





Data Visualization and Storytelling (Fall Edition 2025)

Introduction

Part of our responsibility as UN staff is to turn information and data into stories that help to inform our stakeholders, including national authorities, and civil society. Data complexity can often obscure main findings, or hinder a true understanding of impact. So how do we make information more accessible to different audiences? Often this is done by visually displaying data and information, but this approach, if not done carefully, can also lead to confusion.

The ability to create impactful data visualizations, such as graphs or maps, has become a core skill for analysts, researchers and managers in the UN as part of the vision of <u>UN 2.0</u> and the Quintet of Change. The power to summarize disparate data points or research findings into meaningful and impactful, visual stories often means the difference between our stakeholders making, or not making, evidence-based decisions.

The training proposed aims to offer a double opportunity: i) to strengthen core data visualization and storytelling skills and ii) to apply data visualization and storytelling tools and principles for reporting and communication purposes. The course covers aspects related to the interpretation, visualization and presentation of data of direct relevance to the UN work. It introduces this using concrete examples of data visualizations and uses a combination of storytelling, examples, and hands-on exercises to facilitate interaction and knowledge sharing.

Target Audience

The course is intended for UN staff, that is exposed to interpret, analyse, communicate and report on data. Participants can follow the course online, and can earn a Certificate of Achievement provided they have met the requirements described in the "Certification" below.

Learning Objectives

This course will explore the underlying principles behind effective information displays. These are principles can be applied in almost any area and used to clearly communicate to a variety of audiences. In addition to providing tips to improve most data displays, we will examine the core factors that make them effective. Topics covered in the course will include how to select the appropriate visualization for

different data, common graphical tools, and delve deeper into other graphical displays that allow the user to visually interact with the data. Additional advanced topics will include interactive visual displays, GIS, data dashboards, qualitative and quantitative data displays, and crowdsourcing visualizations.

It is expected that, by the end of the course, participants will be better positioned to:

- Explain the steps to select the right visualization while considering the data, audience, and objective.
- Apply fundamental design principles to declutter graphs and focus attention.
- Communicate effectively our key messages with data.
- Identify when and how to use interactive visual displays, GIS, dashboards and Generative AI.

Scope of work and format

The course is organized in 4 weekly modules, as follows:

Week 1: Introduction

- Intro to data visualization and its many forms
- Principles of effective data visualization

Week 2: Introduction

 Applying principles to practice through the use of Excel & other visualization tools

Week 3 Advanced Topics

- Geographic Information Systems (GIS) for data visualization
- Interactive data displays

Week 4 Advanced Topics

- Data Dashboards
- Qualitative data displays
- Applications of Generative AI in data visualization

This course is an immersive and interactive virtual learning journey where the participants will practice the craft and science of data visualization using data examples relevant to the UN work.

Overall course activities:

- Thematic forum/Reflective Exercise: Participants will be asked to share reflections with their peers on selected weekly topics before each live session;
- **Live sessions:** Weekly instructor-led webinars. Each session will have a duration of 90 minutes and cover both theory and practice;
- **Final assignment:** hands-on exercise with a real-world dataset to apply data visualization design best practices. Participants will be provided with a UN dataset and asked to craft visualizations that answer predetermined questions using tools analysed. Instructor will review submissions and provide feedback.

- **Personal Blog:** personal space offered to learners where to share insights with instructor and UNSSC team.
- **Resources:** compilation of key resources (videos, checklists, publications) available to learners to be consulted at any moment throughout the course.

Recordings will be available after the sessions for those that cannot attend. **However, we highly encourage to virtually attend the synchronous sessions.**

Participants will get access to the UNSSC UNKampus platform, where they will find the asynchronous learning material, will have the opportunity to practice with additional exercises between the webinars, reflect in their personal blog and interact in the discussion forums with the UNSSC instructor, team and peers.

Time and Dates of Live sessions

- Week 1: 3 and 5 November from 15:00 to 16:30 CET
- Week 2: 10 and 12 November from 15:00 to 16:30 CET
- Week 3: 17 and 19 November from 15:00 to 16:30 CET
- Week 4: 24 and 26 November from 15:00 to 16:30 CET

Training Needs Assessment

Participants will be asked to fill in a training needs assessment to know more about their past experience with data and their interaction with different software programs in order to fully meet their specific learning goals.

Tools

During the webinars, the learners will discuss and practice with different tools, including: Excel, Power BI, ArcGIS, Google Maps, Sway, Google Data Studio, Voyant.

Certification

To receive the **UNSSC Certification of Achievement** participants will be expected to:

- Share their reflections in the different discussion forums.
- Participate in the four webinars.
- Pass the Final Assignment.

Faculty

Tarek Azzam

UNSSC Team

- Itziar Arispe
- Maria Fernanda Villari