

**INTERNATIONAL
WORKSHOP**
ON EFFICIENCY
IN EDUCATION,
HEALTH AND OTHER
PUBLIC SERVICES

**PISA, ITALY
SEPTEMBER
8-9 2022**

DEPARTMENT OF
ECONOMICS AND MANAGEMENT,
UNIVERSITY OF PISA POLO PIAGGE,
VIA GIACOMO MATTEOTTI 11, 56124 PISA, ITALY

FULL PROGRAM

Welcome!

Dear Workshop Participant,

We are glad to welcome you to the “International Workshop on Efficiency in Education, Health and other Public Services” held at the Department of Economics and Management in Pisa.

The workshop is the 8th of a series of academic meetings focused on the efficiency analysis of education institutions and other public sectors, the previous editions being organized in Greece (Thessaloniki, 2013), United Kingdom (London, 2014 and Huddersfield, 2018), Belgium (Leuven, 2015), Italy (Milan, 2016), Hungary (Budapest, 2017) and Spain (Barcelona, 2019). After a long break due to COVID-19 in 2020 and 2021, we can finally see each other in person again and exchange new and inspiring ideas.

The Workshop includes three plenary sessions, with the keynotes by Andrea Bonaccorsi (University of Pisa), Bruce Hollingsworth (Lancaster University) and Gabriela Sicilia (University of La Laguna). There will be also parallel sessions with several papers addressing a variety of topics on education and different types of public services. This edition will gather participants from 11 countries across Europe, North and South America, and Asia.

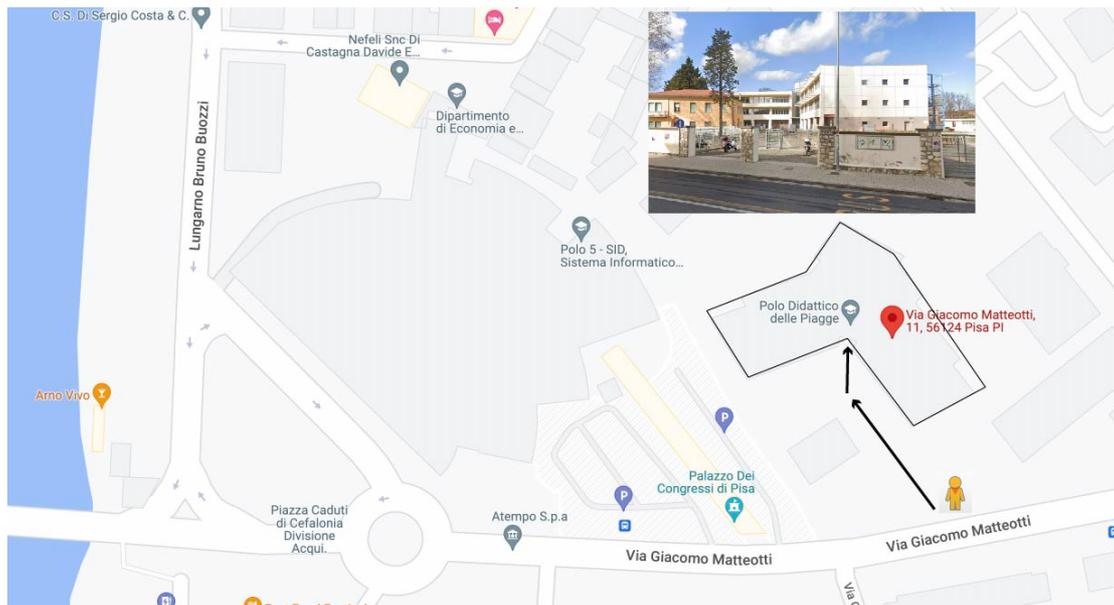
We would like to thank the Scientific Committee (Tommaso Agasisti, Kristof De Witte and Jill Johnes) for their support in organizing the workshop and judging the papers, as well as the “Comitato dei Matematici Applicati in Toscana”. We also owe gratitude to the Department of Economics and Management, the University of Pisa, AMASES (Association for Mathematics Applied to Social and Economic Sciences), Fondation du Risque – Institut Louis Bachelier and REMARC (Responsible Management center) for their sponsorship and patronage. Also, thank you for participating and bringing your great contribution!

Before leaving, don't miss the opportunity to visit Pisa and the natural beauties around its Lands! We have one last thing to say. We wish you all a successful workshop and enjoyable stay in Pisa!

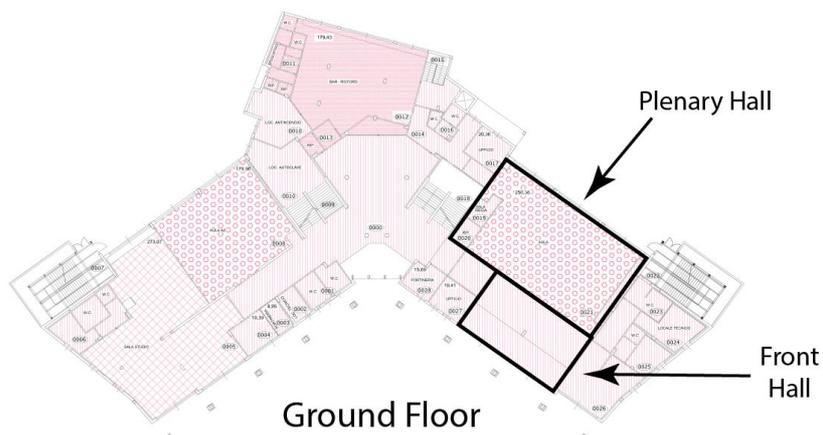
The Local Organizing Committee,
Laura, Riccardo and Giovanna

Venue

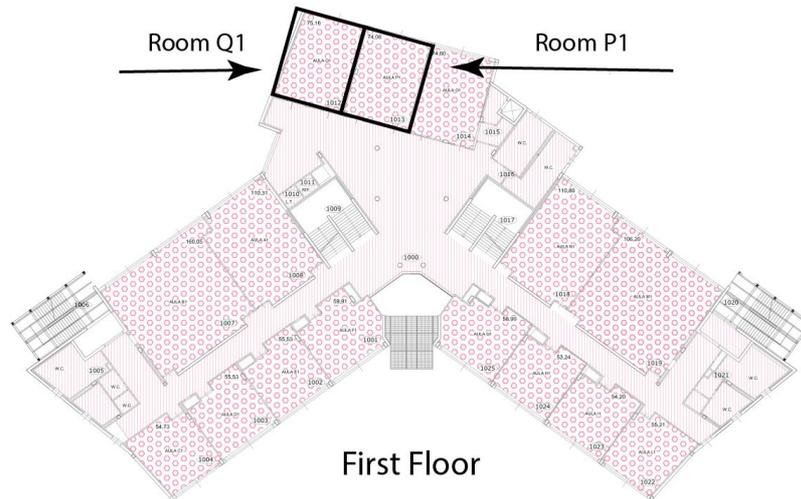
The event takes place at “Polo Piagge”, Via Giacomo Matteotti, 11, 56124 Pisa, Italy (<https://goo.gl/maps/xU6VBGmmqUMGXFbw7>).



The registration and coffee breaks will be in the Front Hall of Aula Magna on the Ground floor.



The parallel sessions will be in room P1 and Q1 on the First floor.



Parallel sessions in room P1:

- *Education - School Performance*
- *Education - International assessments*
- *Education – Equal Educational Opportunities*
- *Education – OECD PISA assessments*
- *Education - Teacher practices*

Parallel sessions in room Q1:

- *Public Services I*
- *Education – Higher Education*
- *Public Services II*
- *Efficiency – Methods*
- *Public Services III*

Media & Internet connection

Please help us spread the word in the social media by using the conference hashtag **#IWE2022**.

Access to WIFI eduroam

It is necessary to register in advance at the affiliation institution/home university.

Alternative Internet access

Please contact us at the Registration desk if you need alternative Internet access.

Social activities

On Thursday afternoon, we will visit the exhibition of “[Le Navi Antiche di Pisa](https://www.navidipisa.it/en/display/)” in the majestic rooms and aisles of the “Arsenali Medicei”, along the Arno River (<https://www.navidipisa.it/en/display/>).

Then, we will enjoy some traditional local food at “[Osteria in Domo](https://www.osteriaindomo.it)” (Via Santa Maria, 129, Pisa, <https://www.osteriaindomo.it>).

Program overview

Thursday, September 8

08:30-09:15 **Registration** | Front Hall of Aula Magna Polo Piagge

09:15-9:30 **Opening session** | Aula Magna Polo Piagge

9:30-10:30 **Plenary session** | Aula Magna Polo Piagge

Keynote speaker: **Bruce Hollingsworth** (Lancaster University, UK)

“Improving on evolution? Updated guidelines for Efficiency Measurement in Health Care”

10:30-11:00 **Coffee Break** | Front Hall of Aula Magna Polo Piagge

11:00-12:15 **Parallel sessions – 1** | Room P1, Room Q1

Education - School Performance, Public Services I

12:30-13:30 **Lunch**

13:45-14:45 **Plenary session** | Aula Magna Polo Piagge

Keynote speaker: **Andrea Bonaccorsi** (University of Pisa, Italy)

“Efficiency in higher education. A long (and troubled) tale”

14:50-16:05 **Parallel sessions – 2** | Room P1, Room Q1

Education - International assessments, Education – Higher Education

16:05-16:20 **Coffee break** | Front Hall of Aula Magna Polo Piagge

16:20-17:35 **Parallel sessions – 3** | Room P1, Room Q1

Education – Equal Educational Opportunities, Public Services II

17:45-20:00 **Social Activity** | Visit at the exhibition of “Le Navi Antiche di Pisa”

20:00-22:00 **Social Dinner** | “Osteria in Domo”

Friday, September 9

- 9:15-10:15 **Plenary session** | Aula Magna Polo Piagge
Keynote speaker: **Gabriela Sicilia** (University of La Laguna, Spain)
“The assessment of education systems’ efficiency and performance in practice: challenges and ways forward”
- 10:15-10:45 **Coffee break** | Front Hall of Aula Magna Polo Piagge
- 10:45-12:00 **Parallel sessions – 4** | Room P1, Room Q1
Education – OECD PISA assessment, Efficiency - Methods
- 12:10-13:00 **Parallel sessions – 5** | Room P1, Room Q1
Education – Teacher Practices, Public Sector III
- 13:00-14:30 **Lunch and farewell**

Overview parallel sessions

Thursday, September 8 11:00-12:15	Room P1 Education - School Performance	Room Q1 Public Services I
	Can the Geographic Distribution of College Students be More Efficient? Impact of Enrollment Cap Policy on College Access in Japan Takeshi Yanagiura , <i>Shinji Fukushima and Takeshi Higeta</i>	The effects of municipal mergers on expenditures and outputs: Evidence from Italy Tommaso Agasisti , <i>Alice Bertolotti and Francesco Porcelli</i>
	Competitive effects of charter schools: Evidence from a nationally representative sample <i>M. Danish Shakeel</i> , Katharina Werner and <i>Paul Peterson</i>	EU municipal waste management performance evaluation: An AHP-GPSI-based composite indicator Laura Carosi , <i>Giovanna D'Inverno, Giulia Romano</i>
	Measuring and Explaining School Performance: Evidence on School Value-Added Models in Italy <i>Tommaso Agasisti, Chiara Masci and Mara Soncin</i>	The role of Infrastructure, firms' efficiency and their survival: evidence from a combined productivity-duration approach Pierluigi Toma

Thursday, September 8 14:50-16:05	Room P1 Education - International assessments	Room Q1 Education - Higher Education
	Efficiency and effectiveness of primary education in terms of equity in old and post-socialist EU member states Dovilė Stumbrienė , <i>Rimantas Želvys, Julius Žilinskas, Rita Dukynaitė and Audronė Jakaitienė</i>	Attainment of Higher Education Goals in South Africa's Public Universities: A Multidimensional Analysis Oleg Badunenko and <i>Lindikaya Myeki</i>
	How Much Educational Data is collected and how much is used? Case of Lithuania Audrone Jakaitiene , <i>Rimantas Zelvyys and Rita Dukynaite</i>	Measuring the efficiency of the Italian universities: A stochastic frontier analysis Gaetano Francesco Coppeta
	Predicting dropout in higher education across borders: Exploring the common elements between Italy and the Netherlands Melisa Diaz Lema , <i>Melvin Vooren, Chris van Klaveren, Ilja Cornelisz, Marta Cannistra and Tommaso Agasisti</i>	A Comparison of the Slacks Based Measure Environmental Efficiency ranking with the People & Planet's University League ranking <i>Boon Lee and Jill Johnes</i>

Thursday, September 8 16:20-17:35	Room P1 Education – Equal Educational Opportunities	Room Q1 Public Services II
	The productivity of Colombian public schools and its determinants in a value-added perspective: an empirical analysis 2014-2019 <i>Tommaso Agasisti, Juliana Arias, Gloria Bernal and Luz Karime Abadía</i>	Judicial efficiency and court organization: a Data Envelopment Analysis Greta Falavigna and Roberto Ippoliti
	Is it possible to be resilient and efficient in one of the most unequal countries in the world? Sebastian Estrada, Diego Prior, Victor Gimenez Garcia and Tommaso Agasisti	Evaluation of labour market active policy reform: Employment outcomes of employment rehabilitation services Renee Pesor and Kaire Pöder
	Impact evaluation in a multi-input multi-output setting: Evidence on the effect of additional resources for schools Kristof De Witte, Giovanna D'Inverno and Mike Smet	An innovative Benefit-of-the-Doubt approach for health system effectiveness: A global case study on amenable mortality Giovanna D'Inverno, João Vasco Santos, Ana S. Camanho

Friday, September 9 10:45-12:00	Room P1 Education – OECD PISA assessments	Room Q1 Efficiency - Methods
	Individualism, Human Capital Formation, and Labor Market Success Katharina Hartinger, Sven Resnjanskij, Jens Ruhose and Simon Wiederhold	Challenging the use of kernel methods to estimate similarity for conditional DEA. A Monte Carlo simulation Anna Mergoni
	Does ICT Improve Education Outcomes and Efficiency? A Panel Data Analysis through OECD PISA Data M. Mujiya Ulkhaq, Giorgia Oggioni, Rossana Riccardi and Kristof De Witte	Modelling production technologies with several parallel processes: An application to higher education Grammatoula Papaioannou and Victor Podinovski
	Career guidance to lessen inequalities in education <i>Tommaso Agasisti, José M. Pastor, Ángel Soler and Iván Vicente</i>	Rank-two programs involving linear fractional functions Riccardo Cambini and Giovanna D'Inverno

Friday, September 9 12:10-13:00	Room P1 Education - Teacher practices	Room Q1 Public Services III
	Occupational accidents and sick leave duration in the Spanish education sector Laura María García Carrizosa and <i>Pablo Arocena</i>	Public investments in Agriculture: Efficiency, Sustainability and Environmental risks Chiara Colamartino , <i>Anna Rita Dipierro</i> and <i>Anna Mergoni</i>
	Leveraging Home Reading to Strengthen Literacy Outcomes Brooks Bowden , Johanna Bernard and <i>Rebecca Davis</i>	The measurement of Asset Management achievements of Portuguese water companies Hermilio Vilarinho , <i>Ana Camanho</i> , <i>Henriqueta Novoa</i> and <i>Giovanna D'Inverno</i>
		Optimal harvesting under marine reserves and uncertain environment <i>M'hamed Gaïgi</i> , <i>Vathana Ly Vath</i> and Simone Scotti

List of participants

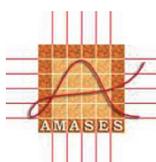
Tommaso	Agasisti	Politecnico di Milano. DIG	Italy
Juliana	Arias	ITM de Medellín	Colombia
Pablo	Arocena	Universidad Pública de Navarra	Spain
Oleg	Badunenko	Brunel University London	United Kingdom
Johanna	Bernard	University of Pennsylvania	USA
Andrea	Bonaccorsi	University of Pisa	Italy
Brooks	Bowden	University of Pennsylvania	USA
Riccardo	Cambini	University of Pisa	Italy
Laura	Carosi	University of Pisa	Italy
Chiara	Colamartino	LUM University G. Degennaro	Italy
Gaetano Francesco	Coppeta	UNIMORE	Italy
Giovanna	D'Inverno	University of Pisa	Italy
Kristof	De Witte	KU Leuven	Belgium
Melisa Lucia	Diaz Lema	Politecnico di Milano. DIG	Italy
Anna Rita	Dipierro	LUM University G. Degennaro	Italy
Greta	Falavigna	IRCrES-CNR	Italy
Rachele	Foschi	University of Pisa	Italy
Shinji	Fukushima	Taisho University	Japan
Laura María	García	Universitat Autònoma Barcelona	Spain
Katharina	Harteringer	KU Eichstaett-Ingolstadt	Germany

Bruce	Hollingsworth	Lancaster University	United Kingdom
Audrone	Jakaitiene	Vilnius University	Lithuania
Jill	Johnes	Huddersfield Business School	United Kingdom
Sebastian	López Estrada	Universitat Autònoma Barcelona	Spain
Anna	Mergoni	KU Leuven	Belgium
Grammatoula	Papaioannou	Loughborough University	United Kingdom
Renee	Pesor	Estonian Business School	Estonia
Victor	Podinovski	Loughborough University	United Kingdom
Simone	Scotti	University of Pisa	Italy
Gabriela	Sicilia	University of La Laguna	Spain
Mara	Soncin	Politecnico di Milano. DIG	Italy
Dovile	Stumbriene	Vilnius University	Lithuania
Pierluigi	Toma	University of Salento	Italy
Muhammad Mujiya	Ulkhag	University of Brescia	Italy
Emanuele	Vannucci	University of Pisa	Italy
Iván	Vicente	University of Valencia	Spain
Hermilio	Vilarinho Fernandes	University of Porto	Portugal
Katharina	Werner	ifo Institute	Germany
Takeshi	Yanagiura	University of Tsukuba	Japan

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