

OPEN COHESION SCHOOL: ISTAT REGIONAL OFFICE IN MOLISE EXPERIENCE¹

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1. Introduction

The *Open Cohesion School Project* is an educational and civic challenge designed for Italian high school students and their teachers with the aim to enable them to analyse the information and data made available on the OpenCoesione website in order to monitor how effectively public funds are spent in their territory and to improve civic awareness and engagement in their communities through public discussions on the effectiveness of public spending and a monitoring system.

What essentially started as a game in 2013 gained structure as a method in 2014 and consequently took root in a practical way when it was introduced as part of a teaching programme “classes for the citizens of tomorrow”. It is currently in its fifth year, developing civic education and the acquisition of digital, statistical and data journalism skills along with some interdisciplinary skills.

2. Project

The Open Cohesion School Project [ASOC] is included in the operational objective I.4 of a National Operational Program (PON) under "The School for Development" and is one of seven programs conceived by the Support Community Framework (CSF) financed by Structural Funds to be spent primarily in the public schools of 6 specific Regions of Southern Italy, namely Basilicata, Calabria, Campania, Puglia, Sardinia and Sicily.

OpenCoesione is a transparent and participating operation concerning cohesion politics and their implementation during the period from 2007 to 2013 through the website <http://opencoesione.gov.it> that allows for all data concerning funding to be made available, updated, downloaded as a draft dataset, reused, processed for

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public interest and visualized through filters by topic, territory and participants involved.

The project was introduced to help local administrative offices, companies, media and citizens alike to analyse how effectively and consistently available funds are used and to give a direction on the planning and implementation of cohesive political ventures.

In addition to the website, through information and communication, the project promotes an Open Government Strategy and the detection of the effects produced.

To implement the Strategy, the following initiatives were activated:

- Data Journalism days, days of professional development aimed at information specialists interested in using OpenCoesione.
- The Open Cohesion School Project signed an agreement on 3rd May 2013 between the Minister of Economic Development, the Department of Development and Economic Cohesion and the Minister of Education to introduce “the informed citizen” as a subject in the school curriculum and was joined in 2014 by the Representatives of the European Commission.

On a territorial level, the ASOC Central Team is supported by the network of the European Direct Information Centre (EDIC) who coordinate all the schools and sustain the valorization of the project on a local scale. EDIC also created a local network of numerous partners including local businesses, organizations and associations to help schools in their monitoring process. In the Molise region seven schools participated in the last edition of The Open Cohesion School Project and are supported by EDIC Molise.

The Open Cohesion School Project was presented at the 12th National Conference of Statistics by the Open Cohesion Department for Cohesion Politics team - Presidency of the Council of Ministers and the intervention was held in front of the "Open Data Advantages" panel.

The Open Cohesion School Project is an innovative interdisciplinary programme aimed to introduce high school students to the principles of informed citizenship through civic monitoring on public funds and the use of open data through information and communication technologies.

The Project is an educational and civic challenge for secondary school students and teachers who analyse data accessible on the OpenCoesione website to learn how public funds are spent in their territories and allow the community to improve their civic awareness and engagement through public discussions and an efficient monitoring system.

The Project combines the content of regular classes with civic education, ICT, statistics and data journalism as well as developing skills such as sustaining a

critical mind, problem solving attitude, teamwork, communication and digital abilities. One of the most important goals of the Project is "to take education to the digital age, giving students the necessary tools to face the future" and The Open Cohesion School Project is mentioned in the National Plan of the Digital School on page 78 as a good example of a civic monitoring Project and data journalism able to implement the use of technology and online dynamics.

2.1. Education programme

Students are asked to research civic monitoring from data and information about the funded interventions by cohesion politics in their territory available on www.opencoesione.gov.it.

The research can be identified through the following items *title *funds *places *areas of intervention *public and private participants *implementation times *means to help local administrative offices supervise the implementation of funding, their efficiency, any delays and the results obtained, and to understand if the investments match the needs of the communities.

The participating students and teachers in the Project are given the opportunity of learning to interpret the data, understand local issues, elaborate territory analysis, consider and suggest interventions to help improve social, environmental and economic aspects of the place they live.

Students are given the necessary know-how and tools to face adult life and the statistics allow them to connect the numbers with appropriate actions to educate them to become adults by accessing information regarding education, the workplace and their territory, in the hope of reducing inequalities.

The education methodology combines asynchronous moments of learning such as MOOC (Massive Online Open Course), with practical tasks supervised by teachers with previous training experience, teamwork, online interaction and project-based work with the use of technology, tools of online sharing, blogs and social networking sites.

In the 2016-2017 edition, schools could choose the educational programme as an option of the *student work experience programme* and from the 2017-2018 edition, participating teachers were recognized formative credits for a total of 25 hours.

The programme is divided into 6 main sessions: 5 lessons and civic monitoring field trips in the form of local events, in addition to participating in the "Open

Administration Week” (SAA), the “International OpenData Day” (ODD) and the final event of the “Birthday of Europe” celebrated on 9th of May.

The course is lesson based and is divided into educational modules over the scholastic year and is developed as follows:

1. To Project: to learn what civic monitoring means, selecting on the OpenCoesione website a public project funded in a specific region to focus on, to identify key research methods, create a work team inside the class and assign roles. In this first module students are asked to **build a scheme** (Business Model Canvas) of the civic monitoring carried out and present it to the class and on social media platforms.

2. To Master: to search for additional information about the research selected, recognizing the administrative procedures and the public decisions made to define the project, identifying all the public and private participants involved in the process, starting from the project’s schedule as shown on OpenCoesion.it. In this second module students are asked to write a report specifying all materials related to the project itself, collecting and organizing all data and sources useful to define the context in a structured way.

3. To Analyse: to ensure that students learn qualitative and quantitative research techniques, understand what open data is, research data relevant to the chosen topic, collect, clean, analyse, cross with other data, create visuals, build indicators and write a data journalism article. In this 3rd module students are also expected to produce a presentation of their research during the “Open Administration week” and the classes involved are invited to ask an open data expert from their region to intervene at the “International Open Day” held between February and March each year.

4. To Explore: to examine how to up-date the chosen project is made through a monitoring site inspection, interviewing the key people who put the project into action and organizing meetings with relevant organizations. In this 4th module students are asked to write a detailed report using the monitoring civic instrument of Monithon.it inserting their 3 most effective pictures and a 3-minute video-interview.

5. To Storytell: the study of communication techniques, planning and realizing a campaign to build sensitivity awareness, involving and illustrating the results of civic monitoring. In this 5th module the students are asked to plan a public event and engage the community to continue monitoring the chosen project using storytelling techniques.

6. Students are asked to produce a final synopsis of the project to be presented primarily at the “Birthday of Europe” and also when participating in conferences and public events of importance for the local and national community to share ideas and good practices.

2.2. Prizes

All participating classes compete for award prizes and the winner wins a 2-day student trip to Brussels, funded by the Representatives of the European Commission in Italy and thanks to an arrangement with the Offices of the Senate of the Republic the runner up receives recognition and is admitted to a session of the Senate Assembly of the Republic in Rome.

The top classes receiving prizes and special mentions are all invited to participate, entirely or as part of a delegation, to the final award ceremony in Rome.

2.3. Recognitions

The Open Cohesion School Project is cited in the “National Plan of the Digital School” from the Minister of Education as a good example of a civic monitoring and data-journalism project which is able to implement the active use of technological and online dynamics.

ASOC has received high recognition as an international best practice for the use of Open Data in schools in the book “Open Data as Open Educational Resources” published online by the Open Knowledge Foundation (OKFN), the international non-profit foundation that promotes free access to knowledge through opening Data and Information.

The Open Cohesion School Project is also being studied by 2 important research institutions, one is the Cattolica University in Milan inside the Laboratory on evaluation of IMPACT politics and aimed to measure the "civic awareness" of the students in the combination of skills useful to become active citizens, and the other is being promoted by an Open Government Partnership, realized by Parliament Watch Italia (PWI) and dedicated to OpenCoesione and initiatives related to The Open Cohesion School Project and Monithon.

OpenCoesione and Monithon gained further international recognition at the Open Government Awards in 2014 which were dedicated to the topic of "citizen engagement".

3. ISTAT Regional Office in Molise experience

The Open Cohesion School Project between school and territory, provide supplementary educational content, help interaction with institutional and local protagonists interested in the research carried out by the schools, planning and managing local events and giving prizes to the best research projects carried out by the schools in the region.

The territorial Open Data represent a new approach to the management of information that reality carries with it, from those describing the level of air pollution to those measuring public spending. Their accessibility is becoming steadily more important in helping to manage the relationship with public administration in a clear and more transparent way, to access services on the net, promoting culture and producing information. The number of databases available on the internet is growing, from public spending to funds related to public works, but a re-use of this data to be used in a civic way is not frequent. This project enables students and teachers to understand how public funds are spent in their territory, linking numbers to actions to be implemented in order to improve aspects of social life, through an intercultural approach, creating an environment of knowledge and comprehension that aims to help students become responsible citizens.

The collaboration with the National Institute of Statistics (ISTAT) Regional Office in Molise has been requested at 3 different times:

1. During the educational path and in support of Module 3 which aims to learn quantitative and qualitative research techniques to understand what the Open Data is and search for data relevant to the chosen topic. In particular experts of ISTAT have provided support in the following areas:

- downloading open data
- re-using data
- the comprehension of data: what information they contain? how are they structured? what dimensions do they have?
- the construction of index and indicators: which data do the National Institute of Statistics publish? how useful can they be? what is an Index? what is an indicator? what does it mean to "normalize" a data?
- the analysis of data
- viewing data: how to do it and which tools to use?
- the decision-making process of which data to elaborate (using other sourced data or creating your own dataset) to set up a report of your own research, a document that requires the writing of an article of data journalism using techniques of a press office and digital communication through social networking sites. During the presentation of research carried out and their results:

2. "Open Administration week" (#SAA2018 - in February)
3. Final Event, "Birthday of Europe" on 9th May 2018.

The schools in Molise that were admitted to the ASOC project 2017-2018 are the following:

1. Liceo Scientifico "Giovanni Paolo I" - Agnone (IS)
2. Liceo Economico Sociale "Giuseppe Maria Galanti" - Campobasso
3. ITST Guglielmo Marconi - Campobasso
4. Liceo Scientifico "Mario Pagano" - Campobasso
5. Liceo Scientifico "Alberto Romita" - Campobasso
6. Istituto Omnicomprensivo di Riccia - Riccia (CB)
7. ITE "Giovanni Boccardi" - Termoli (CB)

The meetings in the various schools defined the function of Statistics as a science that collects data about a specific phenomenon from its beginning, explores, analyses and scientifically interprets the data with the aim of providing answers to questions in a rigorous and scientific way.

The same meetings illustrated the mission of the National Institute of Statistics (ISTAT) as the Italian research office that carry out surveys like the population census, industrial, services and agriculture censuses, sample surveys on families (consumption, workforce, aspects of daily life, health, security, free time, family and social subjects, and use of time etc...), many economic surveys (national accounting, prices, foreign trade, institutions, companies, employment, etc...).

Also defined during the meetings were:

*What I.Stat is? A data base of the statistics produced by ISTAT and organized by topics and presented in multidimensional tables, with the possibility of composing personalized tables and graphics, acting on variables, periods and the disposition of titles and arrays.

*What is the 8 thousand Census? It is a new system of sharing census data (1951-2011) through a selection of 99 indicators, in which data help highlight the sociological and economic evolution of the country observed through the point of view of a single town and from the wider point of view of a province.

* What is *Noi Italia*? "100 statistics to understand the country we live in" that offers a framework of different economic, social, demographic and environmental aspects of our country with over 100 indicators divided into 6 macro areas and 19

sectors of interest that can be accessed in an interactive way through instruments of dynamic graphic visualization.

During these meetings it also came out that our country, along with another 192 countries of United Nations, subscribed to the 2030 Agenda of The United Nations that foresees 17 objectives of sustainable development.

The ISTAT Regional Office in Molise has given support to the teams participating in the Open Cohesion School Project faced with different topics of Cohesion Policies. The research carried out has focused primarily on projects related to Culture and Tourism, Environment and Transportation and other topics such as Cities and Rural Areas, Research and Innovation and Social inclusion, that are all critical to the creation of a sustainable future.

4. Project Proposal

The Open Cohesion School Project is also partnering with Institutions (such as the Minister of Education and the Representatives of the European Commission in Italy) that, in addition to enhancing the educational path on a national and international level, are also engaged in developing and producing supplementary teaching materials useful to the civic monitoring activity and to sustain the central team in planning and managing events and to help with effective processes of communication between teachers, students and other local partners involved.

The support of ASOC regional collaborations, including Calabria and the islands of Sardinia and Sicily as autonomous Regions, help strengthen bonds between local enterprises and the project, through specific actions with schools involved in the education programme. The goal is to consolidate the network of schools on a regional level.

The 2017-2018 edition saw the participation of 184 teams (classes or groups of classes), 41 from Northern and Central Italy and 143 from the South belonging to 154 different Schools, 37 in the Centre and the North and 117 in the South. 144 of these schools have been admitted to the final selections. The Open Cohesion School Project in this 5th edition has collected adhesions of new ASOC associations and the active collaboration of 28 different Europe Direct Information Centres.

Table 1 – *Distribution of schools, students, teachers and centers of Europe Direct by edition*

Edition by year	Schools	Students	Teachers	Europe Direct
2017-2018	184	5000	300	28
2016-2017	196	5000	350	30
2015-2016	120	2500	150	28
2014-2015	86	2000	90	30
2013-2014	7	140	10	28

Source: *A Scuola di OpenCoesione website*

The community of ASOC schools has grown over the years. A heritage of experience and knowledge has developed a virtuous circuit of interaction with students and teachers from previous editions, members of the Europe Direct Centres and different associations, experts in Statistics, Cohesion Policies, Civic Monitoring, Open Data, and Communication.

Since the beginning, the National Institute of Statistics has given support to the "Open Cohesion School Project" through the activities of its task force named Open Data. Occasional collaborations have helped to strengthen the relationship between the National Institute of Statistics and the Department of Cohesion policies, narrowing the space between the institutions, students and schools in the various regions.

In order to achieve a satisfactory distribution and development of a Culture of Statistics at regional level, it is highly desirable to have the National Institute of Statistics as partner of the project, collaborating with the students and teachers of the schools admitted to The Open Cohesion School Project for the edition 2018-2019 (to be started as announced by the Minister of Education in September and to take place in the period of November-May).

On the other hand, the National Institute of Statistics, as the main Data producer in Italy, gives free access to information through a website <http://www.istat.it> and a network of regional offices that work closely with public offices on the regional territories. Its mission is to develop a deep knowledge of the environmental, economic and social reality of the country at different territorial levels and help who is in charge with the decision-making process in addition to promoting the relationship between schools and the territory.

The plan is to arrange a series of meetings in the local territory with students on 4 different occasions:

1. In support of the teaching module "Analyse", through the teaching of quantitative and qualitative research techniques, to understand what Open Data is and how to search for data relevant to the topic chosen by schools to build indicators with the data analysed (November/March every year)
2. Taking part in the "*Open Administration week*" (February every year)
3. Taking part in the "*International Open Data Day*" (February/March every year)
4. Taking part in the local event where students finally present their work in front of the Institutions and local communities (9 May of each year during the "*Birthday of Europe*").

References

RAPOLLA E., 2016 - "A Scuola di Open Coesione", *Rivista Internazionale di Studi Europei*, ISSN 2421-583X Anno II, No. 1, pp.16-20

SUMMARY

Open Cohesion School: Istat Regional Office In Molise Experience

The Open Cohesion School project is an educational and civic challenge, designed for Italian high school students and their teachers with the aim to enable them to analyse the information and data made available on the OpenCoesione website in order to monitor how effectively public funds are spent in their territory and to improve civic awareness and engagement in their communities through a public discussion and a monitoring activity.

In order to make this happen students have to access the data that enable them to make a connection between the numbers and the actions to be implemented in order to improve social life and to create a knowledge and comprehension environment aimed to make students responsible citizens. This approach stresses the learning process with the goal to manage and monitor it.

The Project's objective is to introduce the students to a teaching program about the principles of informed citizenship and to educate them to be strong, motivated and active citizens concerned with sustainability and with a strong critical mind and the skills to participate to a sustainable future.

Students are asked to perform civic analysis of their territory and to discuss the possibility to change the way they look at and think of the territory they live in. The knowledge of the issues faced by the territory, the intercultural approach and a respectful and fair interaction, the empathy and the flexibility can help young people to develop a critical and analytical mentality and to become responsible of their own actions.

The Open Cohesion School Project combines, in the same teaching program, civic education and the acquisition of digital, statistical and data journalism skills along with some interdisciplinary skills such as the developing of a critical mind, problem solving, teamwork and interpersonal and communication skills, as well as focusing on the content of the main disciplines.