



# EUROPEAN CONFERENCE ON QUALITY IN OFFICIAL STATISTICS 2024 ESTORIL - PORTUGAL







EUROPEAN CONFERENCE ON  
QUALITY IN OFFICIAL STATISTICS  
2024 ESTORIL - PORTUGAL



# Istat experiences and new challenges with statistical literacy at central and national level

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Development and Promotion of statistical literacy

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# Methods

- The activity to promote statistical literacy at all levels but particularly at the school level
- The educational sector has a well-established framework where actions are more easily carried out and supported

# Methods and activities

Are explained in our website

## METHODS AND TOOLS

### INFORMATION AND SERVICES

#### USERS

Information centres  
European data support  
Library  
Historical Archive  
Catalogue and subscriptions

#### JOURNALISTS

Press releases  
Embargo  
General information  
The history of Istat

#### RESPONDENTS

#### RESEARCHERS

Laboratory for  
Elementary Data Analysis  
Promotion of statistical  
research

#### STUDENTS AND TEACHERS

Agreement with the  
Association of European  
Economics Education  
(AEEE-ITALIA)  
The permanent census  
on school desks  
Collaboration with at the  
School of OpenCoesion  
Contests and prizes  
Teaching materials  
Italian Statistics  
Olympics

The **development of statistical literacy** is implemented through actions aimed at increasing the critical sense of the users through the correct understanding of statistical data and information. Constituent elements of this process are:

- the promotion of the paradigm of statistical research (fundamental in the process of acquiring knowledge through the empirical observation of reality);
- the orientation to the use and application of data and information produced by official statistics to a plurality of cognitive, decision-making and evaluation contexts;
- the development of a method for decision-making, especially in conditions of uncertainty, through the use of official statistics;
- the knowledge of the set of criteria that guide the activity of the statistician and of the researcher;
- the promotion of metadata culture;
- the attention to quality and its "certification".

On these bases, Istat's proposal on the development of statistical culture is based on four pillars:

1. to disseminate the pervasive and reasoned use of statistics within the curriculum disciplines, oriented to humanistic subjects and social sciences, as well as to the Stem disciplines (sciences, technologies, engineering, mathematics);
2. to equip the learners with a "statistical toolbox" and to develop the critical sense, the recognition of regularities (patterns), the capacity for synthesis (statistics) and the habit of interpreting reality through models;
3. to reach boys and girls outside the scholastic channel, through familiar and fun activities and methods (gamification);
4. to develop the quantitative and statistical interest and literacy of adults.

Moreover, at the national level, Istat has started collaborating in 2018 with the project "At the School of OpenCoesion" (A Scuola di Open Coesione – Asoc). This project is eligible as Pathway for transversal skills and orientation (Percorso per le competenze trasversali e per l'orientamento – PCTO) and for teachers' training.

An agreement was signed in 2019 with the Association of European Economics Education (Associazione europea per l'educazione economica – AEEE Italia). The agreement is aimed at developing statistical literacy in schools and it is addressed to

# The Italian statistics Olympics the initiative with the longest activity (now in its 14<sup>o</sup> edition) and the highest participation



POPOLAZIONE E FAMIGLIE   SOCIETÀ E ISTITUZIONI   ISTRUZIONE E LAVORO   ECONOMIA   AMBIENTE E TERRITORIO   CERCA NEL SITO

## NOTIZIA

### OLIMPIADI ITALIANE DI STATISTICA 2024: GRANDE PARTECIPAZIONE A LIVELLO NAZIONALE

Si è svolta dal 16 al 19 gennaio la prova individuale della Quattordicesima edizione delle Olimpiadi italiane di statistica, rivolte agli studenti dei primi quattro anni delle scuole secondarie di secondo grado presenti sul territorio italiano.

Visto il grande numero di iscritti la competizione si è tenuta su quattro giorni. In linea con il trend degli ultimi anni, anche nel 2024 è stato battuto il record di partecipanti, con **6.639 studenti** (+33,6%). Ben 2.769 le studentesse e 3.870 gli studenti; 1.914 studenti hanno svolto la prova per il primo anno, 2.243 per il secondo anno, 1.386 per il terzo e 1.096 del quarto anno.

- [Vincitori delle prove individuali delle Olimpiadi 2024 \(classi I e II\)](#)
- [Vincitori delle prove individuali delle Olimpiadi 2024 \(classi III e IV\)](#)

I vincitori della prima fase verranno inseriti nell'[Albo nazionale delle eccellenze](#), in base al relativo Decreto Ministeriale.

Le prime 30 scuole per ogni categoria (I/II e III/IV) possono partecipare alla fase a squadre a partire dal **29 gennaio 2024**.

- [Istituti qualificati per la seconda fase a squadre delle Olimpiadi italiane \(classi I e II\)](#)
- [Istituti qualificati per la seconda fase a squadre delle Olimpiadi italiane \(classi III e IV\)](#)

Per questa fase della competizione, il termine per la consegna dei lavori è il **23 febbraio**.

I vincitori della fase a squadre italiana (le prime due squadre per il gruppo I-II anno e le prime due per il gruppo III-IV anno) potranno accedere alla [Competizione europea](#), organizzata da Eurostat con la collaborazione degli Istituti nazionali di statistica europei.

## NEWS

### ITALIAN STATISTICS OLYMPICS 2024



For the 2023/24 school year Istat and [SIS](#) organize the fourteenth edition of the Italian Statistics Olympics.

The Olympics are aimed to encourage students to approach statistical reasoning, to arouse their interest in data analysis and probability, to enable them to better understand the meaning of the quantitative information

they receive every day.

The initiative is open to upper secondary school students (classes 1-4).

School and student registrations opened on **20 October 2023** and closed on **1 December 2023** (2 p.m.).

This year, the registration procedure has been simplified. [Watch the video tutorial](#)

Due to the large number of registrations, this year the individual test was held over four days: from 16 to 19 January 2024, as already stated in the Rules.

The daily trial slots are given below ([download the schedule of days and times](#)):

- **16 January 2024** (schools of Piemonte, Valle d'Aosta, Lombardia, Trentino Alto-Adige, Veneto);
- **17 January 2024** (schools of Friuli-Venezia Giulia, Liguria, Emilia-Romagna without the province of Piacenza, Toscana, Umbria, Marche, Abruzzo);
- **18 January 2024** (schools of Molise, Campania, Puglia, Basilicata, Calabria, Sicilia and Sardegna).
- **19 January 2024** (schools of Lazio and the province of Piacenza)

Individual tests consist of a set of multiple choice questions, administered online, on statistics topics as set forth in the Competition Rules.

The assignments of the previous editions, with solutions and comments, are available in the Competition pages of the years: [2018](#) | [2019](#) | [2020](#) | [2021](#) | [2022](#) | [2023](#).

Further information is available in the [Competition announcement](#), and in the [Rules](#) adopted by Resolution of the Istat President.

Winners in individual tests are inserted in the "[Albo nazionale delle eccellenze](#)" (National register of excellences) by the Ministry of Education according to the provisions of the appropriate Ministerial Decree.

The qualified schools can participate in the team phase, which started on **29 January 2024**. The term of this phase is scheduled for **23 February 2024**.

Also in this edition, the Italian Statistics Olympics are the national phase of the [European statistics competition](#). The Olympics winners (team phase) are admitted to the European competition organized by Eurostat in collaboration with the National statistical institutes (here the [European rules](#)).

#### Winners

- [Winners of the 2024 Olympics individual tests \(classes I and II\)](#)
- [Winners of the 2024 Olympics individual tests \(classes III and IV\)](#)
- [Schools admitted to the second team phase of the Italian Olympics \(classes I and II\)](#)
- [Schools admitted to the second team phase of the Italian Olympics \(classes III and IV\)](#)

#### For information

[olimpiadi-statistica@istat.it](mailto:olimpiadi-statistica@istat.it)

DATE OF ISSUE: **27 OCTOBER 2023**

# Islp poster competition

Numbers of participation are not very much but the results are good

Promotion will be enhanced: notification of the competition will be sent to all the schools through the open data e-mail addresses of the Ministry of education

Courses for teachers are being planned:  
How to make a poster  
The basics of statistical reasoning

The screenshot shows the Istat website header with the logo and navigation menu. The main content area features a news article titled "TWO ITALIAN TEAMS ON THE PODIUM AT THE INTERNATIONAL ISLP COMPETITION 2022-23". The article text describes the competition results, mentioning the 3rd place poster "Analisi delle canzoni più ascoltate su Spotify" and the 2nd place poster "Stiamo coltivando il futuro dell'agricoltura in Italia?". The page also includes a date of issue: 26 JULY 2023.

VERSIONE IN ITALIANO

**Istat** Istituto Nazionale di Statistica

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[ ITALIANO ]

**NEWS**  
**TWO ITALIAN TEAMS ON THE PODIUM AT THE INTERNATIONAL ISLP COMPETITION 2022-23**

Great result for two Italian teams at the International Statistical Poster Competition. The winners were announced during the [64th ISI World Statistics Congress](#) of the ISI (International Statistical Institute), held in Ottawa, Canada, from 16 to 20 July 2023.

The biennial ISLP Poster Competition invites school and university students from around the world to design a poster with the aim of helping to promote statistical literacy. Lower and upper secondary schools and Bachelor's level students are eligible to participate. The winners of the national competitions from each involved country enter the final round.

Third place for the lower secondary school group was awarded to the work **Analisi delle canzoni più ascoltate su Spotify** (Top 100 most streamed songs analysis), carried out by Diletta Bazzardi, Martina Bosio and Federica Ranghetti of the IC "Rudiano" of Rudiano (Brescia), coordinated by teacher Christian Sberna.

- 3rd place poster ([Italian language version](#) | [English language version](#))

In the upper secondary school category, the poster **Stiamo coltivando il futuro dell'agricoltura in Italia?** (Are we cultivating the agriculture's future in Italy?) by Ludovica Del Principe, Vincenzo Minutillo, Andrea Giacchetta, Cristian Lampitelli, and Daria Ciaravolo, from the Istituto Merloni Miliani in Fabriano (Ancona), coordinated by teacher Monia Stoppini, qualified second.

- 2nd place poster ([Italian language version](#) | [English language version](#))

Discover the winning posters ([Concorso internazionale ISLP per poster statistici 2022-2023](#)) from the national phase of the competition.

Typology: NEWS  
id: 287054

DATE OF ISSUE: 26 JULY 2023





# At the School of OpenCohesion

## Courses for teachers

### 2023/2024 school year

The collaboration with ASOC continues for the 2023/2024 school year. The agreement includes a dual training channel: on the one hand, support for schools through the intervention of territorial experts, and on the other, teacher training through the Statistical Literacy+ program, carried out by Istat thematic experts and recognized by the Ministry of Education. The training consists of four lessons that can be accessed as online webinars, with the related supporting slides and any further insights. [Here](#) are all the details and the dedicated [Vademecum](#).

#### Lesson 1 – [Istat databases and information systems](#)

See slides of lesson 1: [Part 1](#) (Giuseppina Sola) – [Part 2](#) (Carlo Boselli) (in Italian only)

At the close of the selection of **lower and upper secondary schools** that applied for the current edition of the At the School of OpenCohesion (ASOC) project, which provides for the possibility of joining one of the three addresses, a total of **145 teams** (classes or groups of classes) were admitted; of these, 22 percent were schools in the Center-Northern Italy and 78 percent in the South, corresponding to 115 educational institutions.

## COLLABORATION WITH AT THE SCHOOL OF OPENCOHESION



### ANALYSIS AND PRODUCTS

### METHODS AND TOOLS

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- Laboratory for Elementary Data Analysis
- Promotion of statistical research

### STUDENTS AND TEACHERS

- Agreement with the Association of European Economics Education (AEEE-ITALIA)
- The permanent census on school desks
- [Collaboration with at the School of OpenCohesion](#)
- Contests and prizes
- Teaching materials
- Italian Statistics
- Olympics

Since the 2018/2019 school year, Istat has been collaborating with the civic monitoring project [At the School of OpenCohesion \(Asoc\)](#), aimed at upper secondary school students. The collaboration follows the [agreement](#) between Istat and the Cohesion Policy Department of the Presidency of the Council of Ministers, which as one of its objectives has "to foster the dissemination of statistical literacy, to provide an adequate in-depth study of research methodologies and the construction of synthetic indicators and to enrich students' training during their educational path".

ASOC is an innovative [didactic programme](#) aimed at promoting and developing in Italian schools principles of active and aware citizenship, through **research and civic monitoring activities of the European and national public fundings**. It started on an experimental basis in the 2013/2014 school year with seven schools, and in the 2019/2020 school year it came to involve 204 schools, about 500 teachers and 5,000 students. The programme is recognised as a Pathway for Transversal Skills and Orientation ("Percorso per le competenze trasversali e per l'orientamento" – PCTO) and provides training credits to teachers who follow some modules, including the Statistical Literacy+ module.

In the 2019-2020 school year, the [European experimentation](#) started in Bulgaria, Croatia, Greece, Portugal and Spain, to these is added the brand new ASOC Slovenia course, and in the 2021/2022 school year the experimentation within Italy-Croatia, Italy-France Maritime, Italy-Austria cross-border cooperation.

▶ [2023/2024 school year](#)

▶ [2022/2023 school year](#)

▶ [2021/2022 school year](#)

▶ [2020/2021 school year](#)

▶ [2019/2020 school year](#)

▶ [2018/2019 school year](#)



# The Social Value of Statistical Literacy

A volume collecting methods and projects carried out by Istat

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## PRODUZIONE EDITORIALE

### IL VALORE SOCIALE DELLA CULTURA STATISTICA



#### IL VALORE SOCIALE DELLA CULTURA STATISTICA

(volume integrale - pdf, 5,3 MB)

Edizione: 2023

Collana: **Letture statistiche - Metodi**

Pagine: 136

ISBN: 978-88-458-2130-1

Questo ebook sottolinea l'importanza di una comunicazione pubblica accessibile e fruibile da ampie platee di destinatari, soprattutto giovani, illustrando le buone pratiche di promozione della cultura statistica dell'Istat e proponendo modelli innovativi.

La consapevolezza delle profonde trasformazioni della società è fondamentale per essere al passo con i tempi. Evidenziare in modo appropriato l'importanza dei numeri e della conoscenza dei dati rappresenta una sfida per i produttori di statistica ufficiale.

Tuttavia, non è sufficiente produrre informazione statistica; è essenziale che essa sia anche letta e compresa. La cultura gioca un ruolo sempre più importante nelle agende politiche dei paesi, delle regioni e dei comuni e anche la promozione della cultura statistica può essere determinante e avere il suo peso. Occorre lavorare per diffondere la *statistical literacy*.

Con tale ambizione, questo ebook si divide in due parti: la prima di scenario sull'importanza del dato statistico e della diffusione della conoscenza; la seconda di presentazione di alcune tra le principali attività di promozione della cultura statistica svolte dall'Istat anche in collaborazione con altri stakeholder.

Tag: CULTURA STATISTICA, EBOOK, LETTURE STATISTICHE

Tipo di documento: PRODUZIONE EDITORIALE

id: 296926





## Courses for teachers

- How to prepare an official statistical survey;
- The wealth of the Istat website;
- How to communicate statistical data to make a story;
- Istat databases and information systems;
- Data visualization within the information systems;
- The territorial statistics;
- Knowing environmental data;
- Communicating and visualizing statistical data with infographics;
- Communicating official statistical data with social networks;
- The sources of official statistics;
- Forms and tools of data visualization;
- How to present data with pictures.



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