

Background

About

Teams of **secondary students** aided by a mentor (a teacher or informal educator) first undertake a citizen science project in their community and then document and creatively share their experiences, processes, and results. Projects should specifically be in the field of environmental monitoring and sustainability and involve student-developed research questions or student-collected and -analysed data on this topic (for example, a schoolyard BioBlitz or an investigation into schoolwide water use). The data or results can be in any form--quantitative, qualitative, or visual (e.g. photos or maps)--as a contribution to an already existing citizen science project.

The "story," the **multimedia** piece submitted, should be a reflection on the student-led project. This can include creatively sharing observational information collected, through using a snapchat or instagram social media 'story' from the day of data collection, a blog-style piece including photos, or a gallery of scientific drawings from students.

The submitted stories will be housed on the [NarrativeAtlas](#) online "exhibition space" and shared via ECSA and DITOs social media platforms, as a way to share student citizen science stories outside of the physical school space, and across regions and borders. A focus will be placed on visual stories to facilitate cross-language communication.

Science Storytelling

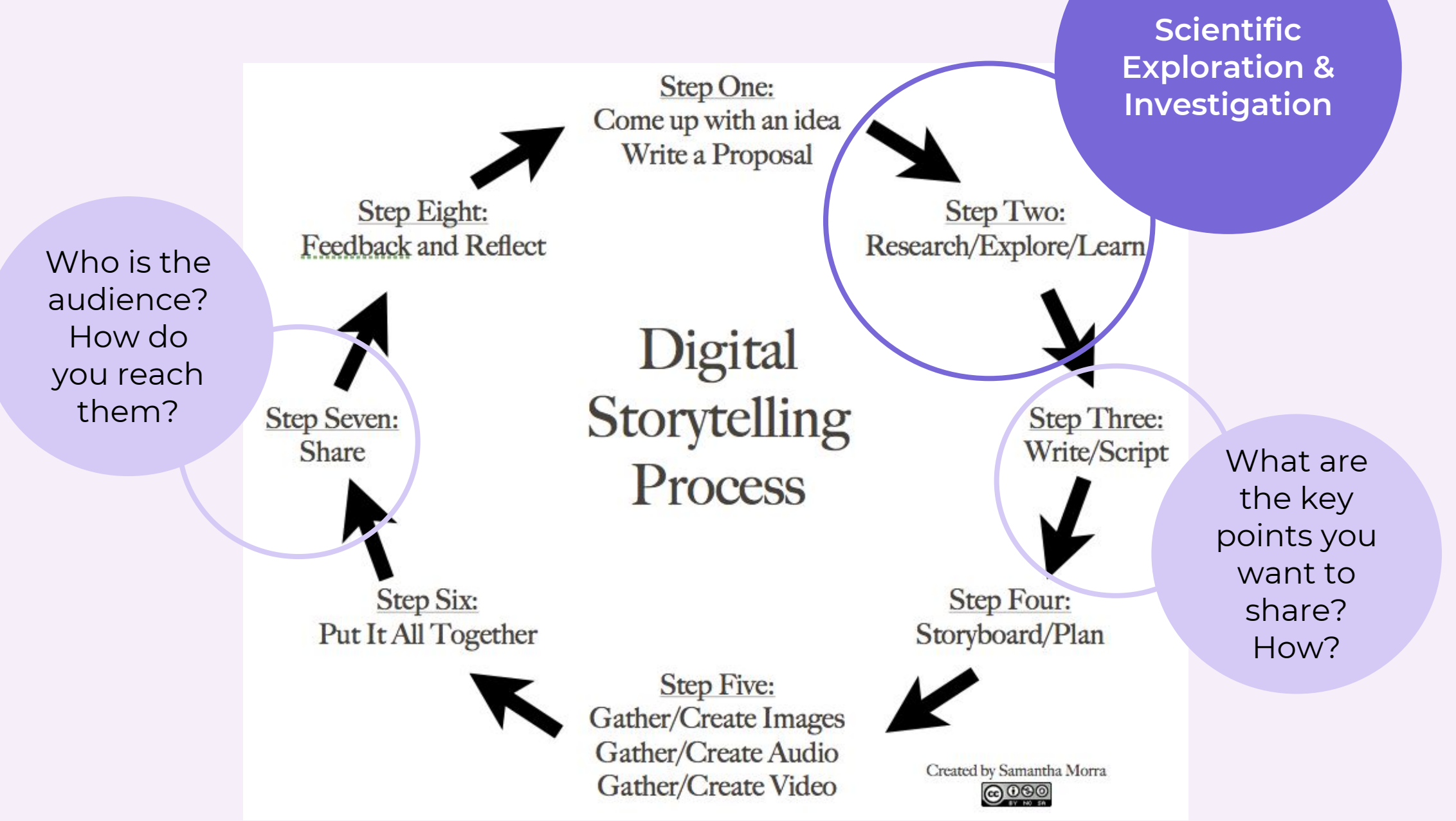
Scientific Documentation

- Good scientific practices
- For students themselves, groups of students, or for teachers

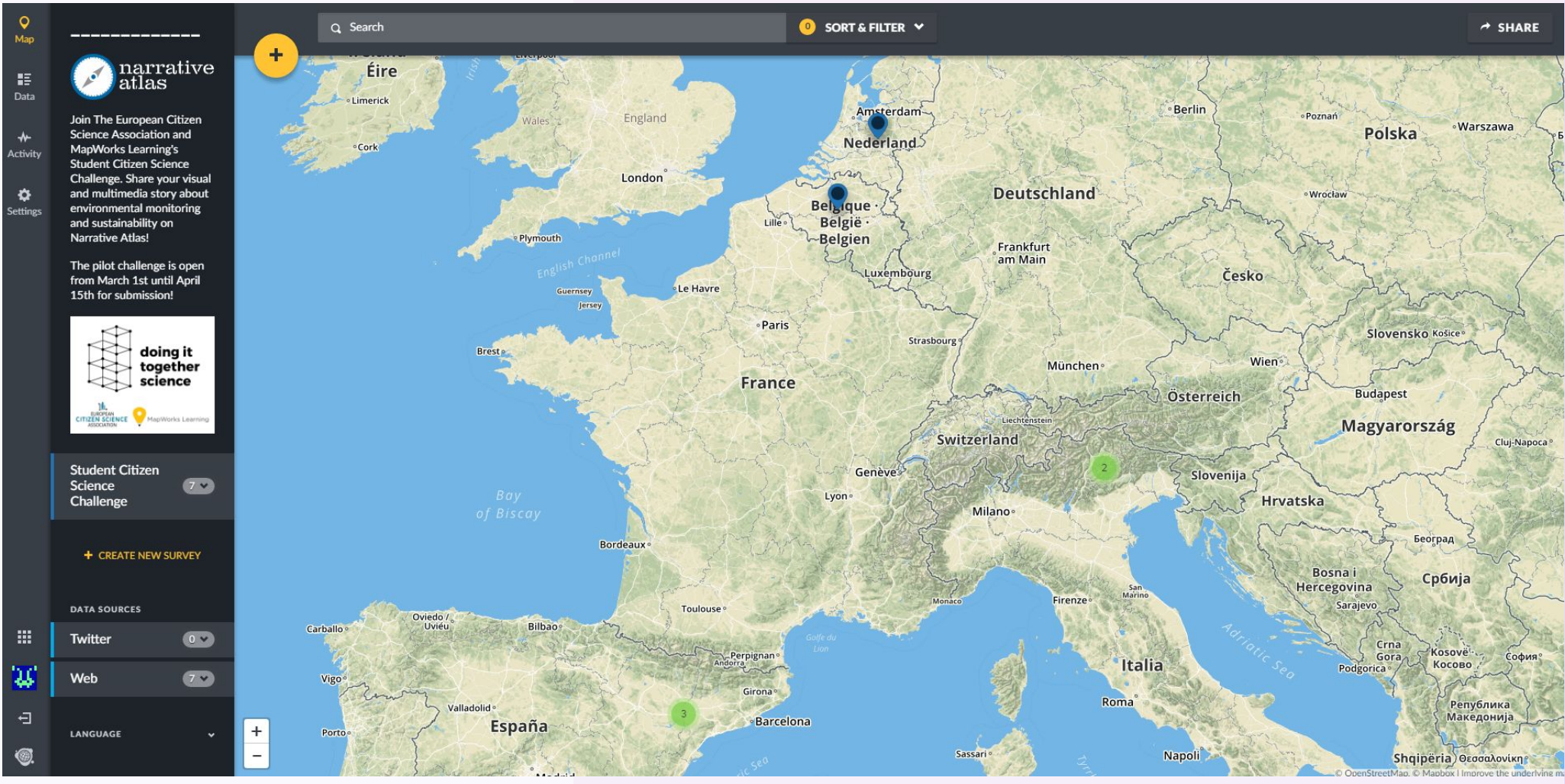
Science class and most science curriculums heavily focus on the scientific process: observing and asking questions about what is observed, researching, forming a hypothesis and developing an experiment, collecting and analyzing data, and then constructing a conclusion. From early science classes, students learn to form scientific conclusions, to write scientifically for the audience of their peers and for their teachers. However, most of their learning experiences stay within the classroom and at the furthest boundary the school.

There are two types of science communication that can expand outside of the classroom in terms of citizen science projects: 1) methodological documentation for replicability in other classrooms and 2) more creative written and visual pieces that reflect on learning and relevance to everyday lives (*storytelling*).

Using these two communication styles to build momentum in for citizen science in schools, the Student Challenge encourages the sharing of both scientific documentation for replicability, and science storytelling! The first style reaches an audience perhaps already involved in citizen science projects and the second, Storytelling, has the potential to reach new audiences!



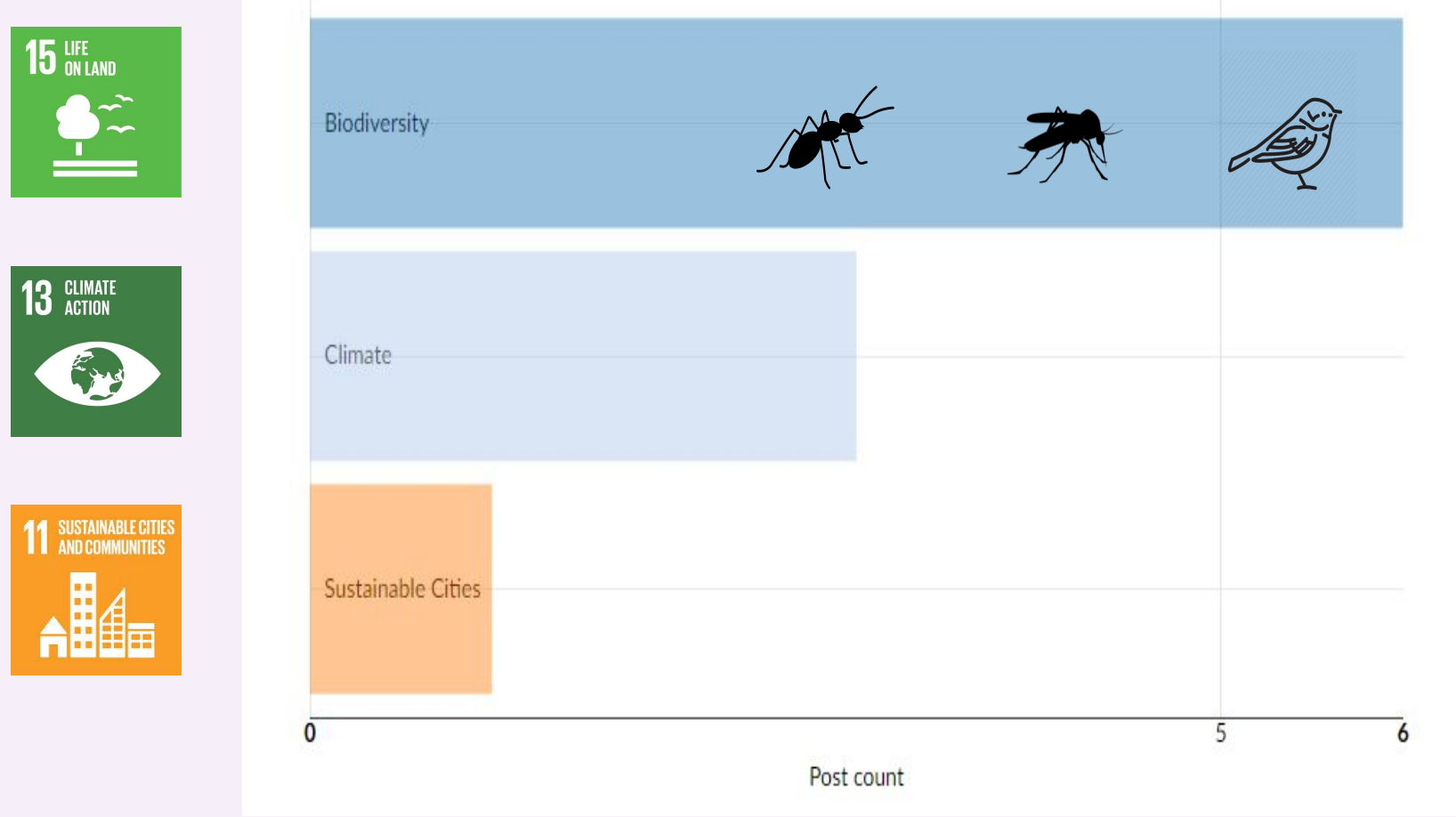
Narrative Atlas - The "exhibition space"



<https://narrativeatlas.ushahidi.io/views/map>

Student Citizen Science Challenge

Student Stories from the Pilot Round



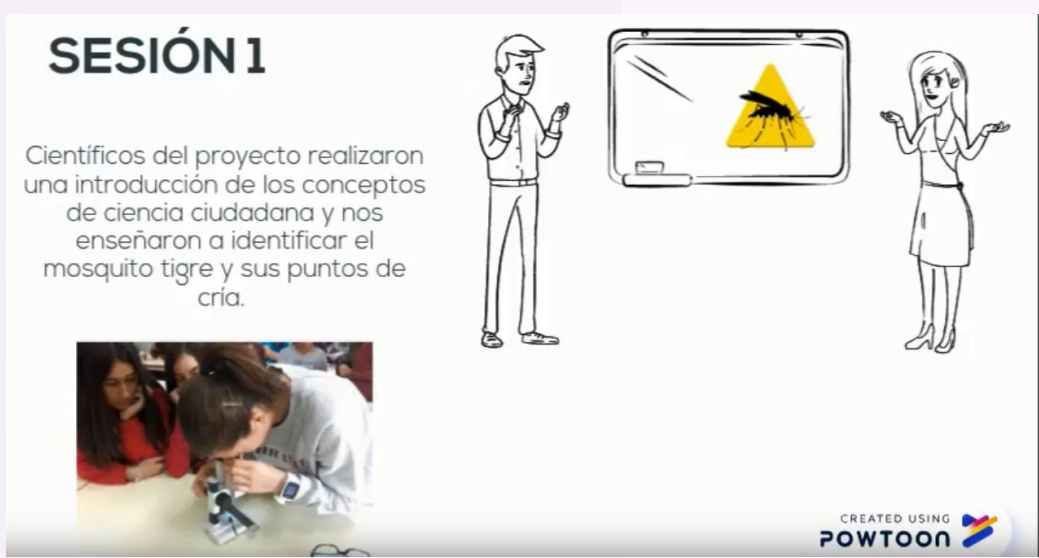
The majority of citizen science projects that students were and are involved in deal with **biodiversity monitoring**, such as mosquito identification in the *Mosquito Alert Project* or monitoring tit nests in *XperiaBird*. One project, *School of Ants* draws on both biodiversity monitoring and the impacts of **climate change**. The last student project, *Nationale Lichtmeting* (National Light Measuring) deals with energy use through lighting in terms of **sustainable cities**.

Even in the pilot round, students already begin to touch on three big environmental sustainability topics (as defined by the Sustainable Development Goals): Life on Land, Climate Action, and Sustainable Cities & Communities.

XperiaBird, Belgium

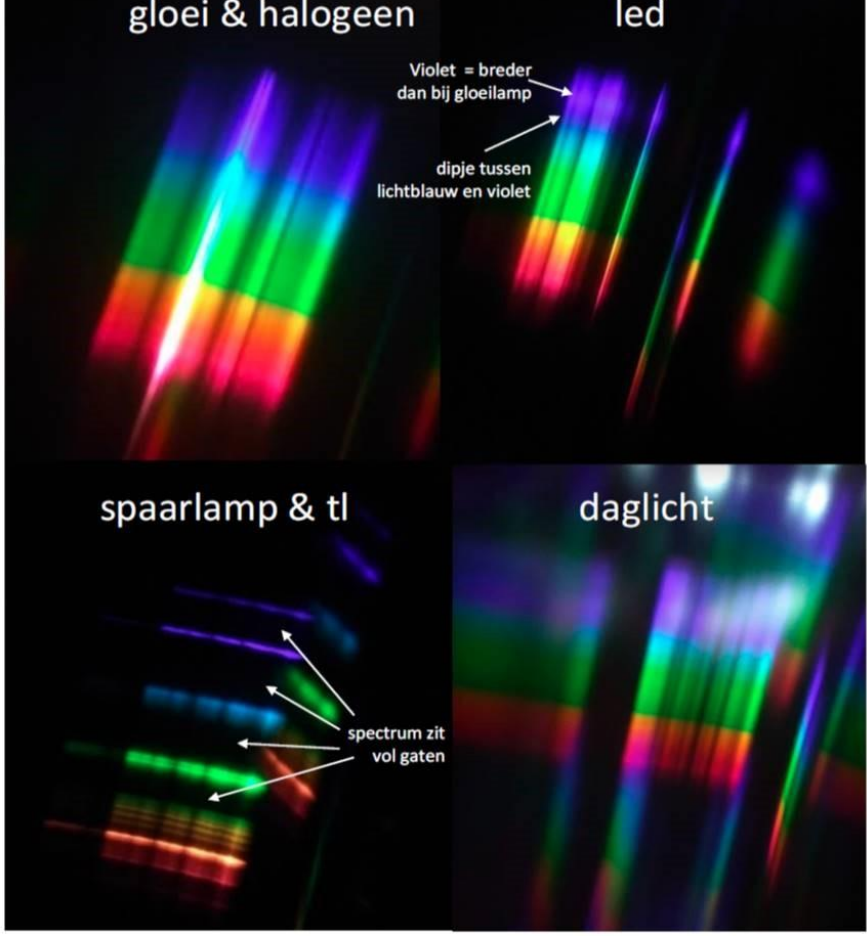


Mosquito Alert, Spain



- 4 countries
- 5 piloting teachers
- ~ 50 student participants
- 4 Citizen Science Projects
- Mediums including informative videos, animations, posters, and poems

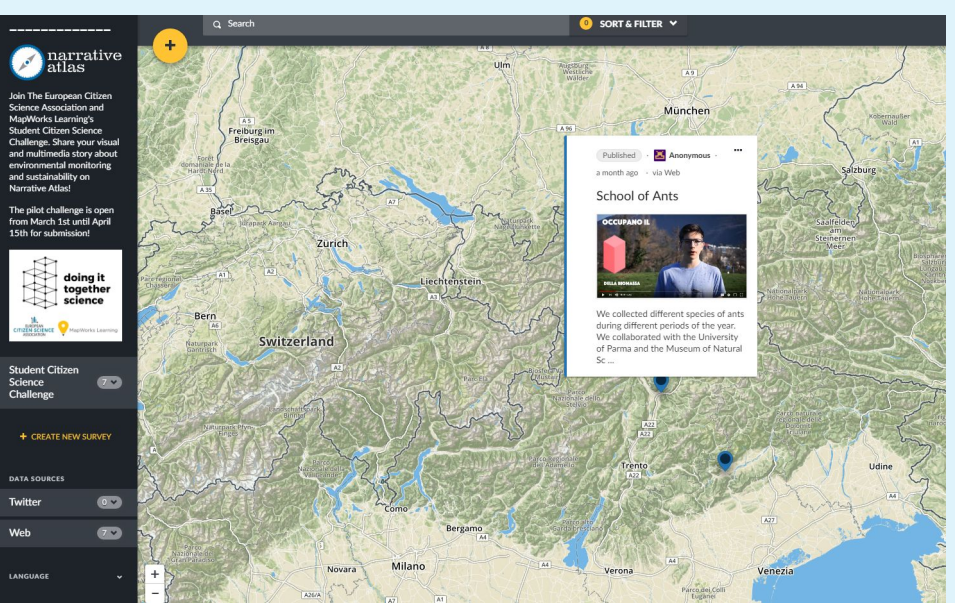
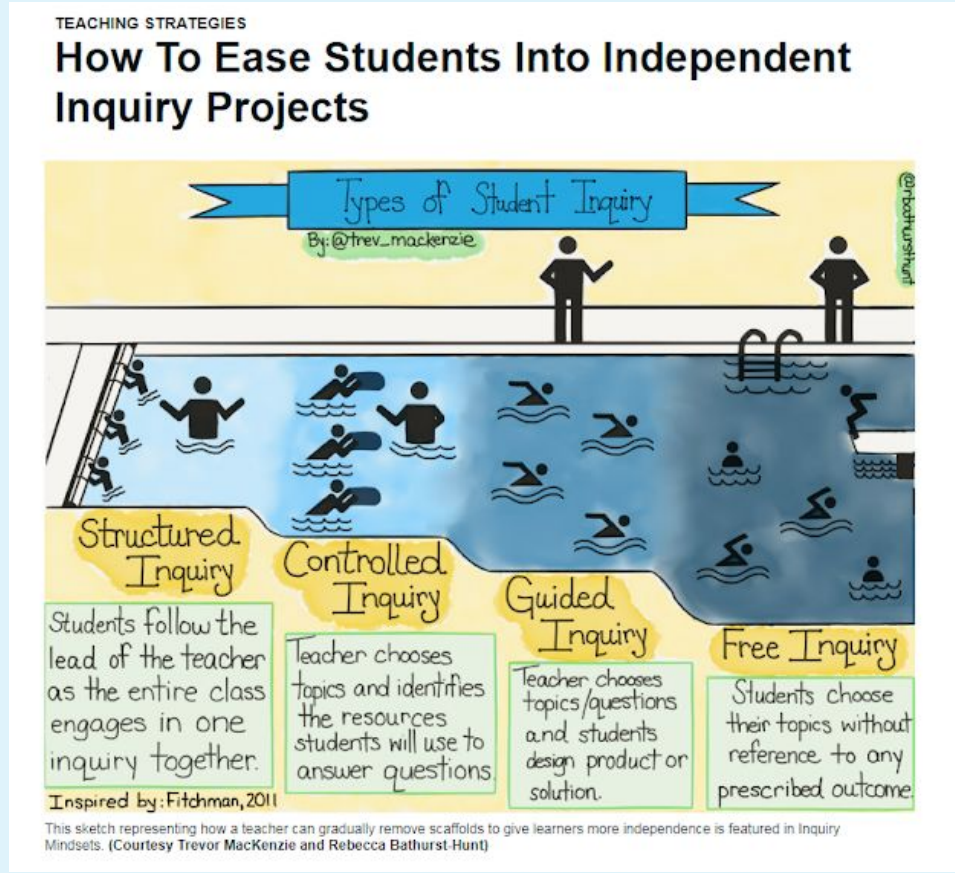
School of Ants, Italy



Nationale Lichtmeting, Netherlands

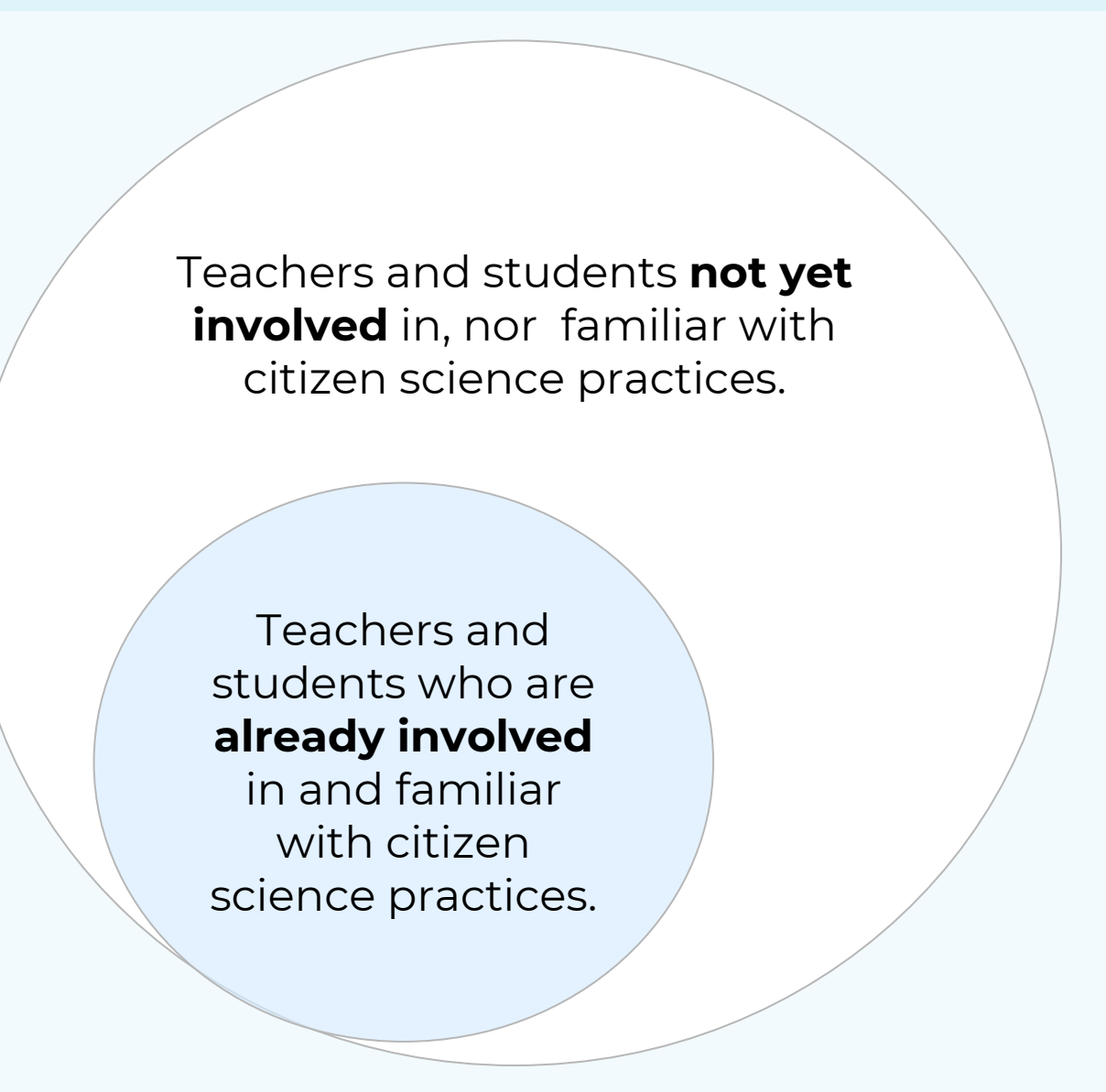
Lesson Learned

1. Storytelling and other forms of narratives as a **reflection or assessment** fit best into the school timeline at the **end of the semester**.
2. **Science teachers** don't necessarily have the tools or skills needed to facilitate [science] storytelling.
3. Having an **"ambassador"** with face-to-face contact, for example a citizen science project coordinator who works with teachers, is key for getting classes involved.
4. Students are motivated by a **prize** and are excited to see **other students'** work when they upload their stories, however, they will not necessarily go back to search for other student work.
5. There is a need to implement a platform with 2 distinct but connected spaces: the **"exhibition space"** with stories and a **"documentation area"** with methodology and other scientific backgrounds to the stories.



What's next?

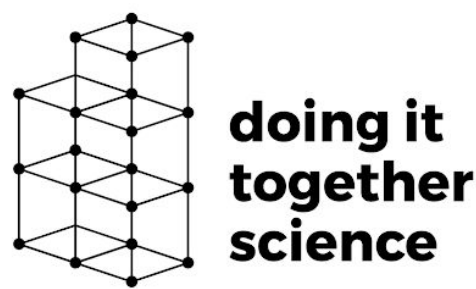
2018	2019
Mar - April Pilot Round <input checked="" type="checkbox"/>	Sept - Oct Fall Round <input type="checkbox"/>
	Mar - Apr Spring Round <input type="checkbox"/>



1. Building on existing teacher & school networks already working on citizen science projects in and around the classroom.
2. Onboarding teachers and schools already familiar with non-traditional education practices, but not necessarily with citizen science
3. Reaching teachers and classes that aren't yet involved in citizen science - including reaching out to various European and national level school networks.

DITOS-
@TogetherSci

ECSA-
@EuCitSci



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