

Save Wikipedia for mathematics education

It still looks like a miracle to me that millions of people have produced millions of encyclopaedic articles in a cooperative way: Wikipedia is a true world heritage that we take for granted but that we must also actively protect and support.

If you are not yet a Wikipedia editor, it is not difficult to become one. The English Wikipedia has something more than 7 million articles, while the German Wikipedia has something more than 3 million articles. I would guess that there are plenty of entries about mathematical objects (or mathematicians) that exist only in English.

What you could then do is taking one of these entries and creating the corresponding German page. While doing so, you may enrich the content (namely, you may go beyond the mere translation or summary of the English page).

It could be that experienced users then edit parts of your page, making use of Wikipedia conventions that you are unfamiliar with. It could be that with time your page will be edited so much that you cannot recognise it anymore. Let it be. And also accept that any correction or critic is forever visible on the history of the page: this is a natural part of the contribution process (and you may choose a username which will grant you some anonymity).

Improving the Wikipedia can also mean improving the digital resources on Wikipedia Commons: if you detect a need, you can for example upload a new (or a better) mathematical image and then adding (or replacing) it in some Wikipedia page. Please opt for the CC0 licence, namely make your images public domain: this will be appreciated e.g. by those teachers who want to use those images for their classes, as they won't need to worry about an attribution. By the way, your Wikipedia username will be linked to your images in Wikipedia Commons, in case you want proof of your contribution.

Last but not least, creating Wikipedia pages is a fantastic student project: this feeling of serving the community is a nice reward for the students' efforts.

My recommendation is to peek into all Wikipedia pages that already exist in the various languages for the entry you are considering. Indeed, we are speaking of a mathematical entry and you can often get a good idea of the content just by looking at the pictures and at the formulas. You will in particular immediately detect which pages are completely inspired from the corresponding English page. In any case, today you have tools to translate from all Wikipedia languages you may wish to read. The comparison of the same page in the different languages will naturally lead you to discuss the pros and cons of the various presentations.

Afterwards you may come up with your own text, which ideally combines the best out of all those pages. Students may also deepen the study of the mathematical object under consideration and enrich the page content for example with references and information coming from mathematical books or different websites. Moreover, related entries and notions can also be investigated. In a nutshell, you can keep happily busy as many students as you want for as much time as you want. I have made very good experiences, and of course I am planning to create more pages in the future whenever the occasion arises. In general, keep in mind that students, while learning, can create learning material that can be shared for the benefit of all.