Rigour/Originality

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to life with the CARE-KNOW-DO model and open schooling for sustainability What does this study contribute to KNOWledge?

What does this study CARE about?

Issue: Science Disconnection hampers:

3. Fair and green economy.

1. Scientifically literate and critical societies.

2. Sustainable and Wellbeing development.

'Open Schooling', an approach o reduce the gap:

2.Aims students'science connections for wellbeing and careers.

3.Involves real-life problem-solving with experts & citizens.

Requires solid evidence for scalability and sustainability.

1.Emotional, intellectual, social and proactive engagement.

2.Actionable Knowledge with issues that students care about.

Science Connection, a novel conceptualisation as 'integrating

science's meaning and purpose into local & global actions

2. How can it be fostered through open schooling?

3. Future-focused learning model to connect science skills to life.

1.Can it be measured from teachers' and students' experiences?

'CARE-KNOW-DO', a model to support open schooling:

1.Introduced in 2015 alongside Agenda 2030.

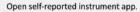
Challenge: Growing Gap in green qualifications (Students lack skills: 20.6% EU: 43.2% Brazil)

Relevance

Innovative Mixed Methodology:

- Cross-national study with new mixed methods.
- Qualitative findings into quantitative measures.
- EFA, CFA, descriptive, comparative & analytic steps.

Novel Multilanguage Instrument:



- Just-in-time Feedback, open badge, and report.
- Actionable data for learners, educators & policymakers.

Open Schooling Scalability with open research:

- Connected 85 teachers and 2.082 underserved students.
- Supported transversal skills of 12,072 students. OS Declaration cocreated and 51,488 students engaged.

CARE-KNOW-DO Model with underserved students:

- 57%-80% self-reported positive science connection.
- Equity for boys & girls; Non-binary support needed. Primary to secondary drop, but recovery with age.

Real-Time Insights:

- Immediate educational impact measured.
- Recommendations for teachers, curriculum designers.
- Policymakers: qualitative & quantitative evidence.

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What actionable findings DO make a difference? Underserved learners impact

CONNECT-science self-reported, multi-language open research instrument



Helps teachers evaluate and foster:

Real-world learning with purpose and meaning.

- Interventions for equity by gender, age, and region/country. Fun science-in-action with communities for a better future.
- Supports students to:
- Think about how they connect science to life & society. Discuss their views on science applications and issues.

Become aware of real-life science projects and careers.

Assists policymakers with:

- Actionable open data for informed policy-making.
- An open research model to localize open schooling. CARE-KNOW-DO insights for 21st-century education.
- Actions for Agenda 2030: local goals for quality education.
- Evidence for new policies for equity, diversity, and inclusion.





with socioscientific thinking':



CONNECT supports the Sustainable Development Goals

Open research project with open schooling based on open practices, open resources, open tools, open science, open policies and open network in Science Education for Sustainability