

This bachelor's assignment has been carried out in cooperation with Juliette Cortes, who created the Storylines for Practice format. The Storylines for practice aim to provide academic research to an audience beyond academia: a practitioners' audience, specifically in the field of water protection. Academic publications are not suitable for this audience, though they might benefit from the contents to make decisions that are research-informed.

The Storyline for Practice format has been developed over the past few years and research has been done to improve the creation process and effectiveness of the format, though improvements were still to be made. The scope for this assignment is to further analyse where the format and process can be improved and to provide solutions to the problems and/or opportunities that arise.

This has been done by analysing the previously done research on the Storyline for Practice format and some theory regarding the key elements that play a crucial part in it: visualisations and storytelling. Visualisations have always been an important part of science communication, though data visualisations have only been developed in the last few decades, and research in cognitive psychology and design have helped to evaluate the possibilities that visualisation technologies can offer. These rapid developments, in combination with an information explosion that is likely to widen the information gaps between science and society, are the reason for an informed visualisation design process to aid the application of scientific knowledge to society. Combined with storytelling, the effectiveness of visualisations has been proven to be increased by various studies. The findings of these studies can be summarized as follows:

1. Good visualisations are a combination of relevant information and attractive graphical elements
2. Leave options for the audience to explore the visualisation by using interactive elements
3. Make navigation (through the visualisation) easy and intuitive
4. Familiarity is strongly linked to comprehension

Besides analysing how visualisations and storytelling can be improved in the format, important (mis)understandings between science-to-practice communication were made clear in the theoretical analysis for this assignment.

Based on the findings from the research a new version for the guidelines, that help a researcher making his own storyline in collaboration with Juliette Cortes, were made. These guidelines were then tested whilst making a Storyline with a researcher for All-Risk, for which the visual design and storytelling-advising roles in the design team were added

as part of the assignment. After testing the new approach for the Storyline for Practice format, final recommendations for the guidelines and the process were made.

It was found that the guidelines could support the researcher more in characterising the audience the storyline is created for and understanding what it takes to effectively communicate with that audience. Besides creating a more effective storyline by structuring the story around the application of the research, the focus also shifted towards developing a new skillset for the researcher.

The guidelines provide the information needed to develop both an effective learning tool for researchers as a document that can be used to present to a practitioners' audience that stimulates them to take action.