



Youth Goals

Research Centre

JEAN MONNET MODULE



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ToolKit of the MOOC

EU youth policies and Youth Goals





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Table of contents

COURSE INTRODUCTION	1
Presentation	1
Course structure	1
Learning methodology	2
Evaluation and Certification	2
Learning Objectives	2
Welcome	3
HISTORY AND TYPES OF EUROPEAN YOUTH POLICIES	4
Instructional Design	5
Theory-Practice	6
Evaluation	8
Key resources	9
GENERAL CONTEXT OF THE YOUTH GOALS	10
Instructional Design	11
Theory-Practice	12
Evaluation	14
Key resources	15
YOUTH GOALS AS AN OUTCOME OF EUROPEAN YOUTH POLICIES	16
Instructional Design	17
Theory-Practice	18
Evaluation	21
Key resources	22
STATISTICAL TECHNIQUES FOR RESEARCH ON YOUTH POLICIES AND YOUTH GOALS ..	23
Instructional Design	24
Theory-Practice	25
Evaluation	28
Key resources	30
BIG DATA TECHNIQUES FOR THE IMPLEMENTATION OF YOUTH POLICIES AND YOUTH GOALS	31
Instructional Design	32
Theory-Practice	33
Evaluation	36
Key resources	38





COURSE INTRODUCTION

Presentation

The course "Youth Goals and European Public Youth Policies" is designed to provide an in-depth understanding of youth policies in Europe and their impact on society. Throughout the course, the main policy frameworks, the development of the Youth Goals and the methodological tools used to evaluate these policies will be explored.

The course is aimed at university students, researchers, youth practitioners and policy-makers interested in understanding and applying evidence-based strategies for youth policy development in Europe.

The course will take place in Google Classroom, an interactive platform that provides flexible access to materials, assessments and discussion forums. Through a theoretical-practical approach, participants will be able to acquire knowledge applicable to youth-oriented policy research and design.

Course structure

The course is divided into **five modules**, each focusing on a key aspect of youth policy and the *Youth Goals*:

1- History and Types of European Youth Policies

- Concept of public policies, types and evolution in the European Union.
- Normative and legal framework defining youth policies in the EU.

2 - General Context of the *Youth Goals*

- Main challenges and strategic objectives for youth in the EU.
- Definition of *Youth Goals* and their meaning.

3 - *Youth Goals* as an Outcome of European Youth Policies

- Origins and development of the Youth Goals in the context of European youth policies.
- Implementation and adaptation of the Youth Goals at different levels and in different regions

4 - Statistical Techniques for Youth Policy Research and *Youth Goals*

- Fundamental concepts of social statistics and their application in public policy.
- Methods and sources of data analysis in the evaluation of the *Youth Goals*.



5 - Big Data Techniques for the Implementation of Youth Policies and Youth

Goals

- *Big Data* principles and their application in youth policy analysis.
- Tools, models and case studies on the use of *Big Data* in the EU.

Learning methodology

The course combines different resources to ensure dynamic and effective learning:

- **Presentations.**
- **Introductory didactic videos** in each module.
- Recommended **further reading**.
- Interactive **audiovisual resources**.
- **Self-assessment questionnaires** to measure learning.
- *Google Classroom* **discussion forums** to encourage reflection and exchange of ideas.

Evaluation and Certification

To complete the course, participants must:

- ✓ Display the materials of each module.
- ✓ Participate in discussion forums.
- ✓ Pass the evaluation questionnaires.

At the end of the course, a certificate **of participation** will be awarded to those who have fulfilled the evaluation requirements.

Learning Objectives

At the end of this course, participants will be able to:

- Understand the contextual framework of youth policy in the EU and the Youth Goals.
- Analyze the impact of the Youth Objectives on the formulation of public policies.
- Apply statistical and big data tools in the evaluation of youth policies.
- Identify effective strategies for implementing youth policies in different contexts.





Welcome

This course is an opportunity to deepen the analysis of public policies and their impact on youth. We invite you to actively participate in each module, reflect carefully on the proposed content and enrich the collective learning by sharing your ideas, experiences and doubts in the discussion forums. Your participation is key to creating a dynamic, respectful and collaborative space.

We hope you will enjoy the journey and that this course will enrich you both academically and personally!

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Instructional Design

Overall objective

Understand the evolution of youth policies in Europe, their different approaches and the actors involved, and then compare them with youth policies in North and Latin America, identifying the key factors that influence their design, implementation and evaluation.

Competences:

At the end of the module, you will be able to:

- Understand the essence of youth-oriented public policies.
- Designing, implementing and evaluating European youth policies.
- Involve various actors in the formulation and implementation of such policies.
- Analyse and compare strengths and areas for improvement of youth policies in Europe, North America and Latin America.





Theory-Practice

Content

What is public policy?

- According to Thoeing, public policy is the work of authorities vested with governmental public legitimacy, ranging from the definition and selection of priorities to decision-making, administration and evaluation.
- Guy Peters defines public policy as the sum of government activities, carried out directly or through agents, influencing the lives of citizens.
- Lasswell sees a public policy as a projected programme of values, ends and practices.

An illustrative example of this is the dialogue with young people that led to the *Youth Goals*, highlighting the definition and selection of priorities aimed at creating public policies for young people.

Basic issues

Public policies comprise government plans, actions and measures aimed at achieving specific objectives. In the European context, these objectives are set out in the democratically adopted Treaties of the Member States.

European law falls into two broad categories:

- Primary law: This consists of the fundamental treaties that set out the foundations, objectives and values of the European Union (EU).
- Derivative (secondary) law: This is composed of the public policies that develop these values and objectives set out in primary law.

Article 165 of the Treaty on the Functioning of the EU exemplifies this, as it encourages democratic youth participation and promotes youth exchange in Europe.

Types of EU legal acts

1. Treaties of the European Union (primary law): These set out the objectives, institutional rules, decision-making procedures and relations between the EU and its Member States. Some key treaties are:
 - Treaty of Lisbon (2007)
 - Treaty of Nice (2001)
 - Treaty of Amsterdam (1997)
 - Maastricht Treaty (1992)
 - Single European Act (1986)





- Treaty of Rome (EEC, 1957), among others.
- 2. Regulations (secondary legislation): These are binding in their entirety and apply directly and uniformly in all EU countries. Example: Erasmus+ programme.
- 3. Directives (secondary legislation): They oblige member countries to achieve certain results, leaving freedom on how to implement them at national level. They must be transposed into national law. Examples include issues such as gender equality, immigration and the environment.
- 4. Decisions (secondary legislation): directly binding on specific addressees (a particular country or company). Example: Authorisation for Croatia to adopt the euro in 2023.
- 5. Recommendations (secondary legislation): These are non-binding and provide guidance to the addressees. Example: European Union Youth Strategy 2019-2027.
- 6. Opinions (secondary legislation): Non-binding declarations of the European institutions, including the Committee of the Regions and the European Economic and Social Committee. Example: Opinion on the role of youth in rural development.
- 7. Delegated and implementing acts (secondary legislation): Legally binding, supplementing or amending non-essential elements of legislative acts (delegated) or ensuring uniform application of European legislation (implementing).

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<https://www.europarl.europa.eu/factsheets/es/sheet/141/la-juventud>

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Types of European Union legislation. European Commission. https://commission.europa.eu/law/law-making-process/types-eu-law_es

The Treaties and the European Parliament. About the Parliament. European Parliament.
<https://www.europarl.europa.eu/about-parliament/es/in-the-past/the-parliament-and-the-treaties>





Evaluation

Instructions

Answer the following questions to assess the knowledge acquired, selecting the correct answer.

Test

1. According to Guy Peters, what are public policies?
 - a. Decisions taken exclusively by citizens.
 - b. Private activities with no social impact.
 - c. The sum of government activities that influence the lives of citizens.**
 - d. Plans developed by international organisations.
2. What is a feature of European Union primary law?
 - a. It consists mainly of treaties setting out EU values and objectives.**
 - b. It includes regulations and decisions.
 - c. It is developed through specific directives.
 - d. It is approved exclusively by the European Commission.
3. What kind of EU legal act obliges Member States to achieve a specific result, but allows them to choose how to achieve it?
 - a. Regulation
 - b. Directive**
 - c. Decision
 - d. Opinion
4. Which of these EU legal acts is NOT binding?
 - a. Regulation
 - b. Delegated Act
 - c. Recommendation**
 - d. Decision
5. Which treaty introduced reforms to the institutional structure of the European Union due to the increase in the number of Member States?
 - a. Treaty of Paris
 - b. Treaty of Nice**
 - c. Treaty of Rome
 - d. Euratom Treaty

Discussion Forum

Taking into account the diversity of legal acts in the European Union (regulations, directives, decisions, recommendations and opinions), which do you consider most effective in bringing about real change in sensitive areas such as youth or the environment? Justify your choice with concrete examples.





Key resources

Supporting material is provided below to complement this module.

Key readings

- **Europe, youth and research:**
https://www.injuve.es/sites/default/files/2017/46/publicaciones/revista110_13-europa-juventud-investigacion.pdf

Audiovisual resources

- **European Union. Primary and secondary law:**
<https://www.youtube.com/watch?v=Xtbup0lwoko>

Didactic explanation video

- **Video-pill 1:** <https://youtu.be/uy9dZR3W8Tc>





GENERAL CONTEXT OF THE YOUTH GOALS





Instructional Design

General objective

The general objective of this topic is to understand what the *Youth Goals* are, to analyse their eleven goals and how they are implemented through European youth policies, as well as to get to know the actors and processes involved in their creation and implementation, in order to understand their relevance in the international context.

Competences:

At the end of the module, you will be able to:

- Identify and explain the 11 goals of the *Youth Goals*.
- Apply the *Youth Goals* in daily practice and at different levels of action.
- Integrate the *Youth Goals* into the design, implementation and evaluation of European youth policies.
- Recognise and relate the 17 SDGs to the *Youth Goals*, assessing their reciprocal influence.



Theory-Practice

Content

What are the *Youth Goals*?

The *Youth Goals* are 11 objectives for European youth, formulated following a 2018 survey involving 50,000 young people in Europe. These goals summarise the main youth issues and priorities for public policy, with the aim of helping European youth to reach their full potential. The EU Youth Dialogue facilitates the implementation of these objectives at European, national and regional level.

1. *Connecting the European Union with young people*

It seeks to foster a sense of belonging, trust and participation of young people in the EU, ensuring access to impartial information and fair representation among Member States.

2. *Equality of all genders*

It aims to ensure gender equality in all areas of youth life, eliminate the pay gap, promote equal sharing of care work, and combat gender-based violence through initiatives such as the new European Directive against violence against women.

3. *Inclusive societies*

It aims to ensure the social inclusion of all young people, especially the most vulnerable, through the dissemination of appropriate information and protection against discrimination and hate speech. An example of this is the EU Urban Agenda on inclusion of migrants and refugees.

4. *Information and constructive dialogue*

Focused on improving young people's access to and critical analysis of information, promoting participatory dialogue. The EU Digital Services Act aims to reduce misinformation on digital platforms.

5. *Improving mental health and well-being*

It focuses on improving the emotional well-being of young people and eliminating mental health stigma by ensuring accessible and quality treatment. The European Commission promotes digital initiatives and legislation against cyberbullying.

6. *Boosting rural youth*

It promotes equal opportunities between rural and urban youth by improving infrastructure, services, connectivity and sustainable jobs, supported by funds such as Next-Generation EU.



7. *Quality employment for all*

It ensures an inclusive labour market with quality jobs for young people by providing adequate information and training through initiatives such as the Youth Employment Initiative.

8. *Quality learning*

It advocates education adapted to the 21st century, focusing on transferable skills, student-centred learning, and non-formal education. Erasmus+ grants facilitate this type of training.

9. *Space and participation for all*

It strengthens youth participation in democratic decision-making by providing dedicated physical and political spaces for youth. The EU Youth Dialogue ensures youth representation in European policies.

10. *Green and sustainable Europe*

It seeks to create a youth that is environmentally active, aware and able to implement sustainable practices in their lives. Initiatives such as the Next-EU Recovery and Resilience Plan promote these goals.

11. *European programmes and youth organisations*

It ensures equal access to European youth programmes and financially supports youth organisations, considered key to the development of youth skills. Examples include support to university associations.

Bibliography

Youth Goals: <https://youth-goals.eu/youthgoals>

European Youth Portal. European Youth Goals:
https://youth.europa.eu/strategy/european-youth-goals_es





Evaluation

Instructions

Answer the following questions to assess the knowledge acquired, selecting the correct answer.

Test

1. What are the *Youth Goals*?
 - a. A set of scholarships for European students.
 - b. Targets to reduce youth unemployment only.
 - c. **11 objectives reflecting the current interests and problems of European youth.**
 - d. A European youth law.
2. Which of the following is a *Youth Goal* related to mental health?
 - a. Improve sports infrastructure for young people.
 - b. **Eliminate stigma and provide comprehensive and respectful mental health treatment.**
 - c. Facilitating youth labour mobility in Europe.
 - d. To promote only the physical well-being of young people.
3. What does the *Youth Goal* on "Inclusive Societies" seek to promote?
 - a. Exclusively university education programmes.
 - b. Increasing digitisation in large cities.
 - c. **Ensure the inclusion of all young people, especially the most vulnerable.**
 - d. Create youth sports spaces in urban areas.
4. Which European initiative is specifically mentioned in relation to the *Youth Goal* on "Quality Learning"?
 - a. Digital Services Act.
 - b. **Erasmus+ Programme.**
 - c. European Agricultural Fund.
 - d. Youth Employment Initiative.
5. Which action is related to the *Youth Goal* "Empower rural youth"?
 - a. **Improving connectivity and services, creating sustainable jobs in rural areas.**
 - b. Exclusively promote the urbanisation of rural areas.
 - c. Create only sports spaces in the countryside.
 - d. Promote only tourism in rural areas.

Discussion Forum

Of the 11 *Youth Goals*, which one do you think should be a priority in your country or region and why? Also suggest any concrete action that could be taken to advance this goal.





Key resources

Supporting material is provided below to complement this module.

Key readings

- **The European Union's youth priorities:** <https://equipoeuropa.org/las-prioridades-de-la-union-europea-en-materia-de-juventud/>

Audiovisual resources

- **European Youth Goals:**
<https://www.youtube.com/watch?v=pTkbW1ZXQ9Q>

Didactic explanation video

- **Video-pill 2:** https://youtu.be/-_Po9hT7vEU



YOUTH GOALS AS AN OUTCOME OF EUROPEAN YOUTH POLICIES





Instructional Design

General objective

The overall objective is to understand the origin and relevance of the *Youth Goals* in the context of European Youth Policies, including the role of the Structured Dialogue and the *EU Youth Conferences*, their relationship with the *EU Youth Strategy 2010-2018*, as well as to examine the existence of similar initiatives in North and Latin America, in order to assess their scope for youth development at the international level.

Competences:

At the end of the module, you will be able to:

- To learn about Structured Dialogue, the Erasmus+ programme and *EU Youth Conferences*.
- Linking the EU, European Youth Policies and the *Youth Goals*
- Implement European youth policies under the *Youth Goals* framework (at local, regional and national level).
- Adapt the implementation of the *Youth Goals* in other regions, especially in North and Latin America.



Theory-Practice

Content

General Context of European Youth Policies

- **Historical background:** After the Second World War, the European Union promoted peace and integration, with youth as a central focus.
- **First Resolution:** In the 1980s on youth participation in European society.
- **Current Principles:** Promotion of participation, social inclusion and equal opportunities.
- **Main Actors:** European Commission, European Parliament, Council of the EU (Youth Ministers), youth organisations such as the *European Youth Forum*.

Structured Dialogue and *EU Youth Conferences*

- The Structured Dialogue is a participatory process involving young people and policy makers in 18-month cycles, with the aim of incorporating youth voices into EU decisions.
- *EU Youth Conferences* are key bi-annual meetings to discuss proposals, resulting in concrete recommendations to guide European youth policy.

EU Youth Strategy 2010-2018: The seeds of the Youth Goals

- It covered 8 fields (education, employment, participation, health, etc.).
- Its main achievement was to strengthen Structured Dialogue and youth participation.
- The need for concrete and measurable targets was identified, culminating in the adoption of the *Youth Goals* (2019-2027).

The 11 *Youth Goals*: Origin and Purpose

- Formulated from a European survey in 2018 with 50,000 participants, under scientific supervision.
- They emerge from the sixth cycle of the EU Youth Dialogue (2017-2018).
- Integrated into the EU Youth Strategy 2019-2027 to address priority and urgent areas affecting young people.

Relationship between European Youth Policies and *Youth Goals*

- The *Youth Goals* are integrated into the EU Youth Strategy.
- Programmes such as Erasmus+ and the European Solidarity Corps are aligned with these objectives.
- Member States adapt these objectives according to their national realities.





- Specific indicators are used to measure progress in key areas.

Similar Cases in North and Latin America

- North America: more decentralised youth policies without a unified framework.
- Latin America: initiatives through the Ibero-American Youth Organisation (OIJ), CELAC and OAS, although without such specific goals as the *Youth Goals*.

Key Competences and Knowledge

- Management of funding programmes (Erasmus+, structural funds).
- Knowledge of the Structured Dialogue, *EU Youth Strategy* and the 11 *Youth Goals*.
- Mastery of youth participation tools.
- Ability to adapt these objectives to different contexts (local and international).

Implementation of the *Youth Goals* (Local, Regional, National)

- Contextual differences in legal frameworks, political cultures and levels of decentralisation.
- International cooperation opportunities through Erasmus+ and bilateral agreements.
- Implementation challenges due to limited resources, frequent policy changes, socio-economic inequalities and digital divides.

Concrete Examples of Projects

- Erasmus+ *Youth Exchanges* focusing on areas such as rural youth (Target 7) and mental health (Target 5).
- Local initiatives such as youth participatory budgeting (Goal 9) and gender equality training (Goal 2).
- EU-Latin America collaboration programmes focused on social inclusion (Goals 3 and 11).

Conclusions and Future Challenges

- Need for robust indicators to measure impact.
- Importance of youth participation in legitimising and enriching policies.
- Mainstreaming and integration of emerging issues (climate, digitalisation, migration).
- Global openness to exchange best practices and long-term adaptability.





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Greenwood, J. (2019). Interest representation in the EU: an open and structured dialogue? *Lobbying in the European Union: Strategies, dynamics and trends*, 21-31.

European Youth Portal: <https://youth.europa.eu/>

EU Youth Strategy 2019-2027: https://youth.europa.eu/strategy_es



Evaluation

Instructions

Answer the following questions to assess the knowledge acquired, selecting the correct answer.

Test

1. The EU Youth Dialogue is characterised by...
 - a. Held only once and without direct youth participation
 - b. Develop in 18-month cycles, including young people and policy-makers**
 - c. Not having any kind of consultation or official event
 - d. Relying only on the opinion of political representatives
2. From which cycle of the EU Youth Dialogue did the 11 European Youth Goals emerge?
 - a. From the first cycle (2002-2003)
 - b. From the fourth cycle (2012-2013)
 - c. From the sixth cycle (2017-2018)**
 - d. From the eighth cycle (2020-2021)
3. What was the fundamental basis for the definition of the 11 *Youth Goals*?
 - a. An internal evaluation of the European Commission
 - b. The European Parliament's recommendations
 - c. EU Council conclusions
 - d. A survey of 50,000 young people and a scientific monitoring of the data**
4. Which of these statements best describes the overall purpose of the *Youth Goals*?
 - a. Establish fines and penalties for countries that fail to support youth
 - b. Guiding youth policies that enable young people to reach their fullest potential**
 - c. Completely replace national youth strategies
 - d. Reducing the participation of young people in public life
5. The *Youth Goals* are part of a broader strategy called...
 - a. EU Youth Strategy 2019-2027**
 - b. Youth Mobility Strategy 2025
 - c. Digital Agenda 2030
 - d. Fundamental Rights Action Plan 2020

Discussion Forum

The *Youth Goals* were born thanks to the participation of thousands of young people across Europe. But once defined, how do we ensure that they remain useful and are met? Reflect on what role young people should have in the monitoring and evaluation of these goals.





Key resources

Supporting material is provided below to complement this module.

Key readings

- **Youth policies in the European Union:**
https://eulacfoundation.org/system/files/politicas_de_juventud_en_la_unio_n_europea.pdf
- **Youth Strategy 2019-2027:**
[https://eur-lex.europa.eu/legal-content/ES/TXT/PDF/?uri=CELEX:42018Y1218\(01\)](https://eur-lex.europa.eu/legal-content/ES/TXT/PDF/?uri=CELEX:42018Y1218(01))

Audiovisual resources

- **Building a youth policy strategy:**
<https://www.youtubeeducation.com/watch?v=AP9XnTDfpoY>
- **European Youth Strategy:**
<https://www.youtubeeducation.com/watch?v=teXWkA-rM14>
- **What's the EU Youth Dialogue?**
<https://www.youtubeeducation.com/watch?v=iXmKwxltSRU>

Didactic explanation video

- **Video-pill 3:** <https://youtu.be/lfjHzhmhvXY>







Instructional Design

General objective

The overall objective of this topic is to equip participants with the theoretical and practical foundations of social and multivariate statistics for researching and evaluating youth policies and the achievement of the *Youth Goals*, as well as to acquire the necessary skills to write and present research results in academic article format.

Competences:

At the end of the module, you will be able to:

- Understand the definitions and scope of statistical analysis and *Big Data*.
- Apply statistical analysis and *Big Data* guidelines and strategies in youth policy contexts.
- Design evaluations of European Youth Policies and *Youth Goals* using *Big Data* methods and statistical analysis.
- Comparing youth policies (European and international) using *Big Data* techniques and statistical analysis.
- Use data visualisation tools to present results and produce articles on European Youth Policies and the *Youth Goals*.



Theory-Practice

Content

Statistics in Youth Policy

Public policies are actions aimed at solving social problems through public intervention (Dente, 2014). Public policies that affect young people must be based on real and up-to-date data. Good intentions are not enough: empirical evidence is needed that clearly reflects the needs, challenges and aspirations of young people. This introduces the concept of evidence-based policy and is exemplified by the Youth Goals. Social statistics have a key role to play in measuring the impact of existing policies and guiding the design of new and more effective ones.

Statistics, understood as the science of collecting, analyzing and interpreting data, provides tools to answer essential questions: what are the situations young people face today, what are the factors that influence their well-being, what policies are working and what are not? Using both descriptive and multivariate techniques, we can detect patterns, identify vulnerable profiles and anticipate the consequences of policy decisions.

The data-driven policy evaluation process

Statistical analysis in public policy is not an end in itself, but part of a process that begins with the collection of information and culminates in the redesign of policies based on the results obtained. This cycle begins with the collection of information through surveys, administrative records or official databases such as Eurostat or Eurobarometer. These data allow the construction of indicators on employment, education, living conditions or civic participation. Once the data are available, they need to be analyzed to identify patterns, relationships or trends, or differences between groups. The results help to identify key issues, assess the feasibility of proposals and design youth-friendly policies. Once implemented, these policies should be monitored and evaluated to determine whether they are achieving their objectives and what adjustments need to be made in their design. Evaluation is not the final step, but the bridge that leads to new, more informed decisions. Thus the cycle begins again, each time with more accumulated knowledge.

The following describes the basic cycle that a public policy follows when evaluated from a data-driven approach.

1. **Data collection:** Surveys, official databases, administrative registers (e.g. Eurostat, Eurobarometer).
2. **Data analysis:** Descriptive and predictive techniques to detect patterns, correlations and trends.
3. **Policy formulation:** Define key issues, assess impact and feasibility.





4. **Policy implementation:** Start-up, resources, timelines and monitoring systems.
5. **Monitoring and evaluation:** Measuring effectiveness and impact for continuous adjustment and updating.
6. **Policy Iteration:** Refinement and development of new policies.

Statistical Techniques for Evaluating Youth Goals

Starting with the basics: descriptive statistics

Before delving into multivariate analysis, it is worth taking a look at the basic tools of descriptive statistics, which allow information to be summarized in a clear and understandable way. Some of the most commonly used are calculating frequencies, measures of central tendency (mean, median, mode), measures of dispersion (such as range or standard deviation), and graphical representations.

For example, from data on youth employment, it is possible to see what percentage of young people in each country are unemployed, what their level of education is, or how much they participate in social activities. It is also possible to compare these indicators between different groups according to gender, place of residence or age. These types of descriptions make it possible to identify obvious inequalities, establish baselines, and prioritize areas for intervention.

Good visualization - through bar charts, histograms, line graphs - can make these results easier to understand and communicate to both policy makers and the general public. Clarity in data presentation is key to turning analysis into action.

Simplifying completeness: multivariate statistics

As the number of variables increases, multivariate statistics provides tools to reduce complexity without losing relevant information.

Principal component analysis (PCA) allows many variables to be reduced to a few components that capture most of the variability. This is particularly useful when working with databases containing multiple indicators of employment, education, housing, or health. For example, when studying factors of youth exclusion, PCA can synthesize this information into two broad dimensions: access to opportunities and risk of exclusion. Similarly, when analyzing surveys on political participation, this technique can distinguish between young people with high levels of civic engagement and those with greater distrust of institutions.





Another key technique is cluster analysis, which allows young people to be grouped into homogeneous profiles according to their characteristics. In a study of European youth, three main groups were identified: integrated youth (with completed education and stable employment), precarious youth (with incomplete education and unstable employment), and disconnected youth (who do not study, work, or participate socially). This segmentation makes it possible to target differentiated and more effective policies.

Regression models, on the other hand, allow us to analyze which factors have the greatest impact on certain outcomes, such as labor market outcomes or school dropout rates. For example, it is possible to study how educational attainment, prior experience or access to support programs affect the employability of young people. The results show that both education and previous work experience are significant predictors of access to the labor market, which justifies policies that focus on training and transition to employment.

Statistical tools and communication of results

Data analysis also requires appropriate tools. For advanced calculations, programs such as R or Python can be used. For visualization and the creation of interactive dashboards, tools such as Excel, Power BI or Tableau can be used to present the results in an accessible and attractive way.

In addition to analysis, communicating the results in a clear and rigorous way is essential, especially if the goal is to influence public policy. For this reason, some of the keys to writing an academic paper according to the scientific method are also addressed: defining the research question and the objectives of the study, justifying the methodology, presenting the results accurately, and arguing the answer to the stated objectives according to the results obtained. Clarity, logical structure, and careful revision are fundamental aspects of good scientific communication.

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Evaluation

Instructions

Answer the following questions to assess the knowledge acquired, selecting the correct answer.

Test

1. Why are social statistics important in youth policy analysis?
 - a. It allows the interpretation of qualitative data without the need for mathematical models.
 - b. Facilitates evidence-based decision-making about youth.**
 - c. It only serves to make general descriptions without in-depth analysis.
 - d. It is useful only for historical studies and not for evaluating current policies.
2. Which of the following data sources is NOT commonly used in social statistics applied to youth?
 - a. National and international surveys.
 - b. Administrative registers of employment and education.
 - c. Social networks without statistical processing.**
 - d. Databases of official bodies such as Eurostat and OECD.
3. Which of the following approaches is useful for measuring the extent to which the *Youth Goals* have been achieved?
 - a. Using quantitative indicators to assess progress in education, employment and youth participation.**
 - b. Subjective interviews without methodological rigour.
 - c. Trend analysis without considering previous data.
 - d. Assessments based only on young people's perceptions without empirical data.
4. Which statistical technique makes it possible to segment young people into homogeneous groups according to their characteristics?
 - a. Analysis of variance
 - b. Time Series
 - c. Clustering**
 - d. Logistic regression
5. What is the typical structure of an academic *paper*?
 - a. Hypotheses, data, graphs and bibliography.
 - b. Summary, interviews, results and opinions.
 - c. Problem statement, short answers and conclusion.
 - d. Introduction, methodology, results and discussion.**





6. Which of the following is NOT a good practice when writing an academic paper?
- a. Use up-to-date and relevant references.
 - b. Base conclusions on empirical data.
 - c. **Omit methodological details to make the text shorter.**
 - d. Present the results in a clear and structured way.

Discussion Forum

How can social statistics improve decision-making in youth policies? What statistical techniques do you know and how do you think they can be applied in youth policy analysis?

Discussion on the importance of data in the formulation, implementation and evaluation of youth policies and how ensure that youth policies are truly evidence-based and not just based on political decisions. Reflection on the use of statistical methods in data analysis and policy evaluation. Participants are invited to share previous experiences with data analysis or statistical techniques that they consider useful for this field.



Key resources

Supporting material is provided below to complement this module.

Key readings

- **Evaluating public policies to improve the policy debate:**
<https://www.elsaltodiario.com/economia-justa/evaluar-politicas-publicas-mejorar-debate-politico>
- **Guide to the Evaluation of Public Policy Results**
https://funcionpublica.digital.gob.es/dam/es/portalsefp/evaluacion-politicas-publicas/Documentos/Metodologias/Guia_de_Evaluacion_de_Resultados.pdf
- **Methodological Guide. Design of composite indicators of sustainable development:**
<https://www.cepal.org/es/publicaciones/3661-guia-metodologica-diseno-indicadores-compuestos-desarrollo-sostenible>

Audiovisual resources

- **Statistics Explained - Your guide to European statistics:**
https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Main_Page
- **OECD Data Portal:** <https://www.oecd.org/en/data.html>
- **EU Datathon 2022 - Your key to European statistics:**
<https://www.youtubeeducation.com/watch?v=fli2YvWDcs>
- **#How does Eurostat work? :**
<https://www.youtubeeducation.com/watch?v=zZ7xgPth5i8>

Didactic explanation video

Video-pill 4: <https://youtu.be/C9gkzTj7UpE>







Instructional Design

General objective

The overall objective of this theme is to understand and apply big data techniques to improve the design, implementation and evaluation of European youth policies and the Youth Goals, to generate empirical evidence to compare results with other regions of the world, and to communicate results effectively through data presentation and visualization.

Competences:

At the end of the module, you will be able to:

- Understand the fundamentals of statistical analysis and *Big Data* in the study of youth policies.
- Apply guidelines and strategies to implement statistical and *Big Data* methods in the research of European Youth Policies and *Youth Goals*.
- Design evaluations and comparative studies based on massive data and advanced analytical techniques, both at European and international level.
- Interpret the results to compare different youth policies through statistical analysis and *Big Data*.
- Use data visualisation tools to present and disseminate findings in articles and papers on European Youth Policies and the *Youth Goals*.



Theory-Practice

Content

Big Data and youth policies: a new dimension of analysis

We live in a context marked by the Industrial Revolution 4.0, a stage characterized by the intensive use of data in all areas of society. In this scenario, Big Data plays a central role. This term refers to the collection and analysis of large volumes of data that are highly diverse, fast and complex. Its treatment requires multidisciplinary teams that integrate technical profiles (informatics, statistics, machine learning) and knowledge of the fields of application.

In the field of youth public policy, big data makes it possible to analyze social phenomena in unprecedented depth. The use of massive data provides a solid basis for making informed decisions, identifying emerging trends and anticipating problems. For example, Eurostat is already using this approach to analyze youth employment, while initiatives such as the Youth Wiki are collecting key information on youth policies across Europe. In addition, the European Commission is exploring the use of artificial intelligence to identify patterns of participation and exclusion among young people.

Case studies: from transport to employment policies

There are concrete examples where big data has demonstrated its potential in public management. In London, data on traffic, weather and social networks are being integrated to optimize the city's mobility network. In Flanders, the employment service is using digital platforms to connect young people with job offers and applying predictive models that estimate the likelihood of employability.

In Spain, the use of big data extends to areas such as water management, rural sustainability, and early detection of disease. These applications show that data is not just a technical resource, but a transformative tool to improve the effectiveness of public policies, including in the field of youth.

Generating empirical evidence and impact assessment

One of the great strengths of big data is its ability to generate solid empirical evidence to support policy analysis. Through techniques such as data mining in surveys (e.g. Eurobarometer), text analysis in social networks or the use of machine learning algorithms, it is possible to identify the concerns, attitudes and behaviors of young people. This information can be used to adapt existing policies or design new, more appropriate ones.



In addition, big data analysis is complemented by formal impact assessment methods. These include:

- Evaluation with experimental and control group, comparing outcomes between those who receive an intervention and those who do not.
- Before-after (diachronic) analysis, which compares indicators in the same group before and after a policy.
- Statistical match, where similar individuals are matched to evaluate the effect of an intervention.
- Regression discontinuity, useful when assignment to a policy is based on a threshold (e.g. age or income).
- Randomised experimentation, considered the "gold standard" for policy evaluation, by randomly assigning participants into experimental or control groups.

International comparisons and benchmarking

The use of global databases and comparative analysis tools makes it possible to assess the implementation of the Youth Goals in Europe in relation to similar policies in other regions of the world. Reports from organizations such as the OECD or the ILO make it possible to compare key indicators such as education, employment, health or civic participation between regions such as Latin America, Asia and Africa. These comparisons help to identify good practices and to contextualize achievements or shortcomings within the European space.

Data visualisation and storytelling

For big data to have a real impact, the results need to be presented in an understandable way. Data visualization plays an essential role in facilitating the interpretation of trends, outliers and complex patterns. Through interactive charts, dashboards or infographics, it is possible to communicate relevant information to decision makers and citizens alike.

Flourish is a tool that allows you to create interactive graphics without programming. Its accessible and free interface, dynamic templates and data-driven storytelling approach make it an ideal choice for presenting youth policy results in an engaging and effective way.

New ethical and political challenges of Big Data

While the potential of Big Data is enormous, its application also poses significant challenges. These include (Azzone, 2018):

- The need to synchronise social expectations with existing legislation.
- Ensuring equity and fairness in access to the benefits of data analysis.
- The fight against disinformation and fake news.





- Adapting the profiles and competences of public managers.
- The balance between individual privacy and the general interest.

Overcoming these challenges is key to ensuring that Big Data not only serves to improve policies, but that it does so without reproducing inequalities or violating rights.

Conclusions

The use of big data in the analysis and evaluation of youth policies represents an opportunity to move towards more evidence-based decision-making. However, this potential can only be fully realized if data quality and accessibility are ensured and those responsible for analyzing and using the data are properly trained. The future of youth policy lies in knowing how to read, interpret and report data responsibly.

Bibliography

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- Hautea, S., Dasgupta, S., & Hill, B. M. (2017, May). Youth perspectives on critical data literacies. In *Proceedings of the 2017 CHI Conference on Human Factors in Computing Systems* (pp. 919-930).





Evaluation

Instructions

Answer the following questions to assess the knowledge acquired, selecting the correct answer.

Test

1. Which feature of *Big Data* enables real-time data analysis for youth policy evaluation?
 - a. Volume
 - b. Speed**
 - c. Variety
 - d. Truthfulness
2. What is a key challenge in applying *Big Data* to youth policies?
 - a. Lack of cloud computing
 - b. Difficulty in capturing real time data
 - c. Accessibility and quality of data**
 - d. Lack of interest in data analysis
3. Which of the following tools allows for the creation of interactive data visualisations in youth policy analysis?
 - a. Excel
 - b. Flourish**
 - c. SPSS
 - d. Google Docs
4. How does *Big Data* contribute to the comparison of youth policies across regions?
 - a. It facilitates the analysis of large volumes of data on youth employment, education and participation.**
 - b. Limits access to information from different countries due to data restrictions.
 - c. It cannot be applied to the evaluation of public policies.
 - d. It always requires structured data from official records.
5. Why is data visualisation important in youth policy evaluation with *Big Data*?
 - a. It does not influence the interpretation of the results obtained.
 - b. It is only useful for presentations and conferences.
 - c. It makes data more attractive without providing analytical value.
 - d. It allows findings to be communicated in a clear and accessible way.**





Discussion Forum

What are the opportunities and challenges of using *Big Data* in youth policy formulation and evaluation?

Big Data has become a key tool for youth policy formulation and evaluation, enabling trend analysis, impact prediction and improved evidence-based decision-making. However, its use also raises challenges related to data quality, accessibility, privacy and interpretation of information.

In this forum, we will reflect on: How can it improve the effectiveness of public policies? What are the limitations or risks to be considered? Share your point of view and, if possible, a real example where the use of *Big Data* has influenced youth decision-making.





Key resources

Supporting material is provided below to complement this module.

Key readings

- **Big data in the policy cycle: Policy decision making in the digital era:**
<https://www.tandfonline.com/doi/epdf/10.1080/10919392.2015.1125187?needAccess=true>
- **The Challenge of Big Data and Data Science:**
<https://doi.org/10.1146/annurev-polisci-090216-023229>

Audiovisual resources

- **Hans Rosling -The joy of Stats:**
<https://www.youtube.com/watch?v=V8lbiiTF2P0>
- **The seven 'V's of Big Data:**
<https://www.youtube.com/watch?v=S81frJYbjcE>
- **Flourish use:** <https://youtu.be/nqkA5a008hs>

Didactic explanation video

- **Video-pill 5:** <https://youtu.be/wwabZ1zACzE>







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