



About this document

This document illustrates the educational strategy of Wikimedia Switzerland (WMCH) for the four years 2022-2026. It is conceptually part of the broader WMCH strategy for this period.

This educational strategy was developed between November 2021 and March 2022 based on a mandate of WMCH to this document's author. After a kick-off workshop with the WMCH board, its development included interviews with six experts and the review of some projects; the details are provided at the end of this document.



The strategy's scope is focused on educational activities in relation to the formal education system or in currently underserved informal learning contexts. It does not address already existing training efforts in other WMCH strategic areas (e.g., training for GLAM staff or for Advocacy). It is suggested that, while promoting cross-fertilization and exchange, such activities are kept tied to their functional areas.

Also, the action lines illustrated in this document do *not* focus on training the next generation of Wikipedia contributors, nor on incrementing or enhancing the content of Wikimedia projects; rather, on how the assets and experience of WMCH and of the whole Wikimedia movement can become an added value for teachers and learners in Switzerland. Efforts for this latter goal will indirectly in the long term also contribute to the former.



In order to set the stage for the whole document, the first section after this short introduction provides a brief overview of the Swiss education system and emphasizes four affordances or value-generator aspects of the Wikimedia movement in relation to education.

Following, the vision of this educational strategy is synthetically expressed, as the main development direction intended to be pursued. The strategic elements are formulated as six guiding principles (in the third section). They are combined with four learning domains (in the fourth section), i.e., four different groups of learning goals that could be achieved. The domains are illustrated with several examples.

Principles and domains are then refined and more practically applied to selected fields of action (compulsory education, high school, higher education and adult education, plus a remark about teacher education) in the last section. Some ideas about "where to start" conclude the document.

1. Setting the stage

This educational strategy is aimed at identifying action lines for WMCH to have an impact on teaching and learning in Switzerland in different sectors and domains. The following descriptions of the Swiss education system and of the educational affordances of the Wikimedia movement provide the essential background for understanding the strategy itself..

The Swiss education system

The Swiss education system is rather complex. Education is a cantonal mandate, so that Switzerland actually has 26 different education systems, although "harmonized" by the HarmoS intercantonal agreement, which resulted in a shared curriculum. For the purposes of this strategy document a description of its main sectors and key stakeholders will suffice.



Compulsory education begins with 4-year-olds and includes pre-primary (P1 and P2), primary (grades 1 through 6; 1 through 5 in Ticino) and lower secondary education. It is usually achieved at the age of 15 (grade 9). Pre-primary and primary schools are managed by municipalities; lower secondary schools can be managed either by the cantons or by municipalities.



Post-compulsory education is split in the academic track (gymnasium, liceo) and the vocational track, which includes several different modes, from apprenticeship to full-time school, in different professional areas. Vocational education and highschools are managed by the cantons.



Higher education is split in the academic track (gymnasium, liceo) and the vocational track, which includes several different modes, from apprenticeship to full-time school, in different professional areas. Vocational education and high schools are managed by the cantons.

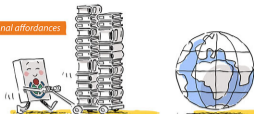


Of course, Swiss communities also offer **adult education** courses and informal learning opportunities, e.g., for specific target groups (elderly people, immigrants) or situations (re-qualification, unemployment, etc.).

The complete and official description of the Swiss education system is available at <https://www.sbf.admin.ch/sbf/en/home/education/swiss-education-area/swiss-education-system.html>.

In this document I will use the term "sector" to identify the above-mentioned levels of the education system (e.g., lower secondary education); the term "area" will be used to indicate a thematic or professional domain (e.g., Biology or Design).

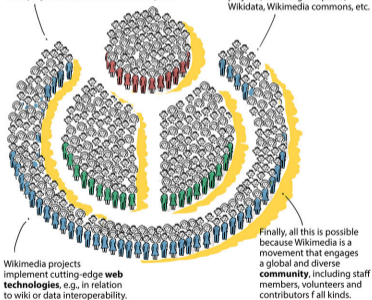
Wikimedia projects educational affordances



The Wikimedia movement is at its core concerned with education, as its declared goal is "to bring free educational content to the world". In order to develop a strategy it is important to identify the affordances or value-generators in the Wikimedia movement that can actually propel its educational effort. Four main affordances have been identified:

Obviously, the immense wealth of **open content**: Wikimedia's first asset is the information provided by millions of contributors in many languages to its projects, first and foremost Wikipedia.

Wikimedia contents are collected and hosted on **open platforms** developed for its big and small projects, including Wikipedia, Wikidata, Wikimedia commons, etc.



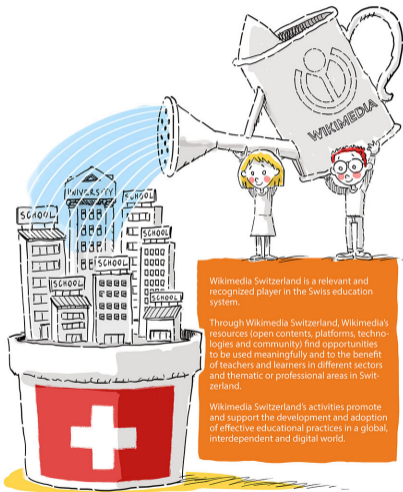
Wikimedia projects implement cutting-edge **web technologies**, e.g., in relation to wiki or data interoperability.

Finally, all this is possible because Wikimedia is a movement that engages a global and diverse **community**, including staff members, volunteers and contributors of all kinds.

Each of these four elements and each of their combinations might suggest possible directions to develop meaningful educational activities.

2. Vision

This strategic document pursues the following vision of Wikimedia Switzerland:



Wikimedia Switzerland is a relevant and recognized player in the Swiss education system.

Through Wikimedia Switzerland, Wikimedia's resources (open contents, platforms, technologies and community) find opportunities to be used meaningfully and to the benefit of teachers and learners in different sectors and thematic or professional areas in Switzerland.

Wikimedia Switzerland's activities promote and support the development and adoption of effective educational practices in a global, interdependent and digital world.

3. Guiding stars: the six principles

Six principles have been identified as the guiding stars of the educational strategy. Two are general (P1 and P2), two address programming (P3 and P4) and two concern WMCH's organization and relationships with the Wikimedia movement (P5 and P6).

[P1] Engage, empower, network and trust teachers



[P2] Establish stable partnerships



GENERAL PRINCIPLES

[P3] Weave programs and events, formal and informal



[P4] Nurture regional good practices



PROGRAMMING PRINCIPLES
(toward the outside)

[P5] Take care of collaborators



[P6] Share in the movement



INTERNAL PRINCIPLES
(toward the inside)



[P1] Engage, empower, network and trust teachers

Teachers (or educators in informal settings) are the key actors in any educational environment. They are the required catalyst that transforms inspirations, technologies, content and tools into actual learning opportunities and activities. The key to deep and sustainable impact in education is having teachers on

board. Strategic action will aim to engage motivated and committed teachers and to empower them, fostering their autonomy in integrating Wikimedia projects in their professional activities. Opportunities for peer-networking among teachers will be precious to foster exchange and develop a sense of community (which will be different from a teacher's peripheral participation in the WMCH community).

Finally, teachers' insights and ideas should be trusted and even their "weird" or more unusual projects could be given a chance to be tried out with proper advice and support.



[P2] Establish stable partnerships

Education takes place in educational organizations either in formal (e.g., school or university) or informal (e.g., afternoon clubs or associations) contexts. WMCH's impact in education can be broader if its action is directed towards supporting trusted partner organizations in different sectors, domains and regions.

Establishing long-term official partnership agreements at institutional level will provide a framework for innovation and access to already existing networks. Some educational organizations, and schools in particular, are controlled by administrative or political bodies. WMCH, as a recognized public utility and non profit organization with a well-known brand and a solid reputation, is in the position to establish positive relationships at this level too.



[P3] Weave programs and events, formal and informal

Strategic action in education should be conceived as weaving a network rather than prioritizing a single focal point or main-stream project, progressively developing an interconnected educational environment.

The Wikimedia movement has a tradition in the organization of events (e.g., Hackatons) and a more limited experience in setting up educational programs with partners. Both formats (and possibly more) should be exploited and further developed, trying to connect them as much as possible, so that students in school programs can get pointers to regional or local events, and vice versa. Connecting partners with each other, also crossing the divides between formal and informal education, is also part of this principle.

[P4] Nurture regional good practices

Teachers (or educators in informal settings) are the key. Considering the institutional structure and the strong linguistic and regional differences in the country, WMCH's educational strategy should be implemented on a regional basis, adapting to each specific context.

Nurturing solid good practices inspired by the above-mentioned principles should have priority, at least initially, over a broader and necessarily coarser national strategy.



[P5] Take care of collaborators

Motivated and creative collaborators are the catalyst to transform technologies, platforms and content into educational opportunities at all levels. WMCH deals with people with different backgrounds and in different roles, from staff members and volunteers to international experts from the Wikimedia movement, etc.

Taking care of them, providing means and opportunities for personal and professional development, and rewarding them - not necessarily (only) with a salary - should be a priority. This includes the teacher that might join WMCH in the education domain.





[P2] Establish stable partnerships

Technology education and teaching and learning with technologies are influenced by complex social and cultural factors. Within the Wikimedia movement, different associates have developed and are developing different approaches and practices, not only through their educational projects, but also by how

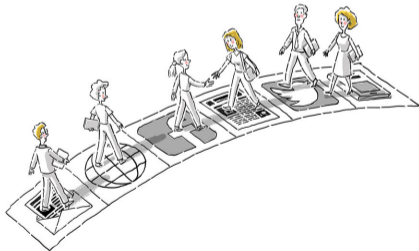
they manage partners and collaborators. Systematically sharing (and fostering sharing) within the Wikimedia movement while at the same time keeping an attentive eye to regional situations will enhance WMCH's self-awareness and standing as a player in education.

A remark about communication

Visibility and outreach are essential to scale up educational activities in a diverse and articulated educational system as the Swiss one. The development of adequate communication channels should accompany the implementation of WMCH's educational activities.

The dissemination of educational activities should exploit effective channels to reach its key target audiences: cantonal and local institutions, teachers, academic staff, etc.

While institutional channels should be identified locally or regionally (e.g., cantonal teachers newsletters or continuing education events), regular and visible communications on social networks might reach out to teachers (e.g., facebook) or academic staff (e.g., Twitter) more effectively than official publications.



4. Learning domains

WMCH, and more broadly the Wikimedia movement, offer learning opportunities in different domains. While they are practically interconnected within single projects (e.g., Wikipedia can be used to learn a History topic and to learn about web technologies), their relevance is different to different education contexts and to individual teachers/educators. Also the effort, resources and expertise required for domain-specific projects can be different. Distinguishing them clearly can also provide insights to develop more interesting proposals and to identify the right partners.

In this strategy, four domains have been developed



[D1] Media and Information Literacy (MIL)



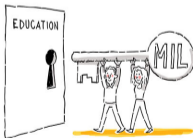
[D3] Learning about web technologies



[D2] Learning about a topic



[D4] Develop and contribute to Wikimedia project



[D1] Media and Information Literacy (MIL)

Media and Information Literacy (MIL) refers to that wide set of competences required to identify an information need and consequently locate, access and use relevant information to solve it.

MIL is the backbone of digital media literacy and a key learning domain for democratic societies.

MIL is also an integral part of the Media und Informatik / MITIC / Technologie e media sections of the 2015 HarmoS curricula for Swiss compulsory education, and of course a central topic in high school and higher education, too.

Wikimedia projects provide meaningful contexts for learning about encyclopedias, licenses, collaborative editing, the scientific system, quoting and citing, and the web in general. The project Reading Wikipedia in the classroom, developed by the Wikimedia Foundation in collaboration with UNESCO developed useful teaching resources for MIL education. Le Jeu Pédagogique, currently under development at Wikimedia France, is another creative example in this direction.



[D2] Learning about a topic

School is about learning subject matter content, and formal education relies on good informative materials that teachers can use for creating usable instructional materials or as reference for students. Wikimedia Projects provide a huge open access base for quality materials to support learning in many disciplines, including for example History, Geography, Biology, Philosophy etc. The issue of teacher's trust in the quality of Wikipedia contents (and indirectly of other projects) plays a central role.

Of course, relating Wikipedia articles to school curricula is not an easy task. The Wikidata for Education project, piloted by the Wikimedia Foundation, aims at collecting school curricula in order to generate a useful database

for establishing such connections. The Wikipedia Primary School project, led by SUPSI and WikiAfrica, also explored this connection, with a focus on South Africa.

Wikipedia-like projects for children also provide opportunities in this direction, including Txikipedia, Vikidia, Le dico des Ados, Wikikids, Klexicon, Chiquipedia and Wikimini.



[D3] Learning about the web technologies

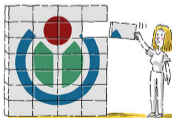
Today the web is a commodity, and understanding how its technologies work is part of basic technology literacy. Web technology is also part of the Media und Informatik / MITIC / Technologie e media sections of the 2015 HarmoS curricula for Swiss compulsory education, and of course a key domain in vocational education and in Informatics in high school and higher education.

Wikimedia projects are based on state-of-the-art technologies, and, as a non-profit organization, Wikimedia enjoys more freedom to explain its inner workings - thus representing a great

real-life platform to learn about distributed systems, data interoperability, programming, etc. - while also sharing its unique business model, thus offering an opportunity to get insights on the business and commercial side of the web.

Programming in connection with WikiData provides a powerful opportunity to develop data management skills in real life (possibly with a client) for students in Informatics, Electronics or related fields (e.g., Wirtschaftsinformatik).

The Technology page of the Wikimedia Foundation offers a wealth of information on technology-related aspects (although not in a didactic form).



[D4] Develop and contribute to Wikimedia projects

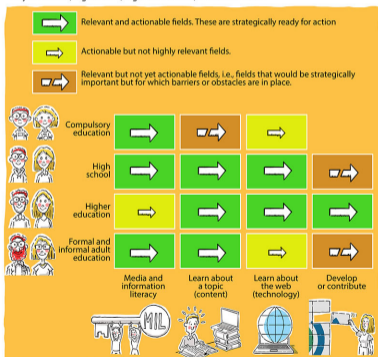
Of course, the deepest and most rewarding experience with Wikimedia projects comes from joining in as a contributor or programmer. Actively taking part in the ongoing movement of free knowledge provides an opportunity to touch all the above-mentioned topics and to reflect on one's identity and potential contribution to society.

The children-oriented projects mentioned above (cf. D2) embody this learning-oriented approach to contributing for lower grades (although it is not always clear what is meant by "children" in terms of age or linguistic competences, which vary enormously between primary and secondary school), while there are countless examples of integration of Wikipedia in academic courses. WikiShootMe is a nice simple tool that can provide guidance for contributions to Wikimedia Commons.



5. Fields of action

The combination of learning domains and school sectors allows the identification of relevant fields of action for WMCH. For simplicity's sake, sectors are reduced to four: compulsory education, high school, higher education, adult education.





[F1] Compulsory education

The educational focus for compulsory education is MIL, which provides a set of relevant and recognizable (by teachers and institutions alike) learning goals.



Using Wikimedia projects to learn about a topic (as readers or also partially as contributors) would also be a strategic action field, but it does not seem yet fully actionable for at least two reasons:

1. The aforementioned challenging matching of open content items with school programs;



2. The complexity of Wikipedia contents, both as size and structure of the articles and as language, which is often technical. Exploring the path of projects like Simple English Wikipedia or Wikimini or Txikipedia could lead to enabling innovations in this area.



In many schools, connectivity and infrastructure are not yet common commodities. Offline wikipedia projects like Kiwix might be relevant here.

[P1] Teachers



- Listen to teachers and identify their needs (not necessarily overlapping with institutional ones).
- Invest in training teachers (both in initial and continuing education) with courses, MOOCs, resources, etc.
Aim to make them autonomous in using Wikimedia projects in their job.
- Document and share successful projects from a perspective of sustainability.
- Engage school librarians as experts, providing support to teachers and disseminators in their school.

[P2] Partnerships



- Connect explicitly with school programs (reference to Wikidata project for international perspective)
- Establish partnership with schools, also connecting with Municipalities and Cantonal administrations.

[P3] Programs+events



- Wikipedia is the most well-known project: it might serve as an access point or "door opener" to the other projects.
- Connect teacher education to teacher-led class activities and to events or competitions (maybe piggybacking on existing ones).

[P4] Regional



- Engage local communities and schools, don't stop at cantonal offices.
- Come up with local/regional events.
- Connect schools and teachers on a regional level.

The "develop or contribute to WM projects" field of action is not highlighted in the table above. On the one hand, children in compulsory education could only contribute to children wiki projects (like Wikimini and the others already mentioned); on the other, contributing would be for them not a goal, but an instructional strategy for achieving other goals, namely those related to the other fields of action. This emphasizes the fact that nurturing young editors can be a sustainability goal for WMCH, but not an educational goal for school teachers.



(F2) High school

High school comprises both academic and vocational post-compulsory education (Sek II level). The focus here should be to advance MIL education and to promote the use of Wikimedia open content for learning (the aforementioned issues about content complexity partially apply here, especially for vocational education). Moreover, the educational use of Wikimedia projects can promote authentic, problem-based learning about web-technologies, especially considering the recently introduced subject Informatics/Computer Science in high schools and technologically oriented vocational careers. The contribution to Wikimedia projects could be a topic here, although it is partly made difficult by the high requirements set by (part of) the community. Having a safe space where contributing is possible also for non-specialists might make a difference.

(P1) Teachers



- Invest in training teachers (both in initial and continuing education) with courses, MOOCs, resources, etc. Aim to make them autonomous in using Wikimedia projects in their job.
- Document and share successful projects, targeting teachers of the same subject matter.
- Engage school librarians as experts, providing support to teachers and disseminators in their school.

(P2) Partnerships



- Establish partnerships with schools.

(P3) Programs+events



- Identify relevant thematic projects connected to specific subject matters.
- Connect with local/regional events.

(P4) Regional



- Engage local communities and schools, don't stop at cantonal administrations.
- Pivot on high schools to disseminate knowledge regionally supporting motivated and competent people. The Wikimedian in residence program might provide inspiration, also in the form of a Wikigrant, i.e., funding 3-4 h/week of a teacher to develop and promote Wiki-related activities in her school/region.



[F3] Higher education

Higher education - both academic and vocational, but especially the former - is probably the sector that best fits for an educational activity of WMCH, and it is where potential future contributors can be nurtured and trained. MIL competences are already strong enough to allow access, comprehension and editing of the contents, and, in informatics/engineering, software design and development skills are also available to facilitate projects. The strategic advice provided here is aimed at strengthening and expanding what is already happening.

[P1] Teachers



- Invest in training teachers (both in initial and continuing education) with courses, MOOCs, resources, etc. Aim to make them autonomous in using Wikimedia projects in their job.
- Promote teacher engagement also fostering research work and academic publications.
- Get in touch with teachers through academic and informal networks (often based on disciplines), and through each higher education institution teaching support units (cf. eduhub).

[P2] Partnerships



- Try and get academic credits for contributions to Wikimedia projects.

[P3] Programs+events



- Develop curricula that fit each discipline and support teachers to identify new topics on which focus their projects.
- Be thematic: identify relevant and “hot” topics for engaging students (sustainability, inclusion, climate, etc.).

[P4] Regional



- Regionality in higher education is second to the individuality of each institution. Work with teachers and research units to find projects that fit the academic culture.
- The Wikimedian in residence program might provide inspiration, also in the form of a Wikischolarship, i.e., a small grant to develop original educational approaches in a specific discipline or area.



[F4] Adult education

Adult education is often the forgotten segment in the system, but it directly appeals to the divulgative and inclusive mission of the Wikimedia movement. Open content might provide an extremely rich support in the development of digital literacy skills for elderly people, or in the education for integration - be it related to language, society or culture - for migrants.

The aforementioned issues about content complexity fully apply in many cases also here, making the exploration of alternative solutions even more relevant.

Contribution to the projects can also be an option, although possibly only for learners with a specific background (e.g., elderly people with a high education level, or migrants with a technical education).

[P1] Teachers



- Identify pioneer educators, explore their practices and listen to their needs.
- Create networks of engaged educators.

[P2] Partnerships



- Associations in these domains are mostly non-profit, so they might resonate with WMCH.

[P3] Programs+events

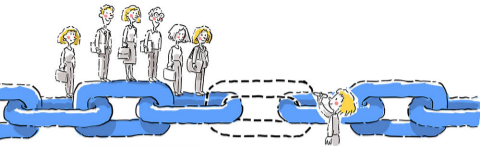


- Aim at developing meaningful programs for specific target groups (elderly, people, immigrants, unemployed, etc.) responding to specific learning needs.
- Connect to local/regional events.

[P4] Regional



- Connect with (mostly informal) learning organizations in these domains, possibly starting from cantonal registers or regional federations.



The missing link: teacher education

Actions that aim to impact an educational system in the long term and provide real added value to its learners should focus on teacher education. Teachers are the enablers of any educational approach, and prospective teachers are the shapers of tomorrow's schools. A primary concern of WMCH should therefore be how to connect to the Swiss teacher education organizations, namely:



The 14 Pädagogische Hochschulen / Haute écoles pédagogiques / Alte scuole pedagogiche which train pre-primary, primary and secondary school teachers.



The Swiss Federal University for Vocational Education and Training (SFIVET) for vocational education.



The few universities which provide habilitation for high school teachers or integrated secondary education abilitation.

The integration of WMCH activities should follow the priorities outlined above for each sector (e.g., MIL for compulsory education, web technologies for higher education), and address both initial and continuing education. The focus should be on school curricular areas, and not primarily on Wikipedia or the open content movement.

Support for specific courses or experimentations will at the same time diffuse basic knowledge about the Wikimedia movement and the related educational opportunities, and possibly identify engaged and committed teachers. Also, partnership for educational innovation development and research could emerge. For example, the documentation, assessment and showcase of rich school projects would be valuable to all partners, both as materials for teacher education and academically. The idea of a Wikimedian in residence (or variation thereof) might also prove valuable in this teacher education universities.



Where to start?

The previous pages provided a broad strategy canvas, encompassing the whole Swiss education system. While the six principles provide consistent and synthetic guidance, the details in the different fields of action are many. This last page tries to identify potential first steps in the implementation of the strategy.

Such first steps should be considered as advice, and should of course be balanced on resources and on opportunities, and also take into consideration the profile, experience and network of the collaborators that will carry them out. The order of presentation is not meant to suggest strict sequentality.

Possible first steps



- [A]** Design and develop learning resources that foster teacher autonomy in using WM projects and tools in teaching.
- Target them specifically to teachers (e.g., select relevant examples)
 - Engage teachers in their design and fine-tuning.



- [B]** Focus on a sector (e.g., Primary education) and region (e.g., Lausanne Region), and establish partnerships with one or more schools, offering training courses for teachers and support to small projects.
- Study the relevant curriculum and identify opportunities, engaging teachers.
 - Consider establishing Wikigrants (as described above) as part of the partnerships.
 - Connect school projects with informal education and events in the region, and connect school subject matter with themes for events.



- [C]** Document the projects and make them available to other teachers in the region.
- Exploit institutional channels (e.g., Departmental newsletters)
 - Try to connect with teacher continuing education courses
 - Connect with teacher education institutions (in the medium term, discuss about contributing to pre-service teacher education)
 - OpenEdu might provide an interesting platform for this.



- [D]** Share with the Movement and get inspiration from other associates. Make this an ongoing dialogue.



Interviews

- Sailesh Patnaik (interviewed 11.1.22). Activist, Community Engagement Specialist, Program Officer at Wikimedia Foundation
- Gabriel Thullen (interviewed 13.1.22). Secondary school teacher in informatics, held continuing education courses for teachers on WP, used WP for introduction to the web with students. Former board member of WMCH.
- Mathilde Louis (interviewed 14.1.22). Master degree in Digital Humanities, Libraries and Archives, currently Master student in Learning Sciences. Staff member of WMFR on education projects, with a focus on secondary education.
- Cristina Sarasua (interviewed 18.1.22). Researcher in Computer Science, UZH; Activist and engaged in projects with WikiData.
- Vivian Epiney (interviewed 18.1.22). Primary school teacher, collaborator of ICT-VS (the "digital school unit" of Canton VS), founder and manager of Le Dico des Ados.
- Beat Estermann (interviewed 27.1.22). Professor, Berner Fachhochschule, collaborator of WMCH in the GLAM sector.



Expert reviews

Expert reviews have been provided by

- Koldo Biguri (faculty member of the University of the Basque Country, founder of Txikipedia)
- Martin Hermida (researcher at the Pädagogische Hochschule Schwyz and program manager of the Master Fachdidaktik Media und Informatik)
- Sarah Orlandi (communication consultant at WMCH)



Projects For teachers

- MOOC by Wikimedia Italy + UNIPD
https://learn.eduopen.org/eduopenv2/course_details.php?courseid=474
- MOOC Wikimedia France on Wikidata / Wikipedia
<https://www.wikidata.org/wiki/Wikidata:MOOC/fr>
https://fr.wikipedia.org/wiki/Aide:Wikip%C3%A9dia_pas_%C3%A0_pas
- Wir Lernen Online by Wikimedia Deutschland
https://outreach.wikimedia.org/wiki/Education/News/April_2020/Fast_help_for_schools:_An_interactive_platform_for_Open_Educational_Resources
- MOOC by Wikimedia Argentina
<https://campus.wikimedia.org.ar/>



Wiki projects for kids

- Wikimini | <https://wikimini.org/>
- Le Dico des Ados (fr) | <https://fr.dicoado.org/dico/Dico:Accueil>
- Klexicon (de) | https://klexikon.zum.de/wiki/Klexikon:Willkommen_im_Klexikon
- Vikidia (multilanguage) | <https://www.vikidia.org/>
- Wikikids (nl) | <https://wikikids.nl/>
- Txikipedia (eu) | <https://eu.wikipedia.org/wiki/Txikipedia:Azala>



Inclusive projects

- Simple English Wikipedia | https://simple.wikipedia.org/wiki/Main_Page



About Media and Information Literacy

- Reading Wikipedia in the classroom
<https://wikimediafoundation.org/our-work/education/reading-wikipedia-in-the-classroom/>
- Game for understanding what Wikimedia is in relation to MIL
https://fr.wikipedia.org/wiki/Wikip%C3%A9dia:Wikim%C3%A9dia_France/Jeu_p%C3%A9dagogique



Event formats

- Wikicontest
https://fr.wikipedia.org/wiki/Projet:Wikiconcours_lyc%C3%A9en_2020-2021
- Thematic editathons (e.g., women) | <https://500womenscientists.org/wikipedia-editathon>



Other

- Kiwix (offline Wikipedia) | <https://www.kiwix.org/en/>
- WikiShootMe | <https://wikishootme.toolforge.org/>
- Wikimedien in residence
https://meta.wikimedia.org/wiki/Wikim%C3%A9dia_France/Actions/Wikim%C3%A9di en_en_r%C3%A9sidence