Reading Wikipedia in the Classroom

using Wikipedia to foster media and information literacy skills

Abuja, Nigeria.

- Module 1
- Module 2
- Module 3
Reading Wikipedia in the classroom

Using Wikipedia to foster media and information literacy skills.

Module 1

Module 2

Module 3
This word cloud is generated from 713 teachers’ responses to a survey that was conducted on July 2020 in Bolivia, Morocco, and Philippines.
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Introduction

Around the world, students and educators are using Wikipedia as a learning resource. As teachers, we can either get frustrated by students misusing Wikipedia or we can use it to teach them important lessons on media and information literacy. We can even use it to teach vital 21st-century skills like critical thinking, communication, and collaboration. In almost every academic subject, students can use Wikipedia as a “first stop” for gathering an overview of a topic.

Let’s help them do it responsibly!
The Education team at the [Wikimedia Foundation](https://www.wikimedia.org) is excited to present this resource as an integral part of the “Reading Wikipedia in the Classroom” program.

“Reading Wikipedia in the Classroom” is a training program that helps teachers understand and leverage Wikipedia as a learning tool by connecting it to the components of UNESCO’s Media and Information Literacy framework. This program was designed to align with local education systems and teachers’ realities. Through a critical approach to Wikipedia, we aim to help educators to teach vital media and information literacy skills for the 21st century, including understanding how information is produced, how to access and evaluate content online, and how to understand biases and knowledge gaps. This program also addresses key questions posed by teachers about how to keep students safe online, and how to equip them to face the various forms of disinformation online.

The program resources have been adapted to multiple languages and we encourage further localizations of the available resources.

**Wikimedia Foundation**

The [Wikimedia Foundation](https://www.wikimedia.org) is the non-profit organization that hosts Wikipedia and its sister projects. We work towards a world where everybody can freely share in the sum of all knowledge. We support a global community of volunteers who collaboratively collect, develop, and share educational content, and we advocate for values and policies that guarantee the right to free knowledge.

**READING WIKIPEDIA IN THE CLASSROOM PILOT TEAM**

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This Teacher’s Guide is aligned with the three components of UNESCO’s Media and Information Literacy (MIL) framework: access, evaluate, and create.
UNESCO proposes an integrated approach towards an interdisciplinary concept of literacy, and as such MIL is defined as “a set of competencies that empowers citizens to access, retrieve, understand, evaluate and use, to create as well as share information and media content in all formats, using various tools, in a critical, ethical and effective way, to participate and engage in personal, professional and societal activities”. We believe that learning how to critically engage students with Wikipedia is key to achieving the competencies encompassed by the MIL framework. For the development of this Teacher's Guide, we have used principles of the Understanding by Design framework to organize the essential questions and enduring understandings. Each module incorporates clear learning outcomes for teachers as well as classroom applications of the knowledge they will gain. We have followed a constructivist approach where we connect the teacher’s own previous experiences and knowledge with how Wikipedia works.

Reflection questions and activities help teachers construct new knowledge and connect it to their classroom practices and experiences.

This pedagogical approach is in tune with our educational philosophy:

- We believe that open educational resources are vital to providing quality education for all and that participating in open movements helps students grow as 21st-century learners.
- We believe students learn best when they facilitate their own learning journey with the support of teachers.
- We believe people of all backgrounds and abilities should be able to participate and learn through our programs.
- We value local knowledge and experiences and believe that our programs should enable the inclusion of localized learning resources in the classroom.
- We believe student wellbeing is imperative to their academic and social development.
How to use this Teacher’s Guide

The content of this Teacher’s Guide incorporates the wealth of knowledge created by Wikimedia communities and it has been designed to easily adapt to different contexts. It draws from Wikipedia policies, guidelines, essays written by Wikimedians, and a variety of resources helpful to understand Wikipedia, its communities, and practices. You can find the original sources from where this content was adapted in the References section.

This Teacher’s Guide is licensed by the Wikimedia Foundation under the Creative Commons Attribution-ShareAlike 4.0 international license. This means that you are free to copy, redistribute, adapt, and translate this resource for any purpose as long as you provide appropriate credit to the authors and use the same Creative Commons license to distribute your contributions.
Navigation Key

**Activity box**
The activity box indicates an activity required for the training, each section in this guide has at least one. Read the instructions and use the blank pages to take notes if you like. If you're using this Teacher's Guide as part of a learning cohort, you will have a forum dedicated to sharing your work.

**Plug into Education box**
The “Plug into education” boxes indicated content that is directly related to education theories or pedagogical trends. Use this information to make deeper connections between the content and your teaching practice.

**For Your Information box**
The “For your information” box calls attention to interesting or insightful information about the topic we're reviewing in the section.

**Annex**
The annex contains sample lesson plans that you can use or adapt to meet the needs of your students. Review the lesson plans before you do the final activity.
# Training Schedule

## MODULE 1

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## MODULE 3

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</table>
Socializing your learning

No matter where you are, by learning about Wikipedia and bringing it to your classroom you are becoming part of a community of innovative educators committed to lifelong learning.

If you are using these resources through a facilitated learning cohort, your local facilitator will tell you where to share your responses and assignments (eg: Facebook group, Moodle course, Discord channel).

During the training, you will share and report on your progress as you work through the assignments in each module.

If you are an independent learner, consider the following ideas to make your learning more social:

Find a colleague who is also interested in expanding their knowledge and skills on Wikipedia, media and information literacy, or digital spaces. Schedule bi-weekly check-ins to share your progress and learning, help each other clarify some doubts, or go deeper into the topics that interest you. By the end of Module 3, you could meet monthly to continue learning to contribute content to Wikipedia together!

If you use social media, decide on a day where you can post about your main learnings of the week to, share your reflections, helpful links, and tag us via @WikimediaEdu on Twitter or @WikimediaEducationTeam on Facebook. We would love to see what you’re getting from this experience!
Module 2
Evaluating Information

MIL Competency
Understanding, assessment and evaluation of information and media

Learning Outcomes
1. Teachers will be able to use Wikipedia’s pillars and guiding principles to analyze the quality of a Wikipedia article
2. Teachers will be able to use various components of a Wikipedia article to determine the quality of information

Classroom Application
1. Teachers will be able to incorporate Wikipedia as a classroom tool for teaching media and information literacy
2. Teachers will be able to evaluate students’ media and information literacy skills using Wikipedia
Module 2
Learning Pathway

2.1 Wikipedia's Pillars

2.2 Wikipedia's guidelines

2.3 Wikipedia's core content policies

2.4 Overview of Wikipedia article structure

2.5 Talk pages and other communication spaces on Wikipedia

2.6 View history and the process of knowledge creation

2.7 References and verifiability

2.8 Evaluating a Wikipedia article

2.9 Facilitating access to quality academic sources for Wikipedia
There are 5 fundamental principles, or pillars, by which Wikipedia operates.

1. **Wikipedia is an encyclopedia**
   Wikipedia combines many features of general and specialized encyclopedias, almanacs, and gazetteers. Wikipedia's scope is heavily influenced by these traditions. Encyclopedias don't seek to contain every single statement ever made on a topic but give a reasonably deep overview so that the reader can confidently do more research about the topic. Wikipedia is not an advertising platform, an experiment in anarchy or democracy, an indiscriminate collection of information, a web directory, or a newspaper.

2. **Wikipedia is written from a neutral point of view**
   Wikipedia strives for articles that document and explain the major points of view in an impartial tone - this is achieved by using reliable, authoritative sources. Information and issues about a topic are rather explained than debated. Topics that have one well-recognized point of view and those with multiple points of view are presented accurately and in context.

3. **Wikipedia is free content**
   that anyone can edit, use, modify, and distribute
   Since all editors freely license their work to the public, no editor owns an article, and any contributions can and will be edited and redistributed. Wikipedia editors must respect copyright laws, and never plagiarize from sources.

4. **Editors should treat each other with respect and civility**
   Wikipedians must demonstrate respect for all contributors, even when there are disagreements. Wikipedians should not engage in personal attacks. Wikipedia editors should act in good faith, and assume good faith on the part of others.

5. **Wikipedia does not have firm rules**
   Wikipedia has policies and guidelines, but they are not carved in stone; their content and interpretation can evolve over time. Their principles and spirit matter more than their literal wording, and sometimes improving Wikipedia requires making an exception.
**CO-CONSTRUCTING EXPECTATIONS**

Much in the same way that Wikipedia contributors consider themselves a community, our classrooms can be built as a *community of learners*. Research shows that when we give our students some choice and agency over how their learning is governed, they may be more motivated to learn and participate. It can also be part of the *hidden curriculum* of how we teach students to interact with each other and the world. Working with your students to set the expectations to which they hold themselves and each other accountable can be a valuable lesson to incorporate into your teaching practice. Wikipedians do this through consultations and consensus building in their communities.

Have you done something like this with your students? How did you go about doing it? Tell us more by answering the questions below. Then, share your answers in the dedicated forum.

<table>
<thead>
<tr>
<th>What are some class expectations that your students have collaboratively defined? If there aren't any, how can you get your students to be co-authors of your classroom's guiding pillars?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Are any of Wikipedia's five pillars relevant to your classroom community? What do you think will resonate most with your students in constructing your class expectations?</td>
</tr>
<tr>
<td>How can you help students understand the importance of these guiding pillars and take ownership of them?</td>
</tr>
</tbody>
</table>
In our classrooms, we set boundaries around acceptable and unacceptable behavior. We establish goals for each of our students and the classroom community as a whole. Much like our own learning communities, Wikipedia is governed by sets of guidelines. These guidelines inform everything from how people should behave on Wikipedia to naming conventions, and even how an article gets deleted. These guidelines establish norms for how the community works together to achieve its goals.

For now, let’s focus on the behavioral guidelines, as these will help you to understand how the community works together to ensure that Wikipedia is accurate, reliable, and up to date.

Assume good faith
Unless there is strong evidence to the contrary, Wikipedia editors are encouraged to assume that people who work on the project are trying to help it, not hurt it.

Conflict of interest
Wikipedia editors are not to use Wikipedia to promote themselves, their friends or family, their websites, or their organizations.

Disruptive editing
Participants with a consistent activity that disrupts progress toward improving an article or building a reliable encyclopedia may be blocked or banned indefinitely from editing Wikipedia.

Do not disrupt Wikipedia to illustrate a point
Wikipedia editors should state their points. However, they should not spam Wikipedia, unfairly nominate articles for deletion, push rules to their limits, or otherwise create work for other people just to prove a point.

Etiquette
Contributors have different views, perspectives, and backgrounds, sometimes varying widely. Treating others with respect is key to collaborating effectively in building an encyclopedia.

Please do not bite the newcomers
Many new contributors lack knowledge about Wikipedia policies. Nevertheless, Wikipedia editors should always understand that new contributors are prospective “members” and are therefore our most valuable resource.

Compare and contrast Wikipedia’s behavioral guidelines to the ones you set for behavior with your students. What would a classroom community look like if they were following Wikipedia’s behavioral guidelines? Share your thoughts in the dedicated forum.
2.3 Wikipedia’s Core Content Policies

One of the main misconceptions teachers have about Wikipedia is that it is an “anything goes” territory on the internet: if people can freely edit and add content, then they will write whatever they want. However, Wikipedia’s content is governed by three core content policies. These policies determine the type and quality of material that is acceptable in Wikipedia articles. These policies complement each other, and they should not be interpreted in isolation from one another.

1. **Neutral point of view:**
   All Wikipedia articles and other encyclopedic content must be written from a neutral point of view, representing significant views fairly, proportionately and without bias. To see some examples, try this neutrality quiz!

2. **Verifiability:**
   Material challenged or likely to be challenged, and all quotations, must be attributed to a reliable, published source. In Wikipedia, verifiability means that people reading and editing the encyclopedia can check that information comes from a reliable source.

3. **No original research:**
   Wikipedia does not publish original thought: all material in Wikipedia must be attributable to a reliable, published source. Articles may not contain any new analysis or synthesis of published material that serves to advance a position not clearly advanced by the sources.
**EXPLORING WIKIPEDIA’S CORE CONTENT POLICIES**

Pick a topic that interests you and use Wikipedia to find 2-3 related articles. You’re going to evaluate how well these articles reflect Wikipedia’s core content policies. Use the table below to document your answers and share a summary in the forum. Feeling adventurous? You can also click [here](#) to get a random Wikipedia article every time!

<table>
<thead>
<tr>
<th>Article title:</th>
<th>ARTICLE 1</th>
<th>ARTICLE 2</th>
<th>ARTICLE 3</th>
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<tbody>
<tr>
<td>Neutral point of view:</td>
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<tr>
<td>Is the article presenting information fairly and</td>
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<tr>
<td>without bias?</td>
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<tr>
<td>Verifiability</td>
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<tr>
<td>Can you identify the sources of the information</td>
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<td>presented in the article?</td>
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<tr>
<td>How reliable are the sources?</td>
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<tr>
<td>No original research</td>
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<td>Do any sources quoted in the article contain</td>
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<td>original research?</td>
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<td>Overall assessment</td>
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<td>Based on your analysis, how reliable do you think</td>
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<td>this article is?</td>
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</table>
2.4 Overview of Wikipedia Article Structure

In the following sections, we will explore the different elements that are generally part of a Wikipedia article. They can provide you and your learners with pointers for a more critical approach to the information you consume online and offline.

Let’s start with a quick overview:

- **The “Talk” section** shows discussions around the topic of the article. It shows how knowledge is constructed through informed exchanges.
- **The numbers found along a Wikipedia article** indicate the sources used to create it. Articles can be assessed according to the number and quality of sources they have.
- **This tab** shows the edits done on a Wikipedia article, how the article has evolved over time, and how up-to-date the information is.

**Use the search box** to look for more information without leaving Wikipedia.

**There are badges** that highlight articles as “good” or “featured” content. Similarly, warning banners indicate areas of improvement for an article, citations needed, or potential conflicts.

**Blue links** allow you to explore more Wikipedia articles related to the topic. **Red links** indicate that the page does not exist yet but it probably should!

**The infobox** summarizes the article’s key points. It provides the students with a quick overview of the topic.
2.4 Overview of Wikipedia Article Structure

A table of contents presents how the content of an article is organized. It allows students to understand how the article is structured and helps them to optimize their information search.

This section compiles all the sources cited in an article. It can also contain notes clarifying or expanding on information contained in the article. Students can use this section to expand their search for information beyond Wikipedia and find academic sources that they can include in their own research. Wikipedia should only be the beginning of their journey.

ACTIVITY

TRY IT YOURSELF!

Can you identify the elements presented above in the following articles?

- Amazon River
- World Heritage Site
- TikTok

Note: If you’re feeling adventurous, you can click here to get a random high quality Wikipedia article to explore.

References

2.5 Talk pages and other communication spaces on Wikipedia

How often do you get a behind-the-scenes look at how textbooks are published? How often do you consider who has written the educational resources you use—their backgrounds, or the perspectives that might be guiding their writing? One of the most amazing things about using Wikipedia as a learning tool is that both you and your students can peek behind the curtain at how information is produced and curated. It’s like being in the room with the publishers, and being allowed and encouraged to ask questions—or even contribute!

Talk pages (also known as discussion pages) are spaces where editors can discuss and coordinate improvements to articles or other Wikipedia pages. Wikipedia volunteers use talk pages to diagnose problems in an article, debate the notability of a topic, or assess an article’s quality.

Let’s take a look at a section of the Talk page of the article “Early childhood education”. What skills and values are the editors demonstrating?

In addition to revealing discussions around content improvement, an article’s talk page can show you if articles are meeting certain quality standards based on content assessments established by the community of editors. Depending on the Wikipedia language edition you are visiting, this assessment system may vary, or sometimes not exist. On English Wikipedia, this content assessment is mainly performed by editors who are part of a WikiProject. A WikiProject is a collaborative initiative amongst Wikimedians who work together as a team to improve specific topic areas of the encyclopedia. You will learn more about WikiProjects in Module 3.
### 2.5 Talk pages and other communication spaces on Wikipedia

The content assessment done by these editors is expressed through a letter scheme, for example:

<table>
<thead>
<tr>
<th>Level</th>
<th>Description</th>
<th>Article/Category</th>
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<tbody>
<tr>
<td>FA, GA, A</td>
<td>Featured Articles, Good Articles, and A-Class articles. The article is well organized and essentially complete, having been examined by impartial peer reviewers.</td>
<td>Muisca Art</td>
</tr>
<tr>
<td>B</td>
<td>The article is mostly complete and without major problems but requires some further work to reach good article standards.</td>
<td>Geography of Nigeria</td>
</tr>
<tr>
<td>C</td>
<td>The article is substantial but is still missing important content or contains much irrelevant material. The article should have some references to reliable sources, but may still have significant problems or require substantial cleanup.</td>
<td>Muhammadu Buhari</td>
</tr>
<tr>
<td>Start</td>
<td>An article that is developing but still quite incomplete. It may or may not cite adequate reliable sources.</td>
<td>Divsha Amirà</td>
</tr>
<tr>
<td>Stub</td>
<td>A very basic description of the topic. Can be well-written, but may also have significant content issues.</td>
<td>Germaine Arbeau-Bonnefoy</td>
</tr>
</tbody>
</table>

Let's go back to the Talk page of the [Early childhood education](https://en.wikipedia.org/wiki/Talk:Early_childhood_education) article. At the top of the page you can see the content assessment established by editors of the [WikiProject Education](https://en.wikipedia.org/wiki/WikiProject_Education).
### EXPLORING TALK PAGES

Let’s go back to the articles you explored in the previous activity - this time we will pay attention to their talk pages.

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<thead>
<tr>
<th>ARTICLE</th>
<th>MAIN DISCUSSIONS ON THE TALK PAGE</th>
<th>CLASS (IF AVAILABLE)</th>
<th>WHAT NEW INSIGHTS HAVE YOU GAINED FROM EXPLORING THE TALK PAGE OF THE ARTICLE?</th>
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</thead>
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<td>Amazon River</td>
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<td>World Heritage Site</td>
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<tr>
<td>TikTok</td>
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</table>
Other discussion spaces

Along with article and user talk pages, you can find Wikipedia editors participating in other discussion spaces to seek help from experienced editors, discuss Wikipedia policies, or to plan online or offline events (just to name a few examples). There are many such participation spaces, we are introducing two of them here:

**The Teahouse** is a help space on English Wikipedia that organizes experienced editors to actively provide encouragement and peer support to promising new editors. Experienced editors who participate in the Teahouse take the role of Hosts. Hosts invite and welcome new editors to the Teahouse, answer questions, offer editing advice, and foster a supportive environment.

**The Wikipedia Village Pump** is a communication space used by Wikipedia editors to discuss various topics including technical issues, policies, and operations of Wikipedia. On English Wikipedia, the Village Pump is divided into 6 sections to guide volunteers to the appropriate discussion space.

---

**PLUG INTO EDUCATION**

**DIGITAL CITIZENSHIP**

Effective communication and collaboration are key [21st century skills](#) and they gain particular importance on digital platforms that put users in contact with people from different cultural, socioeconomic, and linguistic backgrounds.

Digital citizenship refers to the use of information technologies and digital communication platforms to actively and respectfully engage with others. Additionally, [UNESCO](https://www.unesco.org) emphasises the role of digital citizenship skills in empowering users to be “self-regulated and resilient”. This is important as students can face challenges around violence, misinformation, and safety online.

---

**ACTIVITY**

How can you help, or are already helping, your students to become critical and respectful digital citizens?

Share your ideas in the dedicated forum.
2.6 View history and the process of knowledge creation

Most people never see the process authors go through to write a book, or a newspaper or magazine article. This can involve identifying a topic to investigate, researching the various (sometimes competing) perspectives on that topic, producing a draft, incorporating feedback from an editor, and many cycles of revisions to create the final piece. Wikipedia articles are different. As wiki pages are written by many editors, they contain a record of the entire process: from first sentence to final product. This record is the “page history”, and it is free for anyone to examine.

Clicking on the “View History” tab of any Wikipedia article reveals a list of all the article’s previous revisions, including the date and time (in UTC by default) of each edit, the username or IP address (for anonymous editors) of the user who made the change, and an optional edit summary that briefly describes or explains the changes made to the page.

You can use the page history to examine the differences between any two versions of a Wikipedia article and to track specific changes. It also provides a menu of external tools for different purposes such as accessing pageview statistics. Some features on this tab can also help editors to easily revert vandalism made by a specific user, or to thank editors for their contributions to a Wikipedia article.
## IT TAKES A VILLAGE TO CREATE WIKIPEDIA

Pick a topic that interests you and go to Wikipedia to find 2-3 related articles. Go to their “View History” tab and answer the questions below about each article.

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<th>ARTICLE 2</th>
<th>ARTICLE 3</th>
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<td>When was the last time this article was edited?</td>
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<tr>
<td>Was the last edit done by a registered editor or an anonymous editor?</td>
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<tr>
<td>How many editors have worked on this article in the past 2 months?</td>
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<td></td>
</tr>
<tr>
<td>What kind of content did the most recent editor create?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>How does the quality of this article relate to the activity you can observe in its edit history?</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Go to the forums and share your experiences! Tell us which articles you explored and what you learned from this exercise.

**Note:** Feeling adventurous? You can also click [here](#) to get a random Wikipedia article every time!
Can your students differentiate between factual versus false information? How can they develop the skills needed to critically evaluate the information they encounter?

Students spend an increasing amount of time online and are constantly exposed to information from a variety of sources through traditional media as well as through social networking sites. As one study from 2018 among Argentinian youth explains, this is changing the news consumption habits of young people: rather than intentionally seeking for news from traditional and accredited sources, young people come across news while they are using social media for other purposes.

The role that social media plays in facilitating access to information also creates avenues for the proliferation of various forms of misinformation and disinformation. The New York Times states that the inability to judge information can lead to people believing everything that aligns with their preconceived ideas and beliefs, or categorical mistrust of everything. Neither of these outcomes are characteristics of a responsible and empowered digital citizen.

Given the vast amount of information our students encounter daily, how can we help them to be critical consumers of information online? The International Federation of Library Associations and Institutions (IFLA) suggests eight steps students can take to evaluate information and strengthen their critical thinking skills:

**HOW TO SPOT DISINFORMATION**

<table>
<thead>
<tr>
<th><strong>Consider the source</strong></th>
<th><strong>Check the author</strong></th>
<th><strong>Check the date</strong></th>
<th><strong>Check your bias</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Who is publishing this information?</td>
<td>Who wrote this?</td>
<td>Are these stories still relevant?</td>
<td>How are your own beliefs affecting your judgement?</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Read beyond</strong></th>
<th><strong>Supporting sources</strong></th>
<th><strong>Check the intention</strong></th>
<th><strong>Ask the experts</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Is the headline actually telling the whole story?</td>
<td>Can you verify the sources?</td>
<td>Is it a joke?</td>
<td>Can you consult a teacher librarian, or fact-checking sites?</td>
</tr>
</tbody>
</table>
In the next sections we will explore how you can use Wikipedia to guide your students to better verify sources of information and consider these in their assessment of the information they consume both on Wikipedia and on other online information resources.

**Why is verifiability important?**

As you have seen in the previous module, the articles found in Wikipedia are based on reliable, published sources, making sure that all majority, and significant minority, views are referenced. If no reliable sources are found on a topic, Wikipedia will probably not have an article on it. Wikipedia does not publish original research. Well written, Wikipedia articles accurately summarize the facts, interpretations and opinions of these sources.

In Wikipedia, verifiability means that any reader can confirm that the information in an article comes from a reliable source. These sources can be available either online or offline. If reliable sources disagree, editors seek a neutral point of view by presenting all reasonable opinions found in the sources for the article, giving each side due weight.

Many Wikipedia pages use footnotes or other in-text citations to connect statements in an article with their source, especially if those statements will be challenged. All the information in a Wikipedia article (including texts, lists and captions) needs to be verifiable.

**FOR YOUR INFORMATION**

**CHALLENGES IN ACCESSING RELIABLE SOURCES**

1. Wikipedia relies on the availability of reliable sources to add content to the encyclopedia. However, not all of the world’s knowledge sources are available online yet. Most of these sources come in the form of printed books, news sources, or other documents which have never been digitized or made available online.

2. Wikipedia’s sister project [Wikisource](https://wikisource.org) is a multilingual repository of source texts available under open licenses. Wikisource volunteers digitize, transcribe and proofread texts that were not previously available online and create e-books which can later be used as citations on Wikipedia articles. The [Punjabi Wikimedia Community](https://punjabi.wikipedia.org), for example, is working on Wikisource to make sure that books containing important aspects of their local knowledge are available online and can enrich Wikipedia.

3. Publication and digitization is very expensive, and many communities and cultures haven't been able to publish and digitize their history, culture and community. How do you think Wikipedia’s reliable source policy changes representation of these kinds of knowledge?
2.7 References and verifiability

ACTIVITY

RELIABLE RESOURCES IN EDUCATION

Are all textbooks reliable sources? What power do the educational resources we use in the classroom hold? How do you verify the information contained in the resources you use in the classroom?

Choose three educational resources (textbooks, pedagogical guides, booklets, etc.) that you and your students use. Document your reflections about the questions below and share in the forum:

<table>
<thead>
<tr>
<th>NAME OF EDUCATIONAL RESOURCE</th>
<th>CAN I VERIFY THE SOURCES OF THE INFORMATION CONTAINED IN THIS RESOURCE? HOW?</th>
<th>WHAT INFORMATION/PERSPECTIVE IS MISSING FROM THIS RESOURCE?</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

FOR YOUR INFORMATION

#1Lib1Ref – MICRO-CONTRIBUTIONS FOR LIBRARIANS AND EDUCATORS

#1Lib1Ref (which stands for “1 librarian, 1 reference”) is a yearly campaign inviting every librarian on Earth to improve Wikipedia by adding citations that support existing articles. This ever-expanding campaign happens twice per year (in January and May), and has produced tens of thousands of contributions that boost Wikipedia’s quality and reliability for billions of readers. You will learn more about the different ways volunteers contribute knowledge to Wikipedia in Module 3.
Quality references in Wikipedia

Wikipedia relies upon external, reliable sources. Reliable sources may be published materials with a reliable publication process (including peer-evaluation or fact-checking practices, for example), authors who are regarded as authoritative in relation to the subject, or both. These qualifications should be demonstrable to other people.

Wikipedia articles are based on reliable, published secondary sources and, to a lesser extent, on tertiary sources and primary sources. Secondary or tertiary sources are needed to establish the topic's notability and to avoid novel interpretations of primary sources. Below you can find some guidelines that Wikipedia editors follow to incorporate information from these different kinds of sources:

**Primary sources** are defined as original materials that are close to an event, and are often accounts written by people who are directly involved. They offer an insider’s view of an event, a period of history, a political decision, and so on. They may or may not be independent sources. A primary source may be used on Wikipedia only to make straightforward, descriptive statements of facts that can be verified by any educated person with access to the primary source but without further, specialized knowledge.

**A secondary source** provides an author's own thinking based on primary sources, generally at least one step removed from an event. It contains an author's analysis, evaluation, interpretation, or synthesis of the facts, evidence, concepts, and ideas taken from primary sources. They are not necessarily independent sources and they rely on primary sources for their analysis. Whether a source is primary or secondary depends on context.

**Tertiary sources** are publications such as encyclopedias and other compendia that summarize primary and secondary sources. Wikipedia is considered to be a tertiary source. Many introductory undergraduate-level textbooks are regarded as tertiary sources because they sum up multiple secondary sources. Reliable tertiary sources can be helpful in providing broad summaries of topics that involve many primary and secondary sources, and may be helpful in evaluating due weight, especially when primary or secondary sources contradict each other.
So where can students find the sources used to write a Wikipedia article? Sources are included through a citation or reference. This citation is represented by a number next to a statement or paragraph which links to the source of the information. This number also takes you to the References section which provides complete, formatted details about each of the sources contained in a Wikipedia article so that anyone can find and verify them.
2.8 Evaluating a Wikipedia article

As you have seen in this module, there are criteria for content quality on English Wikipedia that volunteer editors use to determine and signal the quality of an article. Similarly, you can set your own guidelines to help your students critically read and evaluate a Wikipedia article by paying attention to the different elements you have learned in this module.

For example, you can develop a set of positive and negative indicators of quality that your students can use to evaluate a Wikipedia article like the ones below:

- It contains several references from reliable sources.
- It has an informative and clear lead section.
- It covers different relevant aspects of one topic.
- It presents balanced and organized content.
- It is written from a neutral point of view.

- It does not have any references.
- It has a warning banner.
- It contains spelling or grammatical errors.
- It contains outdated information about a current topic.
- It contains unsourced opinions and value statements.

So how can you bring this knowledge to your classroom? In the Annex, you can see examples of activities that integrate Wikipedia in different school subjects as a tool to develop media and information literacy skills.

Check out the “Knowledge Quest” activity as an example of how your students can use the positive and negative indicators of quality to evaluate a Wikipedia article.
**TRY IT YOURSELF!**
In the following table, document how you would guide your students to determine the reliability and quality of a Wikipedia article. You can see an example already in the table and you can use the positive and negative indicators above as guidance.

<table>
<thead>
<tr>
<th>ELEMENT / SECTION</th>
<th>REFLECTION QUESTION</th>
<th>CRITERIA/INDICATOR OF QUALITY</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lead section</td>
<td>Does the lead section provide a good summary of the article’s topic?</td>
<td>The lead section provides a good overview of the article and it is written from a neutral point of view.</td>
</tr>
</tbody>
</table>
As you have learned in this module, every article on Wikipedia requires reliable, published sources. These can guide the readers into critically assessing the quality of the article as well as expanding our search for information beyond Wikipedia. But accessing these resources can be a barrier for many editors. *The Wikipedia Library* is an open research hub where active Wikipedia editors can gain access to the vital reliable sources that they need in order to improve Wikipedia articles.

An active Wikipedia editor will have an account that is at least 6 months old, a minimum of 500 edits, a minimum of 10 edits in the last month, and they do not already have access to the sources provided by the Wikipedia Library. The Wikipedia Library makes the access and use of different academic sources free, easy, collaborative, and efficient for the service of editors and benefit of readers. At the same time, with the great majority of the academic sources being available in English through the Wikipedia Library, we are also reminded of the need to foster access to non-English sources and the importance of projects such as [Wikisource](https://wikisource.org).

In the following article written by Alex Stinson you will learn how a volunteer editor used the services offered by the Wikipedia Library to create a well-sourced article on Wikipedia.
### 2.9 Facilitating access to quality academic sources to Wikipedia

Before you read the article, let’s do a quick exercise! Go to Wikipedia and try to find:

<table>
<thead>
<tr>
<th>An article about a subject you have taught this year</th>
</tr>
</thead>
<tbody>
<tr>
<td>An article about a subject you are curious about</td>
</tr>
</tbody>
</table>

And share your thoughts about:

<table>
<thead>
<tr>
<th>The number of references included in each article</th>
</tr>
</thead>
<tbody>
<tr>
<td>The quality of the references included in each article (Do they come from more than one source? Are they academic articles? Are they news articles from reputable sources? Are they recent sources?)</td>
</tr>
<tr>
<td>The accessibility to the references included in each article (Were they accessible online? Were these websites active? Did you encounter any paywalls?)</td>
</tr>
</tbody>
</table>
Through the previous exercise you were able to identify the importance of having a variety of reliable sources to create a quality Wikipedia article. How is the Wikipedia Library facilitating this work for volunteer editors? You will find out in Alex’s post below.

**Note:** The original article written by Alex Stinson can be found on the community blog for the Wikimedia movement.

### Expanding local history with The Wikipedia Library

The Wikipedia Library gives active, experienced Wikipedia editors free access to a wide range of paywalled databases – reliable sources that are vital for their work. Established partnerships are constantly expanding, getting Wikipedia editors more access to high quality research materials! Moreover, because of those successes, we are having many fruitful discussions with organizations large and small that are interested in helping Wikipedians create public knowledge and link Wikipedia into the larger network of scholarly source materials.

We surveyed Wikipedia users interested in the Wikipedia Library about which sources would be best for us to get access to, and one from that list, British Newspaper Archive, has been a very active recent success. An archive of high-quality scans of newspapers from the collection of the British Library, it provides a great source of reference materials for Wikipedia articles about 18th, 19th, and early 20th century Britain and its global interests. Wikipedians have been successfully using them to create new and expand old articles about historical topics, both about local history and topics of national British interest. These range from articles about geographical features (Switchland Reservoir) to sports (1884 FA Cup Final and Jack Kid Berg), coal mines (Pendleton Colliery) to politicians (Sewallis Shirley).

**USER:SITUSH’S EXPERIENCE**

Here is what one of our Wikipedia editors who got access through this partnership, User:Sitush, shared on the British Newspaper Archive’s blog about his new account:

I have a degree from Cambridge in History, and Wikipedia has always been a way for me to explore my interest in Indian and local history. When I got BNA access through the Wikipedia Library, I saw it as an opportunity to explore a local history mystery raised by several people who had been apprentices with the engineering firm of Sir James Farmer Norton & Co Ltd at Adelphi Ironworks in Salford. They often speak with some pride and affection of their time there and of the products that the company manufactured. Those products were sold worldwide, many are still being used and resold now, and some were truly innovative, such as a fast printing press.

None of these people, however, could really tell me anything about Sir James Farmer (the Norton bit of the name came later, when another family became involved in the business). They only knew that he was once mayor of Salford. Although the company did produce a celebratory booklet for an anniversary, there really doesn’t seem to have been much effort made by way of tipping the hat to the man who started it all. Yet, because of the impact on my friends and our community, I suspected him to be one of the more notable of the many self-made – often world-changing – engineering men who inhabited Manchester, Salford and the surrounding areas in the 19th century. He needed a Wikipedia article!
Wikipedia’s model for article development supports the “from little acorns…” approach. So, if I could start an article about Farmer then perhaps at some time in the future someone might find more information and add to it. But Wikipedia also has limitations, meaning that I couldn’t use primary source material available at a couple of archives and, really, there wasn’t much else that I could find without some extensive trawling through microfilms. Inaccessible verifiable information usually means no article – it is meant to be an encyclopaedia, after all, and thus there needs to be some type of public and reliably documented conversation to show that it is of interest to the public (we on Wikipedia call this public interest “notability”).

Enter the BNA! Forget spending days, probably weeks, twiddling at a film reader. I could get access to the most important information about Farmer with one simple search. In the space of a couple of hours, most of which was spent being pleasantly distracted by other news articles surrounding the ones about Farmer, I’d gathered enough material to justify an article, to plant that acorn. The man is now recognised on a major educational project that gets millions of viewers and, although it’s not the best thing I’ve ever written for Wikipedia, the hat has been tipped. Hopefully, given time, much more can be said about him and his company.

(User:Sitush’s new article based on research done with the British Newspaper Archive is titled “James Farmer (knight)” and can be found on [English Wikipedia]).

**ACTIVITY**

**POST-READING REFLECTIONS**

- Do your students have access to academic references about notable local topics in their mother language? If not, why do you think that is?
- How important is it to have access to academic sources in languages other than English?
- How can you facilitate access to reliable sources of information for your students?
- What local knowledge is missing from the academic sources available in your field of practice?

*You can take your notes in this box!*
You have completed Module 2!

Take a moment to share this achievement in the dedicated forum!
What’s next?

Now that you have completed Module 2, you are ready to start Module 3!
What’s next?

In Module 3 you will learn more about the editing guidelines for Wikipedia and how to take your first steps as a Wikipedia contributor.

Use the lesson plans provided in the Annex for inspiration, you will find examples of how to incorporate Wikipedia in different subject areas.

Bring your new knowledge to your classroom! Prepare a lesson plan where you can teach your students how to use Wikipedia to strengthen their media and information literacy skills.

Remember to connect with the larger Wikimedia education community via social media and check if there’s a local Wikimedia affiliate in your region.

Review the ideas that you wrote down at the end of Module 1 and start drafting your lesson plan incorporating what you have learned in this module.
Final Activity
Integrate Wikipedia into your lessons
Final Activity

Now it’s time to put your knowledge in action!

- Review the lesson plan ideas you drafted at the end of Module 1.
- Reflect on the new aspects you have learned about Wikipedia and its value as a pedagogical tool to develop media and information literacy skills.
- Consider the transferable skills that your students can acquire through critically using Wikipedia in their academic journey.
- Review the example lesson plans and activities in the Annex to find actionable ways to integrate Wikipedia in your virtual classroom.
- Improve on your original idea and draft a lesson plan. Use the brainstorm space and the lesson plan template (or another template you already use) to organize your ideas and develop your activity proposal.
- Share your lesson plan in the forum to get feedback from your peers. Bring it to your classroom!
Lesson Plan Template
<table>
<thead>
<tr>
<th>ACTIVITY:</th>
<th>GRADE:</th>
</tr>
</thead>
<tbody>
<tr>
<td>DISCOVERY QUESTIONS:</td>
<td>RESOURCES:</td>
</tr>
<tr>
<td>LEARNING OUTCOMES:</td>
<td></td>
</tr>
<tr>
<td>STANDARDS ALIGNMENT:</td>
<td></td>
</tr>
<tr>
<td>PREPARATION:</td>
<td></td>
</tr>
<tr>
<td>INTRODUCTION:</td>
<td></td>
</tr>
<tr>
<td>GUIDED PRACTICE:</td>
<td></td>
</tr>
<tr>
<td>INDIVIDUAL PRACTICE:</td>
<td></td>
</tr>
<tr>
<td>DEMONSTRATION OF LEARNING:</td>
<td></td>
</tr>
</tbody>
</table>
Annex

Example lesson plans and activities to integrate Wikipedia in the classroom
**ACTIVITY:**
My Knowledge Quest

**GRADE:**
Secondary School

**DISCOVERY QUESTIONS:**
How can I find the information I need on the internet? How can I evaluate the information I find?

**RESOURCES:**
Computer, internet access, notebook, writing supplies, Knowledge Quest worksheet

**LESSON SUMMARY:**
Students reflect on and document their journey navigating Wikipedia as they access and evaluate the information they need to solve a query.

**LEARNING OUTCOMES:**
Students are able to identify positive and negative indicators of quality to assess the information they find on Wikipedia as a starting point of a research project.

**PREPARATION:**
- Identify a research project, activity, take-home assignment where students will need to navigate the internet to find information.
- Familiarize yourself with the worksheet “My Knowledge Quest” as well as with the example and evaluation rubric provided.
- Digitally distribute the worksheet “My Knowledge Quest” for students to complete online or print and use at home.

**INTRODUCTION:**
- Present the topic of the research project, activity, or take-home assignment. Ask students to brainstorm the websites they will use to find information to complete their project.
- Lead a discussion for your students to compare the benefits and challenges of finding information online, how reliable the information is, and how to avoid plagiarism in their work. Bring their attention to Wikipedia in particular and tell them they will use it as the starting point in their project.
- Present the positive and negative indicators of quality from Module 2 and tell your students they will use them as they navigate Wikipedia to start their project.

<table>
<thead>
<tr>
<th>Positive indicators of quality</th>
<th>Negative indicators of quality</th>
</tr>
</thead>
<tbody>
<tr>
<td>• It contains several references from reliable sources.</td>
<td>• It does not have any references.</td>
</tr>
<tr>
<td>• It has an informative and clear lead section.</td>
<td>• It has a warning banner.</td>
</tr>
<tr>
<td>• It covers different relevant aspects of one topic.</td>
<td>• It contains spelling or grammatical errors.</td>
</tr>
<tr>
<td>• It presents balanced and organized content.</td>
<td>• It contains outdated information about a current topic.</td>
</tr>
<tr>
<td>• It is written from a neutral point of view.</td>
<td>• It contains unsourced opinions and value statements.</td>
</tr>
</tbody>
</table>
GUIDED PRACTICE:

- Choose one topic as an example to complete the worksheet “My Knowledge Quest”.
- Demonstrate how to search for the topic from the Wikipedia search box, how to document information on the worksheet, and ask your students for input on the positive and negative indicators of quality they are finding on the Wikipedia article.

INDIVIDUAL PRACTICE:

- Give your students time to individually complete the worksheet “My Knowledge Quest”. Alternatively they can work in pairs.
- Make sure they have the positive and negative indicators of quality in hand and they can consult these when needed.
- Provide guidance and input as your students work through the activity.

DEMONSTRATION OF LEARNING:

- Ask your students to send you their completed worksheets: taking a picture of the printed worksheet, a screencapture, etc. Ask 2 - 3 students to share the process they followed: What was helpful? What was difficult? What indicators of quality were they able to identify in the articles they found? Was Wikipedia a good starting point for their research?
- Evaluate your students’ work using the suggested rubric and provide feedback.
- If available, publish the work created by your students on a school blog, virtual notice board, class Pinterest board, etc.
**My Knowledge Quest**

**Instructions:** Use this worksheet to document your search for information on Wikipedia. Answer each question in the corresponding box to reach the “Finish” line. Compare your findings with your classmates!

- What am I looking for?
- What keywords could I use in this search?
- What articles am I finding helpful?
- What key ideas am I finding?
- What negative indicators can I see in these articles?
- What positive indicators can I see in these articles?
- What are the main discussions about this topic “Talk” page?
- How can I tell if these are facts or opinions?
- What sources of information will I visit next?

**Let's Start!**

**Module 1**
Here you can find an example of a completed Knowledge Quest worksheet. Adapt and change accordingly!

Let's Start!

Next, I will visit these references included in the Wikipedia articles I saw:
- Saint Maya - The New Republic
- How Maya Angelou influenced hip-hop
- The interview Laugh and Dare to Love
- Episodes of Black, Blues, Black

In the “Poetry of Maya Angelou” I found it interesting how authors were discussing the best language to present the value of Maya’s poetry objectively.

The main events in Maya Angelou’s life: she had many occupations before becoming a writer, she suffered from abuse and moved houses a lot, she had a son very young. Her work includes poetry, autobiographies, plays, and children’s books even. She received many awards for her contributions and activism.

I didn’t find any negative indicators of quality in these articles, they had proper references, updated information, and no warning banners.

The main discussions about this topic “Talk” page?
These are not opinions because I can see the sources that the authors have used to create the text and they describe real events in a neutral and objective way.

The Wikipedia articles I saw have a lot of references, the lead sections were informative and clear, and it covered different aspects of the life and work of Maya Angelou.

I’m looking for the main events in the life of Maya Angelou, examples of her work, and the main themes in her writings.
Potential keywords:
- Maya Angelou
- Maya Angelou work

List of Maya Angelou work
Poetry of Maya Angelou, themes
Themes in Maya Angelou’s autobiographies

What key ideas am I finding?
What negative indicators can I see in these articles?
What positive indicators can I see in these articles?
What articles am I finding helpful?
What am I looking for?
What keywords could I use I this search?
What are the main discussions about this topic “Talk” page?
How can I tell if these are facts or opinions?
Which sources of information will I visit next?

M E M O R Y  D I S C E R N I N G  H E L P F U L  A R T I C L E S

My Knowledge Quest - Example
Here you can find an example of a suggested rubric to evaluate the activity. Adapt and change accordingly!

<table>
<thead>
<tr>
<th>STUDENTS ARE ABLE TO</th>
<th>SCORE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Identify search parameters and relevant keywords</td>
<td></td>
</tr>
<tr>
<td>Examine the article using positive and negative indicators of quality</td>
<td></td>
</tr>
<tr>
<td>Summarize the information they find to answer their original query</td>
<td></td>
</tr>
<tr>
<td>Determine if the article contains facts or opinions</td>
<td></td>
</tr>
<tr>
<td>List other sources of information to continue their research</td>
<td></td>
</tr>
</tbody>
</table>

3  Clear demonstration of understanding
2  Some demonstration of understanding
1  Unable to complete the task
History

ACTIVITY: Who's in your textbook?

GRADE: Secondary School

DISCOVERY QUESTIONS: Who is represented in my textbooks? Who is missing? What makes someone “notable”?

RESOURCES: Computer, internet access, history textbook, notebook, writing supplies.

LESSON SUMMARY: Students explore Wikipedia to create a profile about a notable person who is not represented in their history textbook.

LEARNING OUTCOMES: Students are able to analyze representation gaps in their History textbook and use Wikipedia to research the life of local notable people not included in their textbook.

PREPARATION:

- Review the textbook your students are using for their History class.
- Notice the main gaps in representation of notable people it features: gender, nationality, racial identity, mother tongue, etc.
- Create a grid to highlight the main gap in representation for your students to complete. If we focus on the gender gap, for example, your grid could look like this:

<table>
<thead>
<tr>
<th>Women featured in my History textbook</th>
<th>Men featured in my History textbook</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- Create the profile of a notable person not featured in the History textbook to show the students as an example.

INTRODUCTION:

- Ask students to freely share names of notable people in the history of their country/the world.
- Provide some examples to get them started. List them on a shared document or virtual board.
- Ask them if they can identify some common characteristics of the people they have identified and bring their attention to those who are missing: Are there mostly men/women in this list? How did your students learn about them? What makes these people notable?
- Take notes of the main points of this discussion.
- Introduce the purpose of the activity: “We are going to identify who is featured in and who is missing from our History textbook. We are going to add the missing stories of notable people ourselves by conducting an initial research on Wikipedia and other pages on the web”.

DISCOVERY QUESTIONS: Who is represented in my textbooks? Who is missing? What makes someone “notable”?

RESOURCES: Computer, internet access, history textbook, notebook, writing supplies.
GUIDED PRACTICE:

- Bring the students attention to their History textbook and ask them if they think they can find the people they listed in the previous activity there.
- Present them the grid you had prepared and ask them to list the names of the different people they find on their textbooks accordingly. Example:

<table>
<thead>
<tr>
<th>Women featured in my History textbook</th>
<th>Men featured in my History textbook</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- Ask your students to compare their answers with a partner. Alternatively you can ask 2-3 students to share their findings with the class as a whole.
- Choose the example of one notable person not featured in their textbook and demonstrate conducting a simple search about them on Wikipedia.
- Highlight the different sections of a Wikipedia article that are most helpful for this activity. For example: lead section, references, internal links.
- Show the profile you had prepared about a notable person missing from the History textbook.
- Explain to the students how they create their own: the main information it should have, the writing style, how Wikipedia should be the starting point, the external references they can conduct.
- Note: if there are no articles available on Wikipedia about the missing notable people you have identified, guide your students to search the web using the same applicable principles.

INDIVIDUAL PRACTICE:

- Tell your students it is now their turn to find more information about the notable people missing from their textbook.
- Ask them to choose one notable person they want to include in their textbook. It could be from the collective list they created or someone else they have identified.
- Give your students appropriate time to conduct their research on the web.
- Provide input on the writing style, best practices to avoid plagiarism, citing sources, going beyond Wikipedia, etc.

DEMONSTRATION OF LEARNING:

- Ask your students to present the profiles they have created. This could be done in small groups, pairs, or in front of the whole class.
- Ask your students to reflect on the process they followed: How they identified the notable people missing, how they looked for information on the web, how they verified the sources of the information, how they chose what to include in the profile, and what lessons they have learned about this activity.
- If available, publish the work created by your students on a school blog, virtual notice board, class Pinterest board, etc.
**ACTIVITY:**
Only five clicks away

**GRADE:**
Secondary School

**DISCOVERY QUESTIONS:**
How do you discover new information on the internet? How are different web pages connected?

**RESOURCES:**
Computer or cellphone, internet access, notebook

**LESSON SUMMARY:**
Students navigate hyperlinks on Wikipedia articles through five clicks as a model to discover new information on the internet.

**LEARNING OUTCOMES:**
Students are able to identify how information on the internet is connected through hyperlinks and contrast their findings against those of their peers.

**PREPARATION:**
- Choose 3 - 4 Wikipedia articles about the topics you are covering in your science lesson of the week.
- Review the articles to make sure they are examples of Wikipedia articles you consider to have high quality content.
- Prepare a chart for students to record their actions:

<table>
<thead>
<tr>
<th>Article</th>
<th>Click 1</th>
<th>Click 2</th>
<th>Click 3</th>
<th>Click 4</th>
<th>Final Click</th>
</tr>
</thead>
</table>

**INTRODUCTION:**
- Present the week's topic to your students.
- Present Wikipedia and how to use the search bar to look up information.
- Show an example of a Wikipedia article from the ones you had chosen about your week's topic by using the search bar.
- Demonstrate the different parts of the article and the information students can get.
- Focus on the hyperlinks: demonstrate navigating within Wikipedia through the hyperlinks, how information is connected for easy access within the encyclopedia, the new articles you are finding, and how they help you expand on the topic.
- Point to the difference between internal links and external links. Emphasize the fact that a Wikipedia article can always be a starting point in the search for information.
GUIDED PRACTICE:

- Show the chart you have prepared and tell students they are going to document their navigation on Wikipedia.
- Point to the conditions: there are 2 - 3 articles they should start on, they can start reading the articles and click on any link that sparks their interest to learn more, but they can only make 5 clicks. After 5 clicks they must stop browsing.
- Ask them to document the names of each article they visit after each click: they can copy the link of the article, write down the name, or capture screenshots.
- Ask them to write down some facts they learn on each page they visit.
- Do the first article together.
- Compare your results with the results of a student.

INDIVIDUAL PRACTICE:

- Allow students some time to independently navigate and document their actions.
- Provide support as needed.
- Encourage your students’ creativity and independence on how they document their navigation experience.

DEMONSTRATION OF LEARNING:

- Ask your students to finalize their charts for presentation.
- Provide different alternatives: creating a slideshow, a collage, a word cloud, an infographic, etc.
- Get students in pairs or small groups and have them compare the different Wikipedia articles they explored.
- Bring the class together and have 2 - 3 students share their experience and learnings: Was the content easy to understand? What did they find helpful? What do they wish they could find more of? What does this teach them about their practices to access information on the web?
**ACTIVITY:**
Four stars for Wikipedia!

**GRADE:**
Secondary School

**DISCOVERY QUESTIONS:**
Can you trust everything you read online? How can you tell if the content you find online is reliable? How can you assess the quality of the information you find online?

**RESOURCES:**
Computer or cellphone, internet connection, notebook, writing supplies

**LESSON SUMMARY:**
Students examine Wikipedia articles and rank their quality based on a simple star grading system.

**LEARNING OUTCOMES:**
Students are able to evaluate Wikipedia articles and explain how they can use this evaluation criteria to analyze the information they find in other websites.

**PREPARATION:**
- Prepare a slide or graphic representation of the star grading system you will present:

<table>
<thead>
<tr>
<th>Article</th>
<th>Final Click</th>
</tr>
</thead>
<tbody>
<tr>
<td>• The article has a clear lead section</td>
<td>• The article has 5 or more references to reliable sources</td>
</tr>
<tr>
<td>• The article is written from a neutral point of view</td>
<td>• The article contains up-to-date information</td>
</tr>
</tbody>
</table>

- Adapt the star grading system to your own needs: make the parameters more specific, add one or two additional stars, etc.
- Choose a couple of Wikipedia articles that are connected to a topic you are teaching that week to use as examples.

**INTRODUCTION:**
- Guide a reflection with your students about how they navigate the web to find the information they need. Focus on: Which sites do they visit more frequently? For which purpose? What kind of content do they find? How can they evaluate if the content they find is reliable?
- Note down the main ideas that come out of this discussion.
- Ask students about their use of Wikipedia in particular: How do they use the information they find there? What are the elements of a Wikipedia article? Can they trust the information they find on Wikipedia?
- Note down their ideas and provide guidance as needed.
GUIDED PRACTICE:

- Introduce the stars grading system as a tool to help them evaluate the information they find on Wikipedia.
- Present the Wikipedia articles you had chosen as examples.
- Walk your students through the criteria represented by each star and discuss on whether the article deserves that star or not.

INDIVIDUAL PRACTICE:

- Help your students choose one or two Wikipedia articles to conduct the same evaluation.
- Ask them to document their decisions: on a table, a slideshow, a simple infographic, or taking notes in their notebook.
- Provide them with enough time to conduct the activity and guide them as needed.

DEMONSTRATION OF LEARNING:

- Have students present the articles they evaluated and the star rating they gave them.
- Prompt a discussion for students to reflect on what they have learned about the information they consume online: Was the grading system helpful to evaluate the information they found? Can they use this criteria when they navigate information in other websites? How?
- Take notes of this discussion and compare them with the notes from the introductory activity. Have your students recognize the importance of having up-to-date information presented with clarity, written from a neutral point of view, and with clear references to the sources used.
**ACTIVITY:**
My movie on Wikipedia

**GRADE:**
Secondary School

**DISCOVERY QUESTIONS:**
What makes a movie special? How can the same information be expressed through

**RESOURCES:**
Computer or cellphone, internet connection, notebook, writing supplies

**LESSON SUMMARY:**
Students compare information about a popular movie on Wikipedia and other websites to understand differences in text styles and create an encyclopedic article about a movie not yet available on Wikipedia.

**LEARNING OUTCOMES:**
Students are able to identify different writing styles on the internet and determine if texts are written from a neutral point of view.

**PREPARATION:**
- Look for Wikipedia articles about movies that your students are enjoying this season.
- Look for other websites or media that your students visit to learn about movies.
- Prepare some reflection questions for your students to analyze the difference on how movie plots are presented through Wikipedia (encyclopedic, neutral point of view) and other websites (opinions, critics reviews, advertisement, etc.). For example:
  - Which website describes the movie more objectively?
  - Which website is trying to talk me into watching the movie?
  - Which website is expressing a personal view of the movie?

**INTRODUCTION:**
- Help students recall their favorite movies: write down the titles on a document or virtual board, ask them to put images of the movie posters on a slideshow, or ask them to describe the movie and have others guess the title.
- Make a collaborative list of websites that your students visit to learn about upcoming movies.
- Introduce Wikipedia as another website where they can look up information about a movie (if it hasn't already come up).
**GUIDED PRACTICE:**

- Compare an article about a movie available on Wikipedia and another website recommended by your students.
- Give students time to independently read the articles.
- Divide them into small groups to discuss the differences in these websites using the reflection questions you have prepared.
- Bring them back and ask 2 - 3 students to share their reflections.

**INDIVIDUAL PRACTICE:**

- Ask students to choose one movie that doesn't have a Wikipedia article yet.
- Tell your students that they will create a mock-up Wikipedia article about this movie.
- Guide them through the main parts of a Wikipedia article about a movie and leave it as an example. Point again to the characteristics of an encyclopedic text.
- Provide support as needed while your students work independently on their articles. This could be done on a digital document or their notebooks. Alternatively, students could also work in pairs or small groups.
- Review that students are including the different elements of a Wikipedia article and are writing their texts from a neutral point of view.

**DEMONSTRATION OF LEARNING:**

- Collect all the mock-up Wikipedia articles that students have created.
- Present them as a gallery view using slideshows or another platform of your choice.
- Select 2 - 3 random articles that your students have produced and ask the class to verify that it contains the different elements of a Wikipedia article and it is in fact written from a neutral point of view. Alternatively, students can swap articles and provide feedback directly to their classmates.
- If available, publish the work created by your students on a school blog, virtual notice board, class Pinterest board, etc.
ACTIVITY:  
Data visualizations on Wikipedia

GRADE:  
Secondary School

DISCOVERY QUESTIONS:  
How can information be presented in different ways? What are the benefits of representing data through graphics?

RESOURCES:  
Computer or cellphone, internet connection, notebook, writing supplies

LESSON SUMMARY:  
Students identify and interpret data visualizations of country demographics on Wikipedia articles and create their own.

LEARNING OUTCOMES:  
Students are able to analyze demographic information through data visualizations, identify data sources, and design new data visualizations.

PREPARATION:  
- Make a list of Wikipedia articles about different countries that include data visualizations in their “Demographics” section.
- Verify that the sources of the graphics available are reliable and up to date.
- Create 2 - 3 alternative data visualizations to the ones presented in the Wikipedia articles you have selected. Feel free to be creative! Use everyday objects, incorporate popular characters, turn tables into graphics, or create a small animation.
- Prepare quick trivia questions for your students to review demographic data about 3 - 4 of the countries you have included in your list.

INTRODUCTION:  
- Do a quick trivia style activity to get students to guess or recall demographic data about 3 - 4 of the countries you have chosen.
- Bring your students’ attention to Wikipedia and ask them to identify the answers to the trivia questions in the corresponding articles about each country.
- Guide your students to identify the sources of this information by following the references on the Wikipedia articles.
**GUIDED PRACTICE:**

- Lead a small reflection around how the different ways demographic data can be presented, the benefits and challenges of data visualizations, and examples of data visualizations students encounter in their day-to-day lives.
- Present the data visualizations you have created based on demographic data available on Wikipedia.
- Demonstrate how you have interpreted the available data and used colors, shapes, and labels to communicate information.
- Ask your students to comment on the data visualizations: Which ones were easier to understand? Which ones were harder to understand? Why?

**INDIVIDUAL PRACTICE:**

- Present the list you have created of Wikipedia articles about different countries.
- Ask students to choose one country of their interest and look through the “Demographics” section on its Wikipedia article. What kind of information can they find? What kind of data visualizations are available? What is the source of that information?
- Ask students to focus on one aspect of the information contained in the “Demographics” section of the Wikipedia article of their choosing (population by age, gender, religion, ethnicity, etc). Tell your students they are going to use that information to create their own data visualization using either digital or analogue tools (or a combination of both).
- Provide some pointers for the process: consider your audience, choose colors and elements that facilitate understanding, select relevant information to keep it simple, use guiding labels, cite the sources.

**DEMONSTRATION OF LEARNING:**

- Collect all the data visualizations that students have created.
- Present them as a gallery view using slideshows or another platform of your choice.
- Select a few examples and ask different students to interpret the information transmitted by these graphics.
- If available, publish the data visualizations created by your students on a school blog, virtual notice board, class Pinterest board, etc.
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Ismail Atiba
Certified Trainer
2.1 Wikipedia's Pillars


2.3 Wikipedia's core content policies


2.5 Talk pages and other discussion spaces on Wikipedia


2.6 View history and knowledge creation


2.7 References and verifiability

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