Statistical writing –

working together makes all the difference

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Abstract.

Statistics is needed for decision-making, debate and research. In a society with fake news and information overload we need to provide accessible statistics that is easy to understand. In 2024, Statistics Sweden, put together a course in Statistical Writing inspired by several Eurostat ESTP-courses. The aim was to increase the employees' competence in describing and explaining the statistics. All to increase the benefit for the user! Two statisticians and two communicators set up an in-house course which gave a broad perspective. About 50 participants learned about plain language, tables and diagrams, table and diagram headings and interpret and draw conclusions.

After our course, we started workshops in 2025 where we discussed a few published reports and press releases with those who wrote them. The participants not only got insights into their own statistics but gave their views to others and learned from that. Feedback from the participants has been positive. Their comments have been: "the push needed to make a change", "... how important it is to have context and not just focus on the statistical product" and "Luxury to discuss your statistical product!".

Press releases now have better headings, more often two headings above diagrams and tables, which make them easier to understand. Text are not only about exact numbers, but also about storytelling. We continue our work together in workshops during this year and are planning for more actions. We believe that our joint work will lead to statistics becoming more accessible to more people. Other countries can learn from this. Exploring writing together is a win-win!

Keywords: Statistical writing, communication

1. Why a course in statistical writing?

a. Sharing what we learned: From ESTP[1] training to colleague collaboration

The initiative began in 2022, when two statisticians at Statistics Sweden participated in an European Statistical Training Programme (ESTP) course[2]. At the same time, discussions at the communications department highlighted challenges in making statistics easier to understand for users.

Although our mandate is to provide high-quality statistics that are easily available, user feedback showed that accessibility was often limited by unclear texts. Many users reported that they understood the statistics once they were explained verbally, raising the question of why written communication could not be clearer.

An ESTP course on adult learning[3] provided the basis to develop an in-house course. This approach allowed us to use examples from our own work, promote cross-departmental learning, and save time and resources.

Management support was secured, and the course was opened to all employees who write, or wish to write, about statistics, regardless of experience level.

b. Starting point: Why clear stories matter in statistical communication

When searching for information, users typically decide within seconds whether content is relevant and understandable. If statistical texts, tables, or diagrams are unclear, users are likely to abandon them and continue searching elsewhere. Clear communication is therefore essential.

Different texts serve different audiences, but all benefit from a clearly defined message and purpose. Writing should start with the data and what is most important to highlight. Numbers need to be explained in words and placed in context. A narrative has to be

[1] European Statistical Training Programme, https://cros.ec.europa.eu/dashboard/estp-dashboard (2026-05-04)

[2] “Writing statistical texts with an impact for different audiences” delivered by Jan Erik Kristiansen and Anna Przybyll in 2022

[3] ”Presentation, facilitation and consultation skills for statistical trainers” delivered by Duncan Miles and Denis Greer in 2023 (introductory) and 2024 (advanced)

formed, e.g. by describing differences between groups or trends over time. Stories help users understand and remember statistics more effectively than figures alone.

2. The course structure

The course consisted of two parts: Session 1–2: Lectures providing a theoretical basis on plain language and writing for different target groups and Sessions 3–6: Workshops focusing four different aspects of statistical writing.

During the first two sessions, lasting a total of six hours, Statistics Sweden's language experts and communicators introduced the basics of plain language and writing for different target groups. The sessions were delivered in a lecture-based format, and although there were no mandatory assignments, participants were highly engaged and contributed actively to discussions. Together, the two sessions served as a foundation for the course.

Once the two first sessions were completed, two statisticians conducted four different sessions, each session offered on four occasions. These sessions were delivered as workshops. The content was inspired by the ESTP course, but adapted to Statistics Sweden's context, with practical examples from our own work that were discussed and developed collaboratively.

The course was designed as a modular programme, and we did not expect participants to complete all sessions, which together amounted to just over 20 hours. Some sessions were relevant for anyone who writes about statistics, while others involved deeper, more time-intensive work. In total, 52 colleagues participated in at least one session. The majority chose to attend all sessions.

One key success factor for sessions 3–6 was the number of participants. Each session included about 12 participants, who represented different subject areas, which enriched the discussions and ensured that everyone contributed with perspectives from their own field.

a. Session 1 – Plain language

The first session introduced participants to the concept of plain language, its importance for accessibility, and its role in building user trust. The session provided

practical guidance on how to write clearly and concisely and discussed how plain language relates to search engine optimization.

b. Session 2 – Writing for different audiences and different channels

The second session focused on writing statistics for different audiences. It included an introduction to audience targeting and guidance on how to structure a statistical news article using an established template. Participants were also introduced to a report template, including summaries and headings, and discussed how structure supports readability and understanding.

c. Session 3 – User-friendly tables and charts

The third session focused on the role of tables and charts as tools for conveying key messages in statistics. Participants discussed the purpose of visualisation, how to highlight the main message in charts, and how to structure tables to support understanding. The session also introduced Statistics Sweden's chart guidelines and templates for Excel and Word.

d. Session 4 – Clear and meaningful table and chart headings

The fourth session introduced two distinct types of headings: result-focused headings, which communicate the main message or outcome, and fact-based headings, which describe the content and were already commonly used at Statistics Sweden. The session highlighted the role of headings in statistical storytelling and demonstrated how result-focused headings can improve accessibility.

e. Session 5 – Writing about tables and charts

The fifth session focused on writing text that tells a clear story based on statistical results. Participants worked with identifying the main message and expressing it through headings and subheadings, as well as aligning text with tables and charts. The session addressed how to describe differences between groups and developments over time, including the distinction between statistically significant and substantively meaningful differences. Attention was also given to concise writing, appropriate use of

emphasis, selecting a suitable level of numerical detail in the text, and understanding writing as an iterative process.

f. Session 6 – Interpreting the statistics and drawing conclusions

The final session focused on interpreting statistical results and translating them into meaningful conclusions. Participants discussed how to explain why statistics matter, how to describe whether values are large or small in context, and how to interpret changes and patterns over time. The session also addressed the distinction between correlation and causation and highlighted the importance of relating results to other statistics, external information (including current issues debated in media), and relevant research to provide context and support well-grounded conclusions.

3. The course design - From performance gap to effect

Before the course, we devoted time to defining the problem, setting long-term objectives, and considering how long-term effects could be evaluated. This framework guided the course design and was translated into concrete objectives for each session, including content, pedagogical methods, and immediate evaluation. The same approach was applied across all six sessions.

a. Performance gap

The performance gap described the difference between the current situation and the desired state.

b. The long-term objective

The long-term objective described the desired future state.

c. Evaluation of the long-term effect

Although long-term effects of training are difficult to measure, we aimed to define follow-up objectives. As an example, one goal was that table and chart headings in statistical news and reports would adhere to the new standard.

d. Objective for the session

For each session, specific objectives were formulated in terms of participants' attitudes (e.g. feeling positive about result-focused headings), knowledge (e.g. how to construct a result-focused heading), and ability to apply new skills in practice (e.g. when writing a statical news text). Objectives were expressed as desired behaviour under specific conditions and at a defined quality level.

e. The content

Course content was determined based on the objectives. We focused on explaining why change was necessary, engaging participants' perspectives, and using methods that accommodate different learning styles. Each session combined theory, examples, reflection, discussion, and practical exercises. A detailed plan was prepared for each of the sessions.

One particularly appreciated element was the vernissage, where examples from published material were displayed for joint reflection and improvement.

f. Evaluation of the training session

Each session concluded with a short anonymous paper-based evaluation. Feedback was used to refine subsequent sessions and revealed a strong demand for more supported practice, which later led to the introduction of writing workshops.

4. After the course: sustained practice and emerging effects

Following the six course sessions, the work continued through writing workshops. During late 2025, four writing workshops were organised, each with two parallel groups from different subject areas at Statistics Sweden and facilitated by three course leaders in cooperation. Participants shared drafts or published material in advance, and improvements were discussed collaboratively during the workshops. The peer-based format proved highly instructive and highlighted the value of joint reflection on statistical communication. As a result, additional sessions are planned for autumn 2026.

The work has also influenced collaboration structures in-house, including new organisational arrangements within and across departments. Guidelines about graphs have been extended to also include statistical writing.

5. Conclusions

Statistics Sweden has only just begun its journey to improve statistical writing. While no major changes in writing practices have yet been observed, the cumulative effect of small adjustments should not be underestimated. Seemingly minor changes, such as clearer and more result-focused table headings or a more logical ordering of bullet lists, can substantially improve usability. Se the appendix for examples of improvements.

The sessions were open to all staff, although the number of participants was limited. Our ambition is that participants will act as ambassadors and disseminate the approach within the organisation. In parallel, a central working group is developing a plan for the continued work.

A key strength of the initiative was that the course was developed collaboratively across departmental boundaries. Discussions between colleagues with different levels of experience and subject-matter expertise generated new perspectives, which also informed the development of the new guidelines.

Achieving lasting change takes time: first building knowledge, followed by opportunities to practise. Developing and delivering the course required a substantial investment of time, but we consider it well worthwhile.

6. Appendix: List of references

Statistics Sweden (2026, coming): Guidelines for graphs and tables

United Nations (2009): Making Data Meaningful Part 1 A guide to writing stories about numbers. ECE/CES/STAT/NONE/2009/4

7. Appendix: Examples of improvements

Result-oriented headlines for text, graphs and tables

- Before the course: Sveriges framtida befolkning 2024-2070 This version has no result-oriented headings, neither in the text nor for graphs and tables.

- After the course: Sveriges framtida befolkning 2026–2070 This version has result-oriented headings in the text och for graphs and tables.

Result-oriented headlines for graphs and tables

- Before the course: Environmental tax revenues increase in 2024 This version has no result-oriented headings for graphs

- After the course: Environmental tax revenues decreased in 2025 This version has result-oriented headings for graphs

Well-structured bullet point lists

- Before the writing workshop: The inflation rate according to the CPI was 0.8 percent in July 2025 The bullet point list is not clearly separating monthly changes och yearly changes

- After the writing workshop: The inflation rate according to the CPI was -0.1 percent in April 2026 The bullet point list is clearly separating monthly changes och yearly changes

Storytelling: highlighting the relevance of the statistics

- A typical SCB-foreword from a report (no links or years to ensure the author's integrity)

  In English (Swedish only in the report):

  This report describes differences in mortality between various occupations during the period xxxx–xxxx. It is the second time Statistics Sweden (SCB) has presented mortality data by occupation based on information from the Occupational Register. The first report was a follow-up of mortality during the period xxxx–xxxx using occupational data from xxxx. There are also older similar reports in which mortality is presented by occupation based on different editions of the Population and Housing Census.

  The statistics have been obtained from several of SCB's full-coverage registers. Information on occupation has been retrieved from the Occupational Register. Occupational classifications are revised regularly. In this follow-up, the occupational classification has been revised compared with the previous report. The Swedish Standard Classification of Occupations, SSYK 2012, has been used instead of SSYK 96. The new classification contains a larger number of groups, and the data are therefore difficult to compare with previously published information on occupation and mortality.

- A foreword telling why the statistics matter: På egna ben - En beskrivning av ungas flytt från föräldrahemmet 2014–2024

  In English (Swedish only in the report):

Moving out of the parental home is a major life event. For many, it represents a step into adulthood, bringing greater freedom, responsibility, and new opportunities to shape one's own life. From a demographic perspective as well, young people leaving home is an important event, often serving as a first step toward other life events, such as moving in with a partner and starting a family of their own. For many, it is also necessary to move away from home to pursue further education or to take jobs that are not available in their hometown.

This report examines the age at which women and men left the parental home during the period 2014–2024. The analysis also covers where young people move when they take the step into independent housing, as well as their employment or educational status in the year after leaving home.