POLITECNICO
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Evaluating financial education interventions: *guidelines, challenges and best practices*

La valutazione delle iniziative di educazione finanziaria: *Linee guida, sfide e best practices*

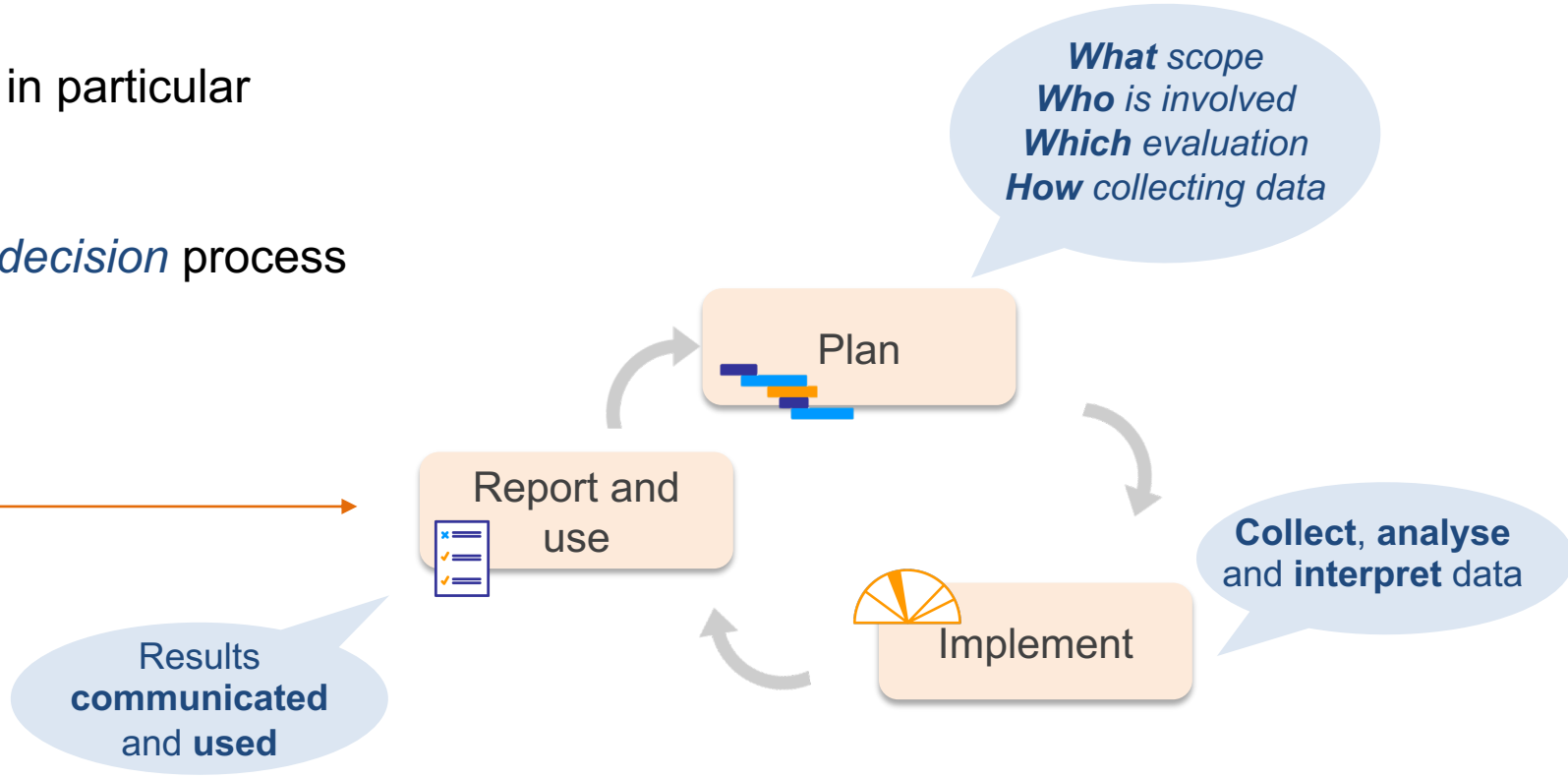
Tommaso Agasisti
Marta Cannistrà

Summary

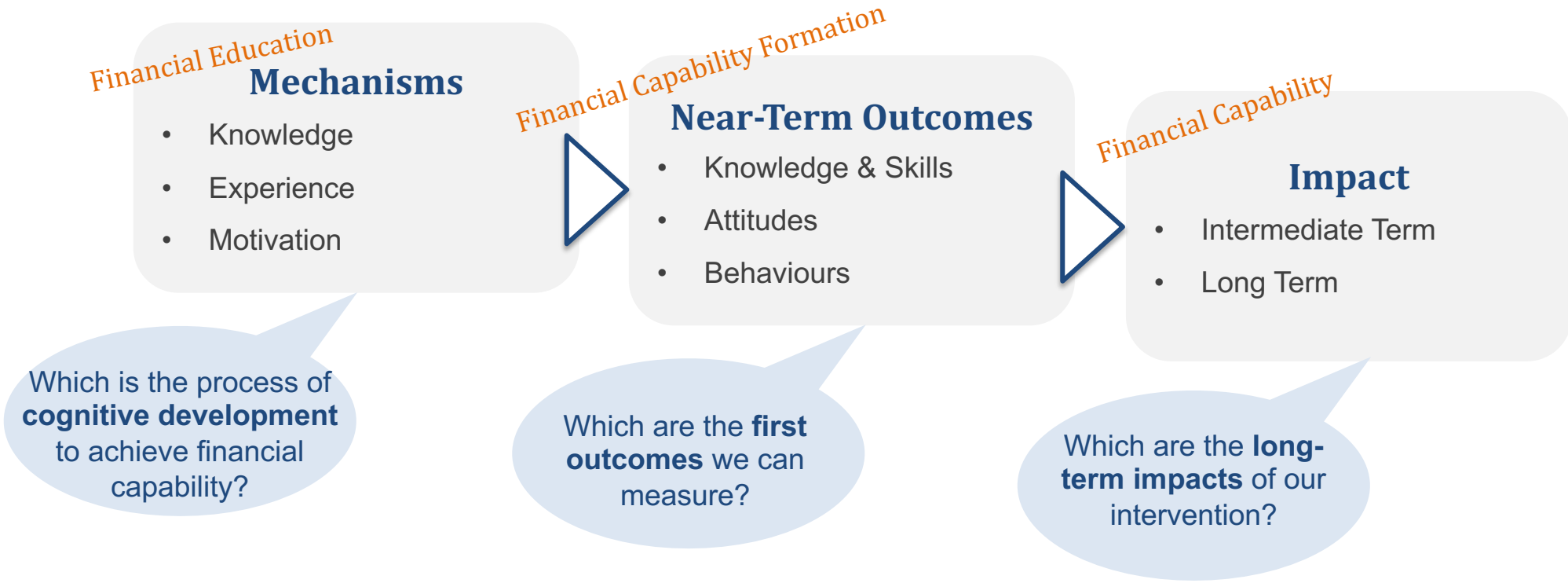
1. Evaluation at glance: features and process
2. Framework for developing and testing financial capabilities
3. Evaluation's contents
4. Evaluating Financial Education interventions: evidences from world experience
5. Our Randomized Controlled Trail for the evaluation of basic financial education in Higher Education

Evaluation needs to

- Be *evidence-based*
- *Measure* something in particular
- Be *systematic*
- Be a contribution in *decision* process
- Be a *process* itself



2. Framework for developing and testing financial capabilities



3. Evaluation's contents

Big Three questions

1. **Numeracy** and capacity to do calculations related to interest rates
2. Understanding of **inflation**
3. Understanding of **risk diversification**

A. Lusardi

4.1. Evaluating financial education intervention
Evidence from world experience: Wisconsin, USA

Where:	Eau Claire (Wisconsin, USA)
When:	A.S. 2011-12 e 2012-13
Students:	4° and 5° grade of two schools from the same district (Elementary schools)
Length of the course:	5 weeks (45 min. per lesson).
Mandatory:	Yes
Methodology:	Randomized controlled trial with OLS regression
Topics:	Savings, financial decisions and money management.
Teacher training:	Yes, they enrolled in a 3-hour course
Participants course assignment:	Random, half of the classes starts immediately (Treatment), while the other ones at the end of the first cycle (Control).
Parents involvement:	Yes, they gave right to data treatment and answered a survey about family income, education level, …
Data:	Baseline at the beginning, first follow-up assessment and second follow-up at the end of the course.
Goal:	Investigate whether students' understanding of financial concepts increases measurably after participating in a modest financial education intervention.

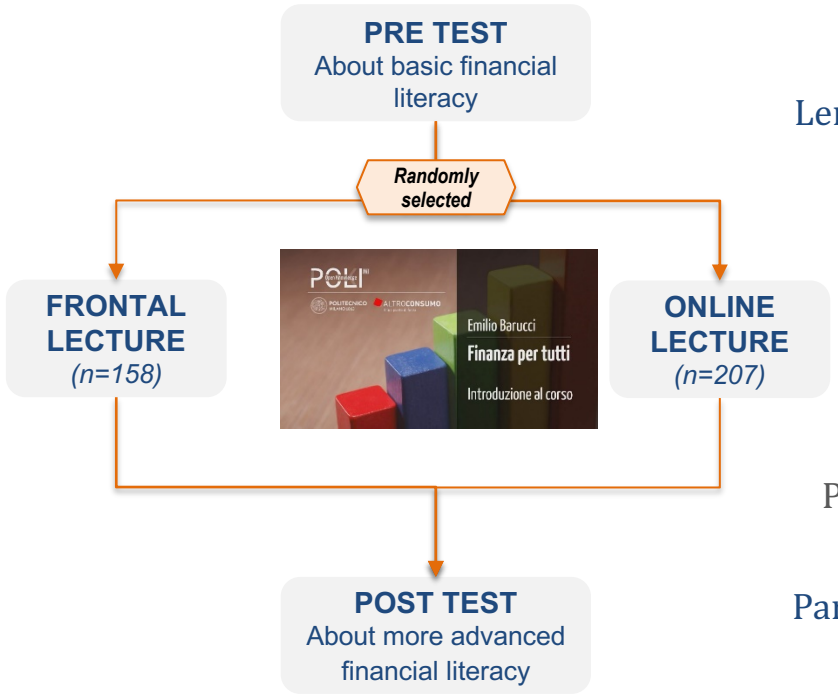
4.2. Evaluating financial education intervention
Evidence from world experience: Brazil

Where:	Brazil
When:	A.S. 2010-11
Students:	High school students between ages 15 and 17 – 892 schools and approx. 25.000 students
Length of the course:	17 months, integrated into regular classroom curricula with interactive in-school and take-home exercises
Mandatory:	Yes
Methodology:	Randomized controlled trial, OLS regression to analyse surveys and focus groups with teachers to evaluate the training materials.
Topics:	Case studies applied to basic finance and economics, connected to daily life
Teacher training:	Yes, with materials.
Participants course assignment:	Schools volunteered to be part of the pilot program, then division into control and treatment through stratified and matched randomization
Parents involvement:	Yes, whose pupils were assigned to treatment group were invited to participate in a school workshop (then divided into control and treatment group) – obj: raise awareness about financial education
Data	Baseline at the beginning, first follow-up assessment and second follow-up at the end of the course. Then teachers and principals were interviewed for feedback on the program.
Goal:	Study the impact of a financial education program for high school students in Brazil.

4.3. Evaluating financial education intervention
Evidence from world experience: Spain

Where:	Spain
When:	Starting in A.S. 2014-15, with four rounds
Students:	3,000 9th and 10th grade (between 14 and 15 years old) from 78 high schools
Length of the course:	10 hours
Mandatory:	Yes, along the normal lectures
Methodology:	Randomized controlled trial
Topics:	Savings and interests, risk and budget, bank accounts' typology and pension funds and insurance investments
Teacher training:	No, nut they had discretion over the teacher who taught the topic
Participants course assignment:	Randomization at school level, stratifying according to typology
Parents involvement:	No
Data:	Baseline financial literacy test and a demographic survey, second financial literacy test and an additional survey, third financial literacy test with an incentivized task.
Goal:	Detect if financial education changes individuals' financial knowledge or behaviour

5. Evaluating basic financial knowledge at Politecnico di Milano
Our Randomized Controlled Trial



Where:	Politecnico di Milano
When:	2nd semester A.Y. 2018/19
Students:	365 PoliMi students attending 1st year of Mathematical Engineering
Length of the course:	1 day (3h) during Economics course
Mandatory:	No, students rewarded with an additional point on final grade of the course
Methodology:	Randomized Controlled Trial, Multiple Linear Regression model
Topics:	Basic finance and economics: interests, loans, indicators…
Teacher training:	No, teacher from Applied Finance of Mathematical Department
Participants course assignment:	Random, based on the first letter of students' surname
Parents involvement:	No
Data:	Results from pre test before the course, final test after the course, administrative data about single student
Goal:	• Understand the general level of financial literacy among 19-years old • Understand if basics finance can be taught in online classes, obtaining the same results of offline ones.

6. Considerations and challenges about financial education programmes

Considerations

- ✓ **Control** group to demonstrate the impact
- ✓ Financial **income** level of participants needs to be considered
- ✓ When young pupils are the target, the **involvement of parents** can be impactful
- ✓ **Motivation** in joining financial education initiatives is essential
  - → necessity to consider response and dropout rate
  - → rewarding can be a solution

Challenges

- × Knowledge evaluation is relatively simple, the difficulties is to determine the **extent** of behavioural changes because they are
  - → Time-sensitive
  - → Self-reported
- × Lack of **theoretical framework**
- × **Data integrity**: potential biases, non-comparability
- × Difficulties in proving **causation** of knowledge on behaviours

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