom space with basic resources
- Define schedule in coordination with academic activities

Team Organization

- Recruit mentors and volunteers have already been recruited through Sparks Lab, UpG and Horizonte STEM, **receiving 112 applications**, demonstrating interest and support for the initiative.
- Assign roles:
 - Program coordinator
 - Mentors
 - Teacher supervisor

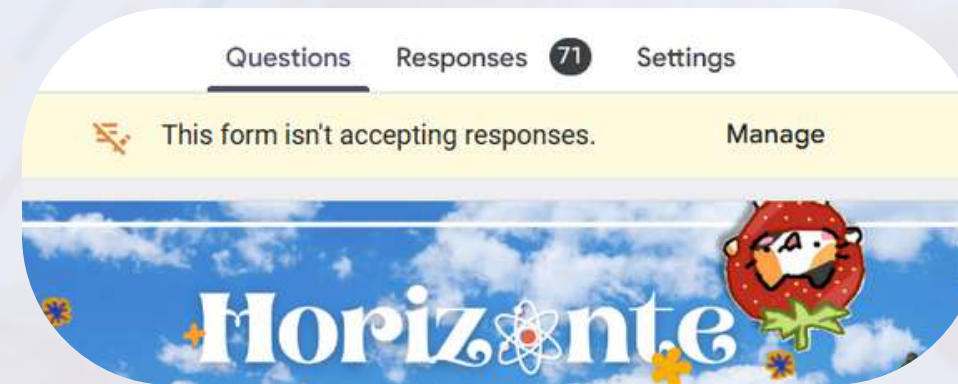
Student Selection

- Open a simple application process
- Select 30 students

Curriculum Planning

- Design session-by-session content
- Prepare materials:
 - presentations
 - worksheets
 - activity guides

Horizonte
stem



Phase 2 – Training and Skill Development (Sessions 1–2)

Focus: build foundational knowledge

Each session will follow a structured format:

1. Concept introduction (short presentation)
2. Interactive activity (hands-on or group exercise)
3. Mini challenge (apply concepts in a simple task)

Topics may include:

- Introduction to innovation and problem-solving
- Basics of entrepreneurship and financial literacy
- Introduction to STEM thinking

Students will begin developing:

- critical thinking
- collaboration skills
- basic understanding of innovation processes

LINK:

https://drive.google.com/file/d/1-v531gds4Tf5rpuzm5_wQxgY66o5sdGP/view?usp=sharing

Inti Minds Pilot Curriculum – Detailed (1.5h Sessions)

Session 1: Introduction to Innovation (90 min)

Objectives:

- Define innovation
- Identify local problems

Schedule:

00:00–00:10 → Icebreaker: “2 truths & 1 problem” (students share issue)
00:10–00:25 → Mini lecture: What is innovation? (slides + examples)
00:25–00:45 → Activity: Problem Brainstorm (sticky notes: 1 problem p
00:45–00:55 → Group clustering (categorize problems)
00:55–01:05 → Break
01:05–01:20 → Activity: Select top 3 problems (voting with dots)
01:20–01:30 → Reflection + exit ticket

Output:

- Problem list categorized

Session 2: STEM & Problem Solving (90 min)

Session 3: Entrepreneurship (90 min)

Objectives:

- Understand value creation
- Generate ideas

Schedule:

00:00–00:10 → Recap
00:10–00:25 → Mini lecture: What is a business?
00:25–00:50 → Activity: Idea generation (SCAMPER method)
00:50–01:00 → Share ideas
01:00–01:10 → Break
01:10–01:25 → Activity: Select idea + define value
01:25–01:30 → Reflection

Output:

- 1 project idea per team

Session 4: Financial Literacy (90 min)

Objectives:

- Understand cost & revenue

Phase 3 – Project Development and Mentorship (Sessions 3–5)

Students work in teams of 4–5 members, organized around shared interests. Each team identifies a real problem in their community using tools such as brainstorming and problem mapping. **They then design solutions using Lean Canvas, idea sketching, and simple prototyping, applying the knowledge learned in previous sessions.** Throughout the process, mentors rotate between teams, providing feedback, guidance, and support to refine ideas. **Each session includes teamwork time, mentor check-ins, and short progress presentations, ensuring continuous development and improvement of projects.**



Phase 4 – Final Project and Presentation (Session 6)

Students will:

- finalize their projects or prototypes
- prepare a pitch presentation

Presentation includes:

- problem identified
- proposed solution
- impact on the community

Projects will be presented to:

- teachers
- mentors
- peers

This phase strengthens:

- communication skills
- confidence
- ability to explain ideas clearly



Phase 5 – Evaluation and Reflection (Post-program)

After the final session:

Feedback Collection

- Short surveys and discussions with:
 - students
 - mentors
 - teachers

Evaluation Metrics

- Attendance and participation
- Number of completed projects
- Student engagement

Internal Review

- Identify strengths of the program
- Identify areas for improvement
- Adjust methodology for future cohorts

Post-Program Engagement

- Organization of virtual follow-up meetings with participants
- Sharing of educational and professional opportunities (scholarships, programs, competitions, internships)
- Continued support for students interested in developing their projects further

RISKS

The following table outlines key operational and strategic risks, along with mitigation strategies to ensure the sustainability and effectiveness of the project.

Risk	Mitigation
Student dropout	Use real-world, team-based projects with a final public presentation (Demo Day) to increase accountability and motivation
Volunteer dependency	Implement a “train-the-trainer” model where top students become mentors; establish formal partnerships with universities for a stable mentor pipeline
Superficial learning	Limit each cohort to 1–2 core focus areas and require a final project with a tangible output (prototype, pitch, or tested solution)
Weak real-world impact	Require teams to validate their projects through at least 5 user or community interviews before final presentation
Scaling challenges	Develop a standardized “Club Toolkit” (session plans, templates, guides) to enable replication without direct founder involvement
Limited long-term impact	Track participants for 6–12 months and require at least one post-program outcome (continued project, application to opportunities, or mentorship role)

The table presents the main risks that may arise during the implementation of Inti Minds and the strategies designed to address them. Each risk is identified based on potential challenges related to student engagement, resource availability, and program organization. **For each risk, a specific mitigation strategy is proposed to reduce its impact and ensure the continuity of the program.** Therefore, this approach allows the project to anticipate possible difficulties and respond proactively. **As a result, Inti Minds maintains a structured, adaptable, and sustainable implementation process**

Short-Term Expansion (Year 1)

After the pilot at COAR Lima, Inti Minds will expand to public secondary schools in Lima, prioritizing institutions with limited access to STEM, financial education, and innovation programs.

Some target schools for initial expansion include:

- I.E. Ramiro Prialé Prialé 3094
- I.E. José Carlos Mariátegui
- I.E. César Vallejo
- I.E. Túpac Amaru
- I.E. Miguel Grau

Contact and coordination with these schools will be initiated after the pilot phase, based on the results and improvements identified during implementation.

The goal is to reach at least five schools in Peru during the first year.

COAR Network Expansion

Expansion will be supported through the COAR network (Colegios de Alto Rendimiento), a system of public secondary schools in Peru designed to provide high-quality education to academically outstanding students, with one school located in each region of the country.

This network enables Inti Minds to:

- Access students from diverse regional contexts
- Facilitate a more efficient and scalable expansion beyond Lima

EXPANSION



The Inti Minds process is designed as a continuous learning and impact cycle. Students begin by joining the club and participating in workshops focused on STEM, financial education, and project creation. **Through collaborative work, they identify real problems in their communities and develop innovative solutions with the support of mentors.** These projects are presented and refined, **encouraging practical application of knowledge.** After the program, students can continue improving their ideas and take on leadership roles as peer mentors. This cycle ensures sustainability, strengthens skills, and creates a growing community committed to innovation and positive local impact.

MOTIVATION

Three years ago, I had very limited exposure to opportunities beyond my immediate environment. I did not understand financial education, nor was I aware of opportunities that could help me grow. I come from a district far from central Lima, where access to quality education, mentorship, and innovation programs is limited, even though talent is present. **Everything changed when I earned a scholarship to study at COAR Lima**, a public high-performance boarding school that offers the International Baccalaureate fully funded based on academic merit. **This experience gave me access to new perspectives and opportunities I had never imagined. Since then, I have been committed to creating opportunities for other students to reach their potential.**



IN ORDER FOR THE PROJECT TO BE FUNCTIONAL, HOW COULD IT BE FINANCED? (PROVIDE DETAILS)

Inti Minds is designed as a low-cost educational initiative, **supported primarily by a volunteer-based model, where mentors and teachers contribute their time and expertise free of charge.**

The program significantly reduces costs because:

- Classroom spaces are provided free of charge by participating schools and institutions
- Workshops are delivered by volunteer mentors and teachers at no cost

As a result, the main expenses are limited to educational and technical materials, such as:

- Printed materials (worksheets, guides)
- Basic supplies (pens, paper)
- Technological resources (e.g., Arduino kits, simple electronics, prototyping materials)

To cover these costs, the project will use multiple funding strategies:

- Participation in grants and funding competitions related to education and innovation
- Donations from individuals and supporters
- Partnerships with organizations and foundations, which may contribute materials or financial support
- Live-streamed sessions on platforms such as Kick and TikTok to increase visibility and enable public donations

In the long term, Inti Minds aims to build strategic partnerships and sponsorships to ensure sustainability while maintaining free access for students, especially those from low-income backgrounds.

FROM LEARNING TO FUNDED IMPLEMENTATION

Inti Minds guides students from idea development to real implementation and access to funding. Each team identifies a community problem, designs a solution, and improves it through user feedback. Students receive mentorship on how to structure their projects, develop clear proposals, and present them effectively. Mentors and volunteers support this process using their experience in competitions, scholarships, and innovation programs.

The program also connects students with funding opportunities such as the International Baccalaureate Social Impact Fund and other national and international competitions. Students receive guidance on how to apply, meet requirements, and strengthen their applications. This support increases their chances of obtaining resources to continue their projects beyond the program.

In addition, Inti Minds operates as a student-led model. High-performing participants become mentors in future cohorts. They guide new students, support project development, and share practical experience. This structure ensures continuity and reduces dependence on external volunteers.

This approach ensures that projects do not remain theoretical. Students develop solutions, access funding opportunities, and continue their work. Inti Minds creates a system where learning leads to execution and real impact.



SUSTAINABILITY & FUNDING

	Description	Cost (USD)
Certificates & Recognition	Printed certificates for students	\$10
Total Fixed Costs		\$10

	Description	Cost (USD)
Printed Materials	Worksheets (30 students)	\$15
Stationery	Pens, markers, supplies	\$16
Arduino Kits	5 shared kits for activities	\$60
Prototyping Materials	Cardboard, tape, basic materials	\$15
Transportation	Transport for mentors/materials	\$20
Snacks	Incentives for students	\$30
Total Variable Costs		\$156

Category	Cost (USD)
Fixed Costs	\$10
Variable Costs	\$156
Total	\$166

The Inti Minds pilot is designed as a low-cost and efficient initiative, with a total estimated budget of \$166 for 30 students over three months (approximately \$5–6 per student). Costs are minimized because classroom spaces and teaching are provided free of charge by partner institutions and volunteer mentors. Fixed costs are limited to basic recognition materials, while variable costs focus on essential learning resources, including printed materials, stationery, and prototyping supplies. Only one new Arduino kit will be purchased, while additional kits will be provided by the school (COAR Lima), further reducing costs. Transportation ensures mentor participation and material delivery, while small incentives support student engagement. This demonstrates a high-impact, financially sustainable model.

This project promotes human dignity by expanding access to quality education. It fosters equality by prioritizing students with fewer opportunities. It encourages tolerance and respect for cultural diversity by including students from diverse backgrounds, including those who speak indigenous languages. It supports sustainable development by empowering students to create solutions for their communities. It also contributes directly to the Sustainable Development Goal of Quality Education (SDG 4), building a more inclusive and equitable society.

REFERENCES

ComexPerú. (2026, April 11). Peruvian education: Low performance and departmental inequalities. Retrieved March 11, 2026, from <https://www.comexperu.org.pe/articulo/educacion-peruana-bajo-rendimiento-y-desigualdades-departamentales>

Kozodij, M. (2026, February 5). Seventy-five percent of students in rural areas do not reach minimum competency levels in reading and science, and nearly ninety percent do not do so in mathematics. Infobae. <https://www.infobae.com/educacion/2026/02/05/el-75-de-los-estudiantes-de-zonas-rurales-no-alcanza-los-niveles-minimos-de-competencia-en-lectura-y-ciencias-y-casi-el-90-no-lo-hace-en-matematicas/>