

FREQUENTLY ASKED QUESTIONS AND ANSWERS

REGARDING THE EUTHMAPPERS HANDBOOK

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Mapping Our World With Open Geospatial Tools: A Practical Guide for High School Teachers



Euthmappers

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Technical aspects

1. Once we have defined a challenge and have decided what to map, how can we check the already available tags to classify our selected features?
 - a. This website provides information about how to tag different types of features in OSM. Map Features provides a comprehensive list of feature types, recommended tags, and descriptions for each type. You can access Map Features at https://wiki.openstreetmap.org/wiki/Map_Features
Also, this website provides a simple interface for searching and browsing OSM tags. You can search for a specific tag or browse by tag category to learn more about how to tag different types of features in OSM. It also provides statistical information about OSM tags, including how often and which features they are used to tag. Taginfo is a helpful tool for understanding the prevalence and popularity of different tags in OSM. You can access OSM Tags at <https://taginfo.openstreetmap.org/>.
2. How can we check whether our target features are already mapped in a specific area?
 - a. On the tasking manager website. If you are selecting tasks for mapping, you should look at the legend:
 - white areas are available for mapping (there are no mapped areas, you can map);
 - yellow colour means more mapping needed (there are still areas need to map, you can continue to finish the task);
 - green colour means finished tasks (you can no longer map this task)
 - blue areas are ready for validation (if all tasks are blue, there is no more mapping and validators can check the all mapping)
3. If the teachers want to predefine some hashtags so pupils just have to select them from a list instead of typing them, how can this be done to avoid miss-spellings?
 - a. We can define all hashtags when editing a project (in section Changeset comment). These hashtags are then automatically displayed in the mapping task. Then students do not have to write them.
4. How can we explore the data generated within Euthmappers project in OSM?
 - a. If you want to see what the schools participating in the project are doing or have done or the data from new schools joining the community, you have to look for the following hashtags: #euthmappers, #iesforges, #bratianu, #itetfontana, #gk2, #maesdagua
This can be done on the following website Resultmaps. ResultMaps is a platform where anybody can track changes someone did, make some advanced statistics of changesets or users and also visualize it: www.resultmaps.neis-one.org. There is a specific app to explore the data: <https://www.resultmaps.neis-one.org/osm-changesets#5/47.916/14.414>
5. If we start a new project in a school, which hashtags should we use to relate our data to this project?
 - a. #euthmappers and your own hashtag with your school name.

6. How can we move the collected information from Field Papers to the digital map?
 - a. This website provides a good explanation of the use of Field Papers:
[LearnOSM](#)
7. How can we update data mapped in the field using the PCs?
 - a. You can refine the mapping done in the field in class sessions with computers using either the editors in OSM or the tasking manager.
8. How can we upload a photo taken directly with our smartphone to a tag to be added (or already added) to the OSM?
 - a. The easiest way is to use Mapcomplete to do the job. But if there is no Theme for your target feature/s, you can do it by using a specific "Photo tag" linked to the particular object: https://wiki.openstreetmap.org/wiki/Photo_linking
However, the image has to be public, for example, on the Flickr platform. This is an important issue to take into account, as public images can be used by anyone.
9. Can we upload pictures directly through Vespucci?
 - a. Today, there is no OSM option to upload photos. Vespucci is the first OpenStreetMap editor for Android. Its features can be searched on its website: <https://vespucci.io/>. The app is intended to be used to create and edit data, rather than incorporating pictures.
10. Can we use Map Complete directly in the computer classroom?
 - a. It is not the intended use. The idea is to use MapComplete in the field with smartphones/tablets. However, it is possible to work in PCs, and this could be advisable if your students are beginners, as direct editing in OSM can make more damage than Mapcomplete PC
 - b. In case you already have some expertise in OSM and you want to use computers, it is better to use the OSM editor.
11. Will the changes be visible in OSM if we use a Tasking Manager?
 - a. Yes. The advantage of Tasking manager is that the mapped area is divided into individual tasks, which can only be used by one user at a time, which prevents the occurrence of duplicate features. Also the edition can be restricted to a particular topic, so you can reduce mistakes. Once mapped in the Tasking Manager, the edition will be supervised by validators and the change will be finally visible in OSM after a few days.
12. Will a school that wants to start a mapping project have any support?
 - a. There is an active OSM community that can support technical aspects. An option is to use the OSM mailing lists, which are email-based discussion forums where OSM contributors can ask questions, share information, and discuss various topics related to mapping in OSM. Here is the link for searching for different mailing lists: lists.openstreetmap.org/subscribe
 - b. There is a web with a lot of tutorials in a lot of languages:
<https://learnosm.org/en/>

- c. A YouTube channel, “*two minutes videos*”, can help with mapping:
<https://www.youtube.com/watch?v=Phwrgb16oEM>.

13. Can we check what has been done by each pupil in OSM?

- a. You can track all your pupils' work on the following website: [Find Suspicious OpenStreetMap Changesets \(neis-one.org\)](https://neis-one.org). This can be useful to find pupils with many mistakes in mapping to help them improve their skills.
- b. There is also tool OSMCHa (<https://osmcha.org/>). It is a web tool to help visualise and analyse edits made by individual mappers on OSM. Via this tool we can validate the edits of each student.

14. Where can we search for the project statistics?

- a. On the tasking manager. In bottom section "More statistics" you can find statistics about tasks by status, edits, contributors, project timeline and also time statistics

Project design aspects

15. When would it be a good moment to start the design of a mapping project in a school?
 - a. A mapping project should ideally be designed one academic year before the expected implementation. It is important to design a project that covers some part of the official curriculum, in order to have the school support to introduce the project. This will facilitate a coordinated design, a forecast of the time and resources required, teaching methodology, evaluation methods, etc.
16. How do I start organizing a mapping project in the classroom?
 - a. Begin by defining clear goals that align with the curriculum. Identify which cross-curricular competencies you want to develop and how mapping can help achieve them. Consider integrating relevant topics for the students that can be explored through mapping.
17. What would be a good process to choose the challenges to be worked through maps?
 - a. The more the pupils participate in the selection process, the more involved they will be with the process. The incorporation of all the educational community in the challenge design can help to obtain a broader involvement. This could include families, neighbourhood associations, public institutions, universities, etc. A good analysis of the local context is very important for the challenge to be relevant for pupils. You can also look for synergies with other challenges that the School is already committed to and that would benefit from a mapping and spatial analysis.
18. How can we integrate the project into the current curriculum?
 - a. Look for connections between the project's objectives and the curriculum themes. For example, if you teach biology, the project could focus on mapping local habitats and their biodiversity. This allows for the application of theoretical knowledge in a practical context, facilitating meaningful learning.
19. How do we organize tasks and collaboration in and out of the classroom?
 - a. Divide the project into stages with specific tasks, assigning clear deadlines. For tasks outside the classroom, such as going out to map, make sure to prepare students with the necessary skills and prior knowledge. You can start using paper maps or technology to collect and analyze data in the field, depending on your students' expertise in mapping.
20. How can we assess pupils' achievements through the project?
 - a. Assessment should ideally be planned in advance in order to be able to incorporate the project activities in the subjects' assessment plan. A part of the pupils' grades could be associated with their work in this project. The strategy to assess their improvement could be similar to other project-based learning strategies carried out in the subjects.
 - b. A competence assessment scheme could be used. Competences such as Management, communication, data literacy, environmental and civic skills,

STEM, collaborative work, technological and digital skills, and cooperation with other stakeholders, make a good framework.

21. How do we assess the project within the framework of the subjects?
 - a. Use rubrics that include specific criteria related to the learning objectives of the curriculum and the competencies developed. Evaluate both the process (teamwork, use of GIS tools, research) and the final product (maps created, analysis presented).
22. Are there any examples that we can explore to get inspiration for our projects?
 - a. Open Cities Africa ([Open-Cities-Africa-Final-Report.pdf \(opendri.org\)](#)) is a good example of a mapping project involving the community.
 - b. Youthmappers ([YouthMappers|Humanitarian Mapping|University Students](#)) is a university network around the world with many interesting projects that can serve as inspiration.
 - c. TeachOSM (<https://tasks.teachosm.org/>) is a platform that integrates mapping projects developed under a learning approach.
23. Is there a pedagogical methodology behind this proposal?
 - a. There are three methodologies that serve as pedagogical bases that can help design the projects:..Project-based learning, Challenge-based learning and Service-Learning.
24. Is there any recommendation regarding how many students should be involved?
 - a. Each project has to be defined according to the local context. A previous diagnosis of the coordination opportunities among different teachers and subjects has to be carried out. It might be a good start to take one class group as a starting point.
25. Are there certain subjects which are recommended to incorporate this proposal?
 - a. Ideally, a mapping project can serve as a means to work different topics and skills from different subjects. Geography has maps at the core of the subject, but they can also be used to work natural sciences subjects, arts, languages, etc.
26. How do we encourage teamwork and assign roles?
 - a. Group students considering their strengths and areas of interest. Assign specific roles (such as team leader, data manager, GIS analyst) to promote individual responsibility and collaborative work.
27. What digital tools are available that we teachers can use to track the daily progress of teams in project development?
 - a. There are various options currently available that are user-friendly for school students, such as Trello, Google Classroom, Slack, Microsoft Teams, and Padlet, among others. Perhaps the school has its own educational platform that can also be used. More specifically, if you work in a Tasking Manager environment, you will be able to check the progress of the mapping task and the performance of each geovolunteer.

28. How and where do we disseminate the project's results?
- Consider various platforms for sharing the results, such as the school's website, educational blogs, or school events. You can also collaborate with local organizations or community groups interested in the collected data.
29. What platforms could our students use responsibly and safely to publish content and showcase their actions for community improvement?
- To disseminate their actions for community improvement, students can use various social media platforms, each with its own specific audience and format. Here are some popular options:
 - Instagram: Ideal for sharing photos and short videos of activities and projects. Very effective in reaching a broad and young audience.
 - Facebook: Allows for the creation of pages or groups where updates, events, and more detailed information about community activities can be posted. It has a wide and diverse reach.
 - Twitter: Useful for sharing quick updates, links to articles, and for interacting with other organisations and public figures who might support or spread the project.
 - YouTube: For posting longer videos that explain the projects, show the progress of activities, or tutorials that could benefit the community.
 - LinkedIn: Although more professional, it can be useful for connecting with businesses and professionals who may be interested in supporting student initiatives.
 - TikTok: Very popular among the youth, ideal for creating short, creative videos that can capture attention and effectively convey messages.
 - Pinterest: For sharing infographics, photos, and other visual resources that inspire or educate about community improvement projects.
30. How can we develop the project so that students develop MANAGEMENT competence (learn to plan, organize tasks, make decisions, and face challenges)?
- By defining clear and achievable objectives, involving students in the planning, dividing the project into manageable tasks, promoting teamwork and collaboration, implementing reflection and review sessions, using digital tools for project management, establishing clear evaluation criteria, and reflecting on the results at the end.
31. How can we develop the project so that students develop COMMUNICATION skills (exchange ideas, information, and messages in a clear and appropriate manner)?
- Integrate activities that require writing, presenting and discussing ideas in groups, encourage the use of various digital tools for effective communication (such as online forums, blogs, or messaging apps), and conduct exercises (e.g., debates) that imply active listening, critical thinking and providing and receiving constructive feedback.

32. How can we develop the project so that students develop DATA LITERACY skills (gather information, analyse it, interpret it, and effectively use data to make informed decisions and solve problems)?
- Activities can include data collection and analysis, teaching students to use data analysis tools and specific software (such as spreadsheets or statistical programs), encouraging critical interpretation of collected data and its application in problem-solving, and guiding them in evidence-based decision-making.
33. How can we develop the project so that students develop ENVIRONMENTAL AND CIVIC competence (understand in-depth environmental changes, social responsibilities, and take a proactive attitude)?
- Students should be encouraged to engage in practical actions that promote a positive impact on the environment and their community, in areas where such needs are identified by the project's agents. It is crucial to foster reflection and debate on responsibilities and solutions to environmental and social problems, as well as to teach by example that it is possible for students to participate proactively in both local and global initiatives.
34. How can we work so that through this mapping project our students develop STEM competence (apply knowledge from Science, Technology, Engineering, and Mathematics subjects to solve complex problems)?
- Integrate natural science concepts when analyzing geographical and environmental data, include mathematical elements for the quantitative analysis of the collected data, such as statistics and calculations of areas or distances, and involve teachers from these areas so that they somehow connect the content they teach with that of the project to be developed.
35. How can we work so that through this mapping project our students develop the COLLABORATIVE WORK competency (effectively working with others having a common goal which is the project, actively participating in group tasks, being co-responsible)?
- Form diverse teams that leverage the varied skills and knowledge of the students, assign clear roles that promote shared responsibility, and establish common goals to foster a shared purpose. Additionally, it's important to encourage effective communication through the use of strategies and tools that facilitate the exchange of ideas, as well as to evaluate the collaboration process, considering it for the final grade, valuing both active participation and mutual support within the team, to ensure that all members effectively contribute towards the achievement of the project's common goal.
36. How can we work so that through this mapping project our students develop the TECHNOLOGICAL AND DIGITAL competence (use digital technologies (software and online platforms) and tools ethically and with critical thinking)?
- It is crucial to conduct practical activities that allow the application of knowledge in real-life situations and evaluating not only technical proficiency but also the students' critical and ethical capacity in using digital technologies.

37. How can we develop the project so that students develop the COOPERATION competence (collaborate and engage with local government entities and community organizations, building positive relationships)? We have always worked within the confines of the school and don't know how to reach out and participate to improve our community.

a. The following steps can be followed:

- **Identify Local Partners:** Start by identifying local government entities and community organisations with interests aligned with the project's objectives. This can include city councils, environmental departments, NGOs, among others.
- **Establish Common Goals:** Work with these partners to define common goals to be achieved through the project. This fosters a sense of shared purpose and facilitates effective collaboration.
- **Plan Joint Activities:** Organise activities that require the active participation of both students and partners, such as community mapping projects, joint research, or awareness campaigns. This provides students with practical collaboration experiences.
- **Promote Communication and Exchange:** Encourage a constant flow of communication between students, the school, and project partners. This may include regular meetings, using digital platforms to share progress, and conducting community events.
- **Reflect on the Relationships Built:** Include moments of reflection within the project for students to consider the impact of their collaboration with local entities and community organisations. Discuss how these relationships have contributed to the project and what learnings can be drawn from the experience.
- **Evaluate the Impact:** At the end of the project, evaluate together with the partners the impact achieved on the community and the students themselves. This not only helps to measure the success of the project but also reinforces the importance of cooperation and positive relationships.