

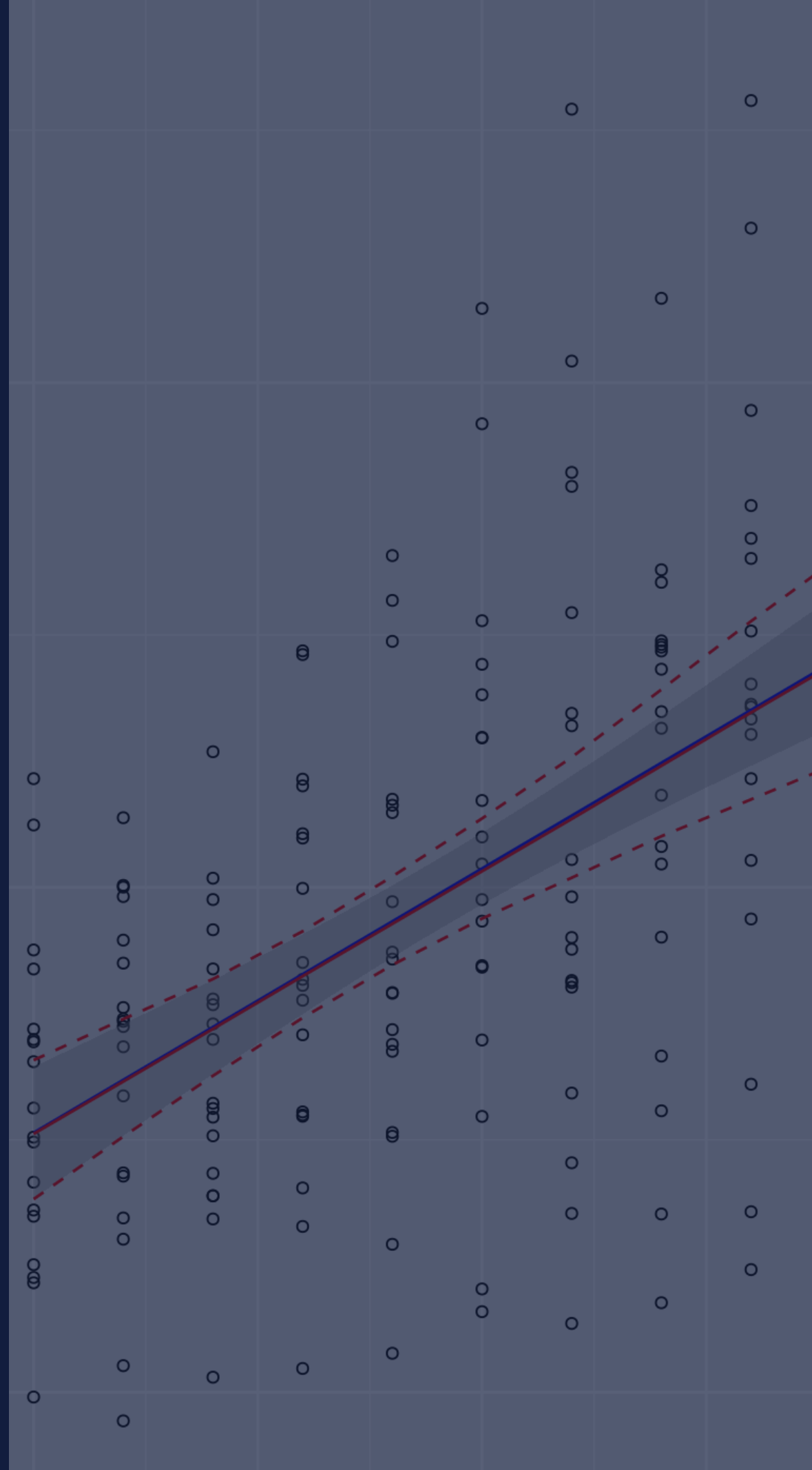
04.03.2021

Exploring inclusion in Erasmus+ Youth in Action:

Effects of inequalities on learning outcomes



Strategic Partnership on Inclusion
04. March 2021 | Online



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HELLO THERE

RAY stands for “Research-based analysis of European youth programmes” and is the self-governed network of 36 National Agencies of the European youth programmes and their research partners.

researchyouth.net/network/

Founded in 2008 to contribute to

- » quality assurance & quality development in the implementation of the European Youth Programmes
- » evidence-based & research-informed youth policy development in the youth field in Europe
- » the recognition of non-formal education and learning
- » the dialogue between research, policy & practice

RAY COORDINATION

» **Coordination Office**

Since 2021 at EDUFI, Finnish National Agency for Education

» **Research Coordination**

GENESIS = Generation and Educational Science Institute
and YPL = Youth Policy Labs

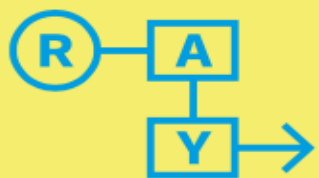
Three network-wide research programmes

- MON** » monitoring of Erasmus+ Youth in Action
- SOC** » monitoring of European Solidarity Corps
- STRAT** » contribution of programmes to strategies

Two upcoming research projects of relevance

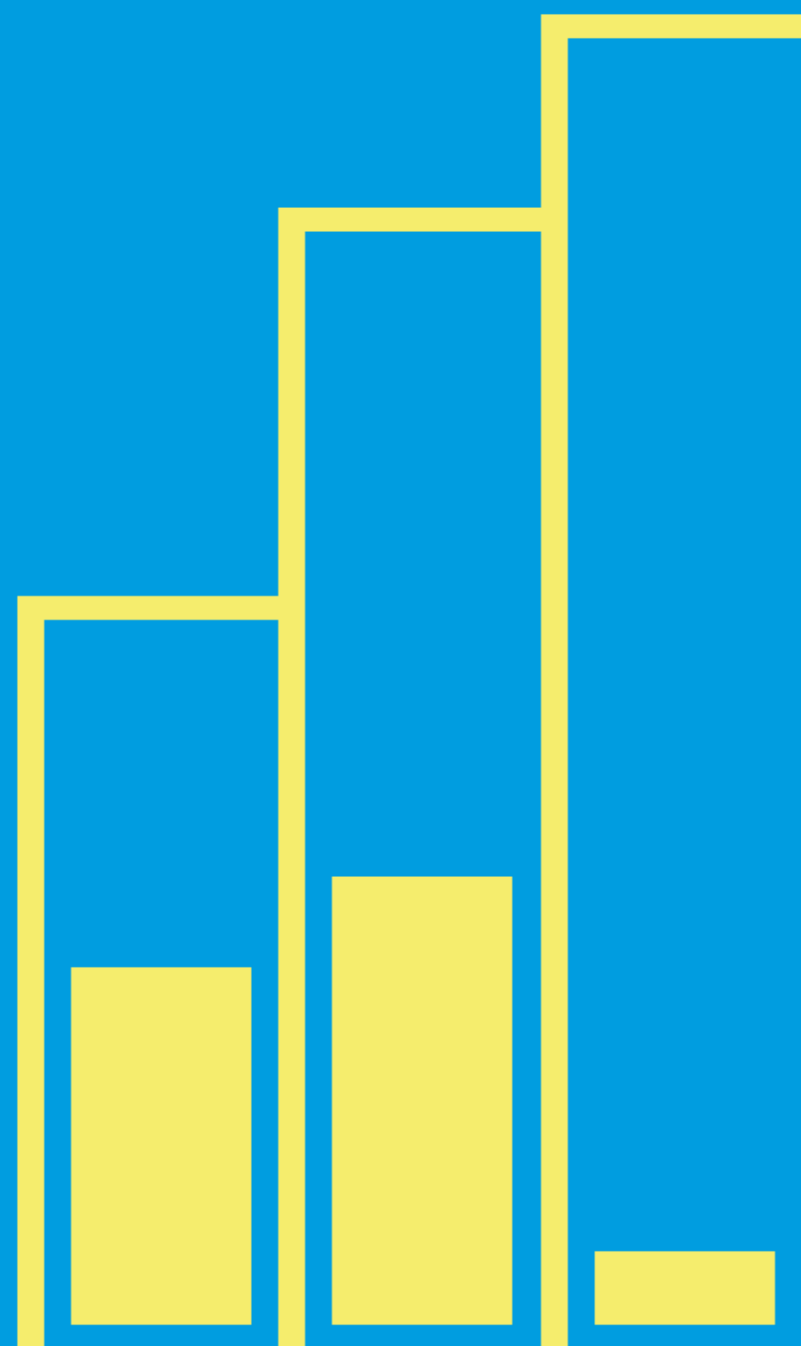
EQUAL » **effects of inequalities on learning outcomes**

MISS » **exploring who is missing – and why**



Research-based analysis of European youth programmes

We are a research network with partners in 34 European countries with 29 languages.

[Facts & Figures](#)[News](#)

More information

- » www.researchyouth.net
- » www.researchyouth.net/reports
- » www.researchyouth.net/news
- » [@researchyouth](https://twitter.com/researchyouth)

A

RESEARCH QUESTION

“How do social inequalities in different dimensions affect the learning outcomes of young people who participated in Erasmus+ Youth in Action projects?”

B

RESEARCH DESIGN

- » **Secondary analysis of data collected during the 2017/2018 monitoring cycle of the 2014-2020 programme generation**
- » **Selection of appropriate independent variables related to different dimensions of inequality**
- » **Analysis of effects (if any) of these inequality variables on learning outcomes**

C

DATA ANALYSIS

Full dataset of the 2017/2018 monitoring cycle: 23.571 respondents

- » **Condition 1: complete questionnaires**
- » **Condition 2: age range from 18 to 30**

Resulting in 16.997 respondents used for the inequality analysis

- » **55% Youth Exchanges**
- » **21% Youth Worker Mobility**
- » **13% Voluntary Service**
- » **8% Structured Dialogue**
- » **3% TCA Activity**

» **Use of inferential statistics**

» **Extended regression model**

» **Linear mixed model with random effect**

Descriptive statistics allow you to describe a full data set, while inferential statistics allow you to make (inductive) inferences based on a sampled data set.

Regression models explore whether changes in (inequality) predictor variables cause changes in a (learning) outcome variable.

Linear mixed models (LMM) are used to account for non-independence of data points, such as (in our case) participants experiencing the same activity (type).

Data analysis inclusion study

$$Y_{ijk} = y_{00} + y_{100} X_{ijk} + y_{200} C_{ijk} + V_{00k} + U_{0jk} + R_{ijk}$$

- Y_{ijk} = learning outcome (dependent)
- y_{00} = average intercept of individual in random group
- y_{100} = unstandardised coefficient of the independent variables
- y_{200} = unstandardised coefficient of the independent variables
- X_{ijk} = set of independent variables for different dimensions of inequality
- C_{ijk} = set of independent control variables such as gender, age, country
- V_{00k} = error term for activity types to capture variance of learning outcome
- U_{0jk} = error term for project groups, nested in/underneath activity types
- R_{ijk} = error term for individual level to capture variance of learning outcome

D

INDICATORS

Indicators of inequality (overview)

- » Educational inequality
- » Employment inequality
- » Participation inequality
- » Migratory inequality
- » Mobility inequality

» Educational inequality

- Educational attainment of parents
- Educational attainment of participants
- Perception of obstacles to education

» Employment inequality

- Unemployment in twelve months prior to project
- Perception of obstacles to employment

» Participation inequality

- Perception of obstacles to social participation

» Migratory inequality

- Family language (as proxy for migration)
- Belonging to a minority

» Mobility inequality

- Never been abroad
- Perception of obstacles to mobility

Indicators of learning (overview)

- » **Active participation**
- » **Learning and personal development**
- » **Intercultural interaction**

Indicators of learning (1)

Active participation

Through the participation in the project I improved my ability...

...to say what I think with conviction in discussions

...to develop an idea and put it into practice

...to negotiate joint solutions when there are different viewpoints

...to achieve something in the interests of the community or society

1=strongly disagree, 2=disagree, 3=agree, 4=strongly agree

Indicators of learning (2)

Learning and personal development

Through the participation in the project I improved my ability...

- ...to think logically and draw conclusions
- ...to identify opportunities for my personal or professional development
- ...to learn or to have more fun when learning
- ...to plan and carry out my learning independently

1=strongly disagree, 2=disagree, 3=agree, 4=strongly agree

Indicators of learning (3)

Intercultural interaction

Through the participation in the project I improved my ability...

...to communicate with people who speak another language

...to get along with people who have a different cultural background

1=strongly disagree, 2=disagree, 3=agree, 4=strongly agree

Group size ranging from 1 to 69

Control variables

Gender (female, male, other)

Age groups (18-20, 21-25, 26-30)

Activity duration in days (1-3, 4-7, 8-14, 15-60, 60-365)

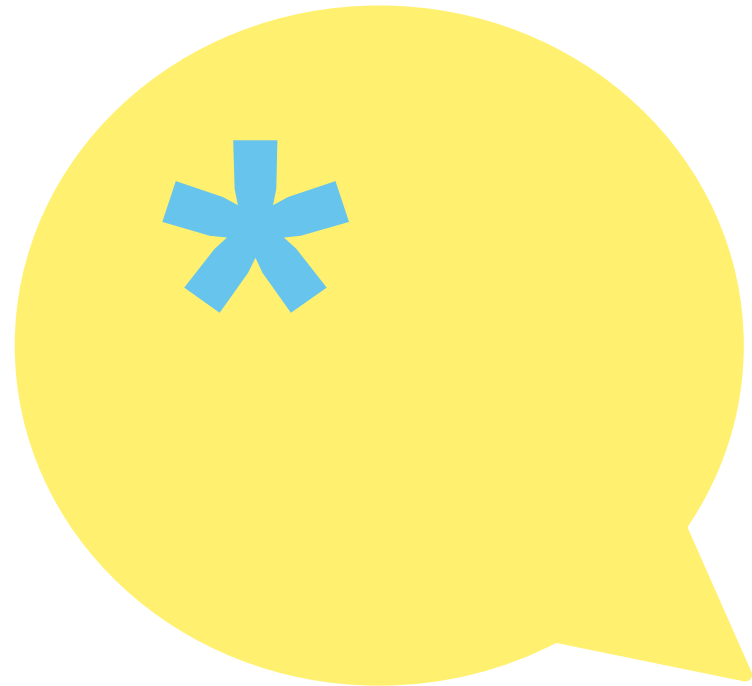
Country of residence

- » Central Europe
- » Eastern Europe
- » Northern Europe
- » Western Europe

E

FINDINGS

Predictors	Active Participation (M1.1)		Active Participation (M1.2)		Learning and Personal Development (M2.1)		Learning and Personal Development (M2.2)		Intercultural Interaction (M3.1)		Intercultural Interaction (M3.2)	
	Estimates	p	Estimates	p	Estimates	p	Estimates	p	Estimates	p	Estimates	p
(Intercept)	3.19	<0.001	3.11	<0.001	3.07	<0.001	2.89	<0.001	3.37	<0.001	3.33	<0.001
Educational attainment of parents (Ref. Upper Secondary/Technical School)												
<=Lower Secondary School	0.02	0.293	0.00	0.898	0.07	<0.001	0.03	0.111	0.02	0.120	0.02	0.207
University/tertiary	-0.01	0.140	-0.01	0.185	-0.03	0.002	-0.03	0.001	-0.00	0.693	-0.01	0.448
Educational attainment of participants (Ref. Upper Secondary/Technical School)												
<=Lower Secondary School	-0.07	0.051	-0.07	0.049	-0.06	0.136	-0.05	0.194	-0.05	0.185	-0.05	0.132
University/tertiary	-0.01	0.604	-0.02	0.303	0.02	0.268	-0.02	0.192	-0.02	0.127	-0.01	0.630
In education or training	0.03	0.046	0.02	0.196	0.04	0.009	0.02	0.319	0.06	<0.001	0.05	<0.001
Perception of obstacles to education (Ref. No Obstacle)												
Subjective Obstacle to Education	0.03	0.179	0.02	0.413	0.10	<0.001	0.08	0.001	0.01	0.515	0.01	0.649
Gender (Ref. Female)												
Male			0.02	0.012			0.00	0.981			-0.01	0.310
Other			-0.06	0.306			-0.05	0.394			-0.19	0.001
Age Group (Ref. 21-25)												
18-20			0.02	0.022			0.03	0.004			0.08	<0.001
26-30			-0.01	0.405			0.01	0.594			-0.04	0.002
Country Region (Ref. Central Europe)												
Eastern Europe			0.13	<0.001			0.23	<0.001			0.09	<0.001
Northern Europe			-0.05	0.092			0.11	<0.001			-0.04	0.143
Southern Europe			0.13	<0.001			0.30	<0.001			0.10	<0.001
Western Europe			0.06	0.005			0.22	<0.001			0.03	0.117
Other			0.11	<0.001			0.31	<0.001			0.09	<0.001
Activity Duration (Ref. 4-7 days)												
1-3 days			-0.06	0.032			-0.14	<0.001			-0.34	<0.001
8-14 days			0.02	0.121			0.01	0.443			0.02	0.149
15-60 days			0.01	0.809			-0.00	0.910			0.04	0.367
60 - 365 days			-0.09	0.043			-0.04	0.452			0.07	0.179
Random Effects												
σ^2	0.29		0.29		0.36		0.35		0.28		0.28	
τ_{00}	0.02	project_group:key_act_typ	0.01	project_group:key_act_typ	0.02	project_group:key_act_typ	0.02	project_group:key_act_typ	0.03	project_group:key_act_typ	0.02	project_group:key_act_typ
	0.01	key_act_typ	0.00	key_act_typ	0.00	key_act_typ	0.00	key_act_typ	0.04	key_act_typ	0.01	key_act_typ
ICC	0.05	project_group:key_act_typ	0.05	project_group:key_act_typ	0.06	project_group:key_act_typ	0.04	project_group:key_act_typ	0.08	project_group:key_act_typ	0.07	project_group:key_act_typ
	0.02	key_act_typ	0.01	key_act_typ	0.01	key_act_typ	0.01	key_act_typ	0.11	key_act_typ	0.04	key_act_typ
Observations	16509		16451		16504		16446		16514		16456	
Marginal R ² / Conditional R ²	0.002 / 0.070		0.016 / 0.075		0.004 / 0.065		0.038 / 0.089		0.005 / 0.194		0.037 / 0.137	



“By and large, E+/YiA projects do not lead to further inequalities in learning outcomes. Young people with fewer opportunities who participate in an E+/YiA project achieve, in general, similar learning outcomes as their peers with ‘normal’ (or average) opportunities.”

**This is quite extraordinary:
typically, existing educational
inequalities tend to increase
and amplify – a phenomenon
described through the “Matthew
effect of accumulated advantage”.**

“By and large, E+/YiA projects do not lead to further inequalities in learning outcomes. Young people with fewer opportunities who participate in an E+/YiA project achieve, in general, similar learning outcomes as their peers with ‘normal’ (or average) opportunities.”

**NON-FORMAL LEARNING IN
ERASMUS+ YOUTH IN ACTION
LEVELS THE LEARNING FIELD
FOR YOUNG PEOPLE WITH
FEWER OPPORTUNITIES
IN THE PROGRAMME.**

**NON-FORMAL LEARNING IN
ERASMUS+ YOUTH IN ACTION
LEVELS THE LEARNING FIELD
FOR THOSE YOUNG PEOPLE WITH
FEWER OPPORTUNITIES WHO
MAKE IT INTO THE PROGRAMME.**

Two exceptions

A notable positive exception is young people who have been less exposed to intercultural learning and mobility learning: there is subtle indication that those young people with fewer opportunities achieve better learning outcomes.

A notable negative exception is young people who were unemployed prior to or at the time of participating in an E+/YiA project: there is clear indication that those young people with fewer opportunities achieve worse learning outcomes.

Educational inequality

Low educational attainment of parents and perceived obstacles in accessing education show slightly better learning outcomes

Employment inequality

Young people who had experienced unemployment in the year leading up to their project show significantly lower learning outcomes

Participation inequality

Young people with perceived obstacles to actively participate in politics and society show slightly better learning outcomes

Migratory inequality

Young people with second-generation immigration status (deduced by proxy) show slightly better learning outcomes

Mobility inequality

Young persons who have never been abroad before the participation in the project show significantly higher learning outcomes

Our biggest question mark

Non-formal learning in Erasmus+ Youth in Action levels the learning field for those young people with fewer opportunities who make it into the programme.

Some projects do that more powerfully than others. What makes some projects more powerful than others in this context, we do not yet know.

F

OUTLOOK

What comes next?

» RAY-EQUAL

Conceptual sharpening

Project characteristics should be analysed with more nuance than activity type & duration

Learning outcomes should be expanded to explore knowledge, skills, attitudes and values

Effects of inequality should be explored for competence development and capacity building

Methodological sharpening

Regional clustering of countries should ideally be contextual clusterings of countries

Composite learning outcome indicators should ideally have identical number of variables

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