Non-Editing Participation

New account holders and the Wikipedia reading experience

eyahia + mraish | Feb 2024

Summary of main findings

Many people create Wikipedia accounts because they *expect* to get reading features.

Interest in **individual reading features** (e.g., making reading lists) appears to be stronger than interest in **social reading features** (e.g., sharing reading lists).

Using these features will require readers to interact with Wikipedia in a different way than they're used to—namely, they'll likely be required to log in.

New account holders are interested in Wikipedia and have recently taken a step to deepen their relationship with it. They're a population worth thinking about.

NEP deck sections

1. **Introduction and context**

2. **Methods**

   Welcome Survey; new account holder **survey (English)**; new account holder **interviews (English and Arabic)**

3. **What did we learn about participating new account holders?**

   Behaviors; relationship with Wikipedia; use of Wikipedia; expectations for their accounts; desires for improvements

4. **What do interview participants think about 8 reading features under exploration by the Growth team?**

5. **Appendix: Some extra findings**

Study context: Why "non-editing participation"?

As it begins its FY24-25 annual planning process, the Wikimedia Foundation continues to explore ideas for providing Wikipedia readers with a richer and more engaging reading experience.

WMF product teams are specifically interested in the idea of "non-editing participation"—to what extent can readers be enticed or encouraged to deepen their engagement with Wikipedia through **participatory actions that fall short of "traditional" editing**?

This study originated with a request from the Growth team in 2023, although it also overlaps with the domains of the WMF Web and Apps teams, among others.

2. Methods

Study structure

1. **Recruit participants from the Welcome Survey**

   Add an opt-in checkbox allowing new account holders to be recruited for research.

2. **Survey English Wikipedia new account holders**

   Who are they, why did they make accounts, and how do they read things on and off Wikipedia?

3. **Interview English and Arabic new account holders**

   Why did they make accounts?

   Also, what do they think about all these Growth team ideas for possible reading features?

Earth ▶ Listen to this article

Article   Talk

Earth is the third planet from the Sun and the only place known in the universe where life has originated and found habitability. Earth is the only planet confirmed to sustain liquid surface water.

ABOVE: An example of a Growth team reading feature idea (listen to an article) shown to Arabic and English new-account-holding interview participants.

What's the Welcome Survey?

First implemented by the Growth team in 2018, the Welcome Survey poses **3 questions to new account holders** directly after registration. Responses are anonymized and aggregated after 30 days.

The WS is a valuable—but underutilized—source of information about the editor journey, and now as a source of recruitment for research involving new editors:

- [2021 analysis](#) by Rita Ho (WMF)
- [Ongoing analysis](#) by Tiziano Piccardi

The persistent Growth team "[head-scratcher](#)" that prompted this study:

> *Why do so many people (consistently 15-20% of registrants) say that they signed up "to read Wikipedia"? You don't need an account to read!*

Welcome, Trizek (WMF)!

Help us improve your Wikipedia experience by answering a few optional questions.

Why did you create your account today?

Please select...

Have you ever edited Wikipedia?

Please select...

Wikipedia is available in nearly 300 languages. Are there other languages you read and write in?

English

Add up to 10 languages...

Finish   Skip this survey

Welcome survey screenshot. Image author: [Trizek (WMF)](#), via Wikimedia Commons ([CC BY-SA 4.0 DEED](#))

Survey of English Wikipedia new account holders

Welcome Survey recruitment
- **1711** confirmed enwiki emails, contacted in groups of 200-400 in the 1-3 weeks following their account creation;
  - Of these, **246** completed the screener survey;
  - Eligible participants were then invited to complete a longer survey on Qualtrics.
    - Of these, **93** (after cleaning) completed the Qualtrics survey that investigated their reading habits.

Survey sections
- Demographics
- Reading behaviors on-Wiki
- Reading motivations
- Reading behaviors off-Wiki

English ∨

If you could change anything about the Wikipedia reading experience to make it better for you, personally, what would you change?

→

Example new-account-holder survey question posed to respondents who signed up for English Wikipedia.

Semi-structured interviews with Arabic (8) and English (5) new account holders

Interview question areas:

- Why did they make an account?
- What have they been using it for since registration?
- What do they want out of Wikipedia that they aren't currently getting?
- What do they think of the 8 designs for new reading features that the Growth team has thought about?

Automated article summary chat-bot

Ask me to create a summary for you in the format you prefer! Here are some ideas to help you get started:

[Flashcards]   [Practice questions]

[Abstract summary]   [Detailed summary]

...or, you can type in how you'd like me to summarize the article.

[▷]

Automated article summary chat-bot

Imagine a long time ago in 1969, some brave astronauts flew to the Moon in a special spaceship called Apollo 11. One of those astronauts, named Neil Armstrong, became the very first person to step on the Moon's surface! He said, "That's one small step for man, one giant leap for mankind."

After that, they had more missions and sent more astronauts to the Moon a few more times. These missions were very important because they helped us learn more about space and our world. They also inspired lots of people to dream big and think about exploring other planets one day.

Can you summarize the "Moon landing" article for a 9-year old?   ▷

Above: an example of a visual artifact (AI reading assistant) shown to English-speaking interview participants.

3. What did we learn about English new account holders?

More precisely, what did we learn about the 93 people who created accounts on English Wikipedia during the first week of December, 2023, and who then completed our survey?

We heard from 93 survey respondents, 81 of whom signed up to read or to edit.

Why did you create a Wikipedia account?

WM event-related
2.3%

donation-related
5.7%

fix typo
6.9%

create new article
14.9%

read Wikipedia
41.4%

change information
28.7%
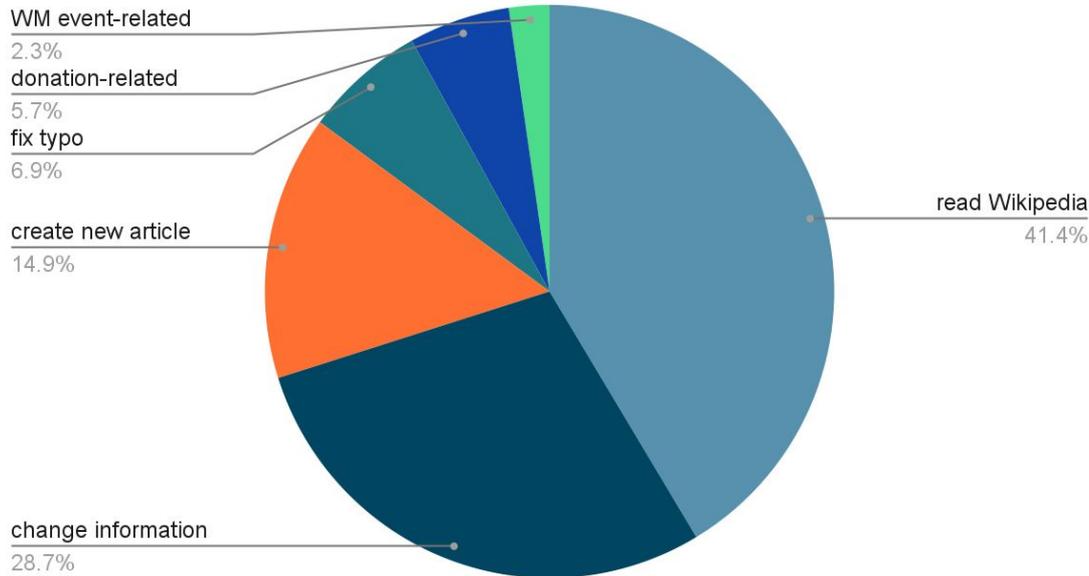
Participants who initially responded to a screener survey were asked to choose from the original account creation reasons presented on the Welcome Survey, in addition to a text-entry "other" option.

41% of respondents reported signing up "to read Wikipedia" or for "other" reading purposes, and 47% reported an editing motivation.

Subsequent slides in this deck compare "**Readers**" (37 respondents) and "**Editors**" (44), or they present all survey respondents together (93 total)

Most of our survey respondents were from North America and Europe.

Region

SSA
8.9%

SA
7.8%

NWE
17.8%

CEECA
2.2%

ESEAP
5.6%

MENA
4.4%

NA
53.3%
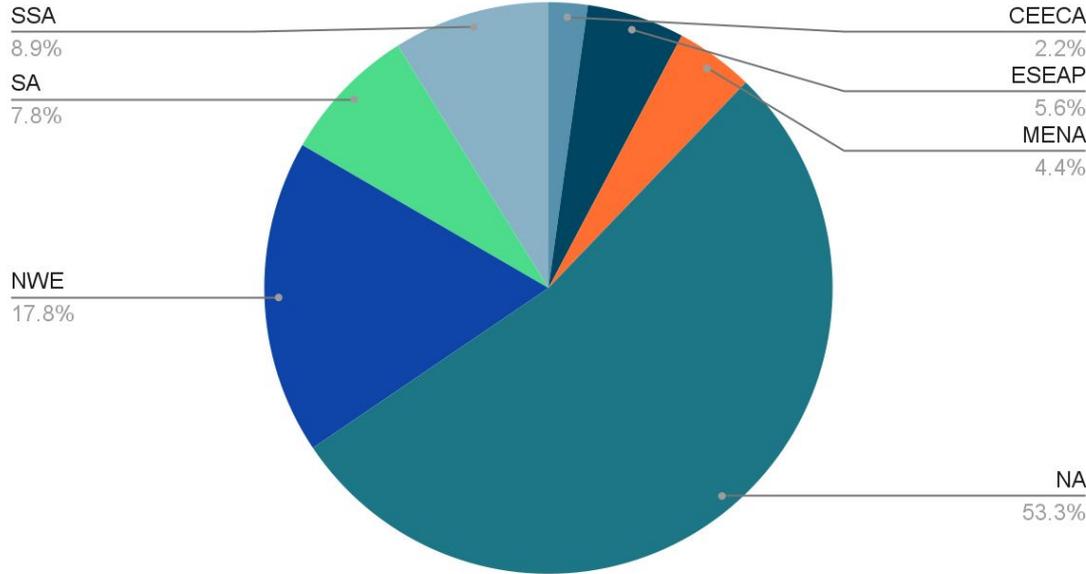
Region codes

CEECA: Central & Eastern Europe and Central Asia

ESEAP: East, Southeast Asia, & Pacific

MENA: Middle East and North Africa

NA: North America

NWE: Northern & Western Europe

SA: South Asia

SSA: Sub-Saharan Africa

Surveyed new account holders are relatively educated, and many are relatively older.


How old are you?
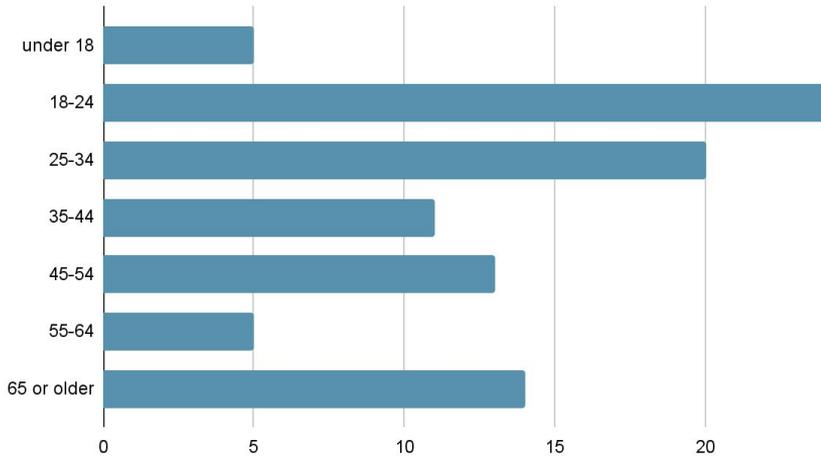
What is the highest level of education you have completed?
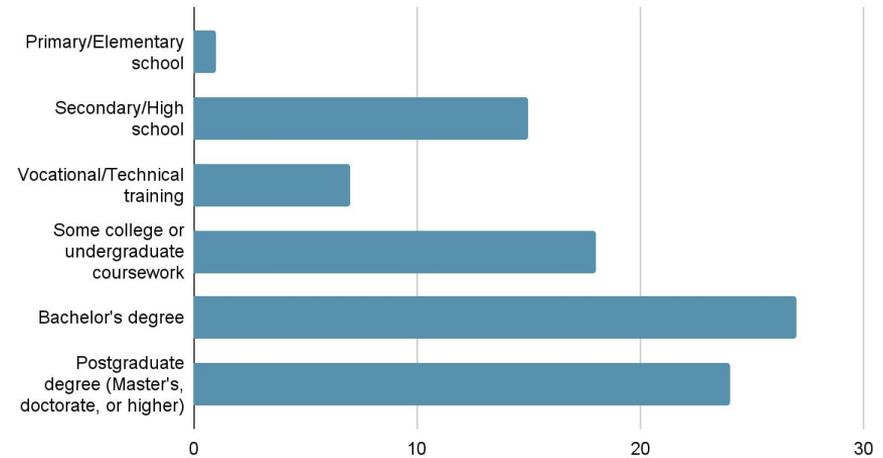
They are regular visitors to news, social media, and discussion platforms.

Which of these platforms or websites, if any, do you regularly visit?
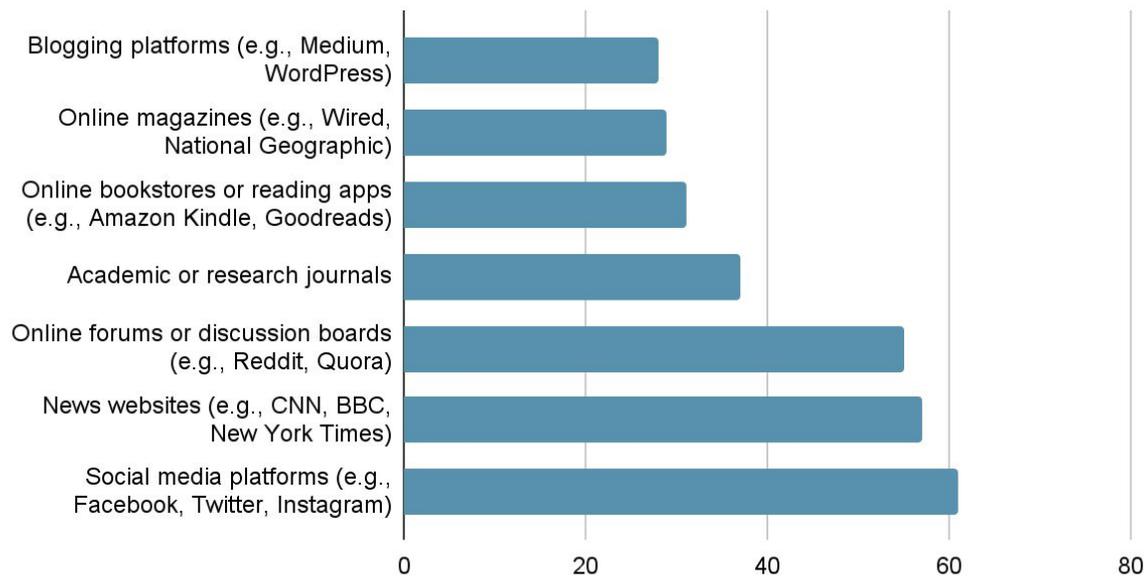
Social media platforms (e.g., Facebook, Twitter, Instagram)
Editors   Readers
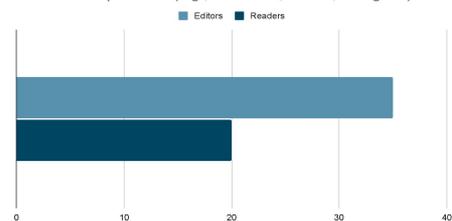
Editors report more social media use than Readers.

3a.   What's their relationship with Wikipedia like?

Surveyed new account holders express generally high curiosity about Wikipedia.

How curious are you to know more about how Wikipedia works?
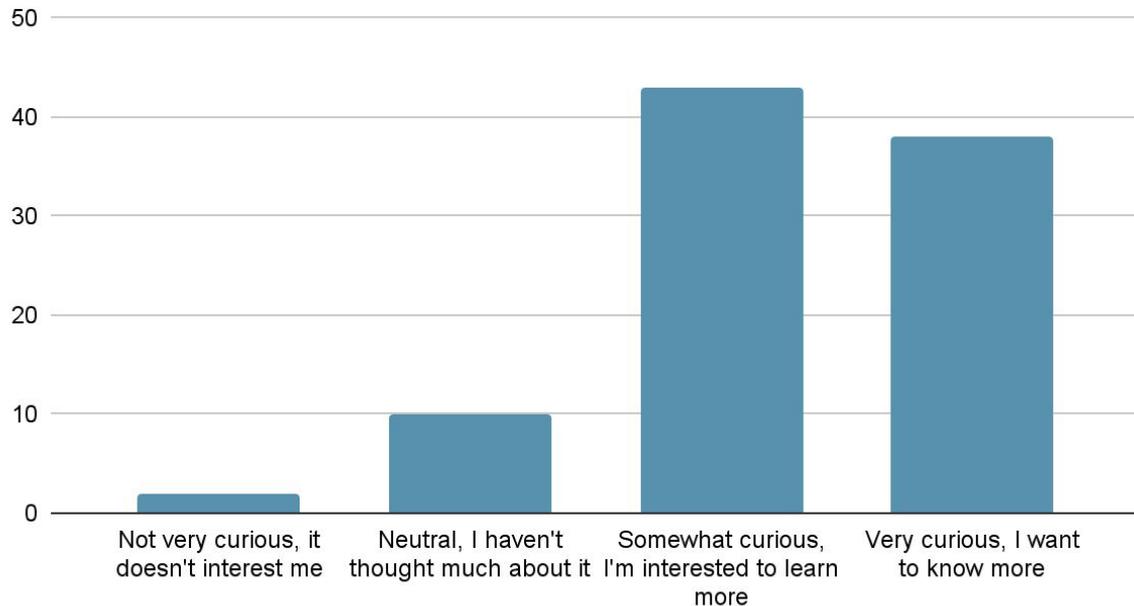
Interviewed new account holders express a sense of affiliation with Wikipedia.

As a group, they respect Wikipedia and value it as a free and useful resource for information and current events. They value its impartiality and accuracy.

Those who are aware of the community (typically people who signed up to edit) enjoy their own sense of ownership over Wikipedia, given that their contributions are read by millions of people worldwide.

They generally feel secure when navigating Wikipedia due to their perception that Wikipedia doesn't collect reader data. They likewise appreciate that they don't have to deal with paywalls or ads.

Arabic participants in particular noted that Wikipedia, as a trusted informational resource, is often their window onto the world.

. . . just a fantastic trait of Wikipedia that anyone can contribute to it and can contribute to it in any language. . . The greatest difference is that everything on Wikipedia is open. There's no paywall on Wikipedia."

News sources have become storytellers. They need to abide news with drama, with emotional flavor with the not almost novel aspects of telling a story. Whereas that's very much generally missing on Wikipedia and I really like that. The informative aspect of Wikipedia just exceeds everything else"

— English interview participants

[interviewed Arabic new account holders, on why they value Wikipedia]

I admire and respect Wikipedia a lot and I consider it a huge effort and one of the best creations of mankind after the huge greatest historical Fatimid encyclopedia which had millions of books.

. . .

*I'm impressed by the amount of information as an academic researcher and a professor. . . The information here is very updated. Today I opened Wikipedia and found information about the death of the Kuwaiti Prince and his biography.*

They visit Wikipedia relatively frequently using both desktop and mobile devices.

How often do you visit Wikipedia?
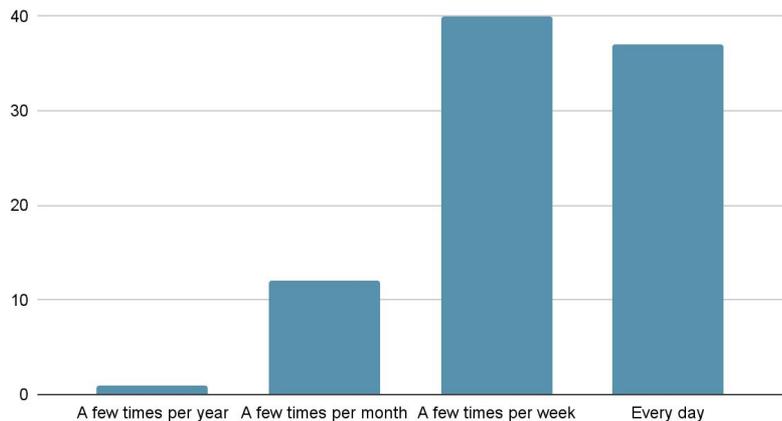
When you visit Wikipedia, what kind of device do you usually use?
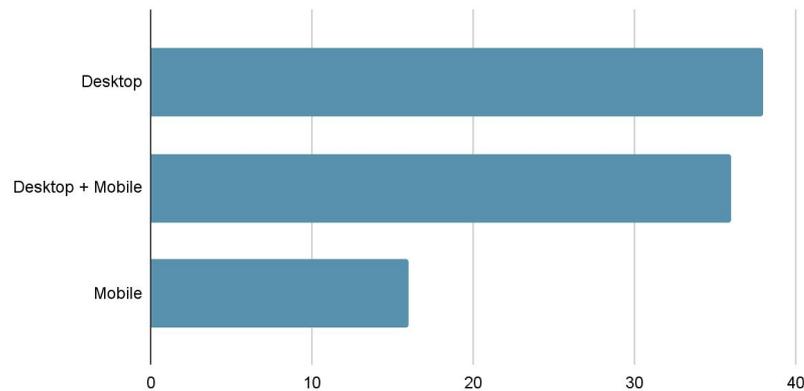
At the time of the survey, Editors report more editing experience than Readers.

Have you ever edited or changed anything in a Wikipedia article?
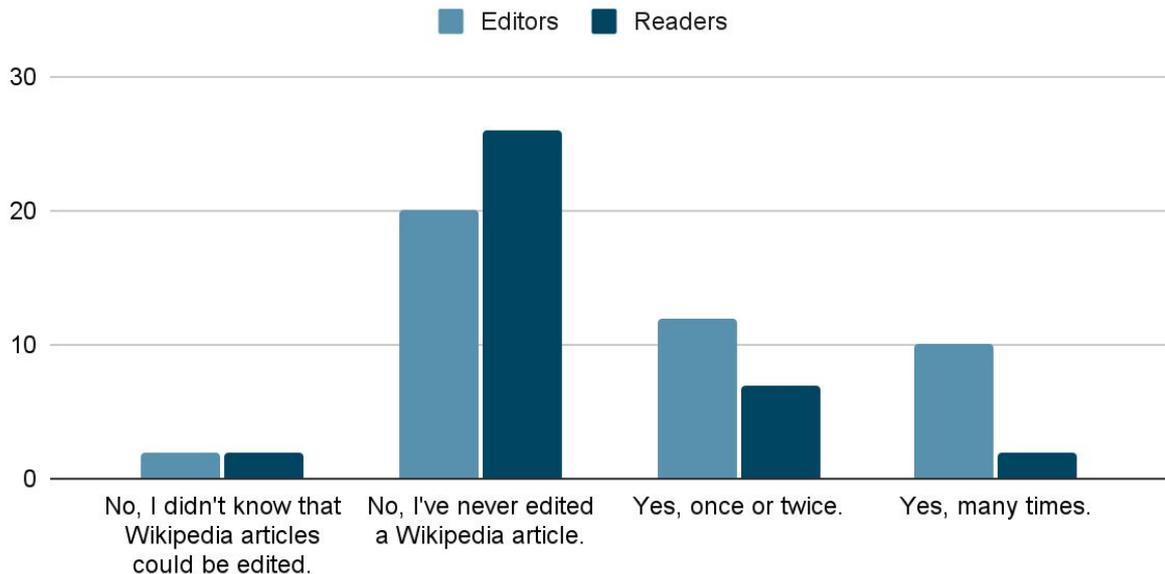
Survey respondents were generally providing responses 1-3 weeks after they had created their Wikipedia accounts.

For those who haven't edited, interest in editing remains generally high.

How interested are you in editing Wikipedia in the future?
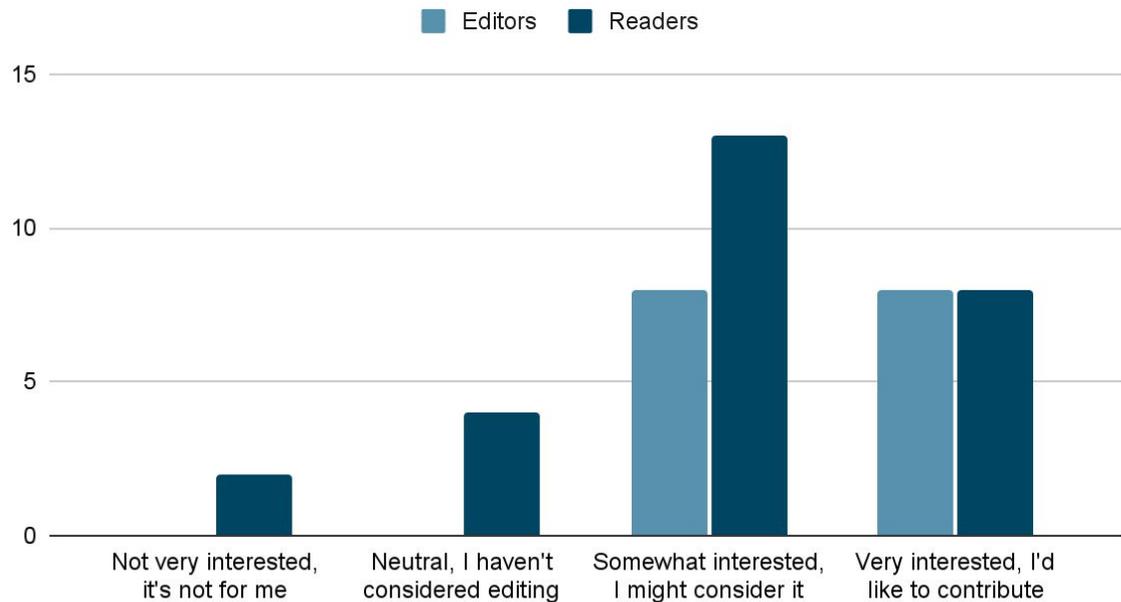
Most respondents arrive via search.

When you are reading a Wikipedia article, how do you usually arrive there?
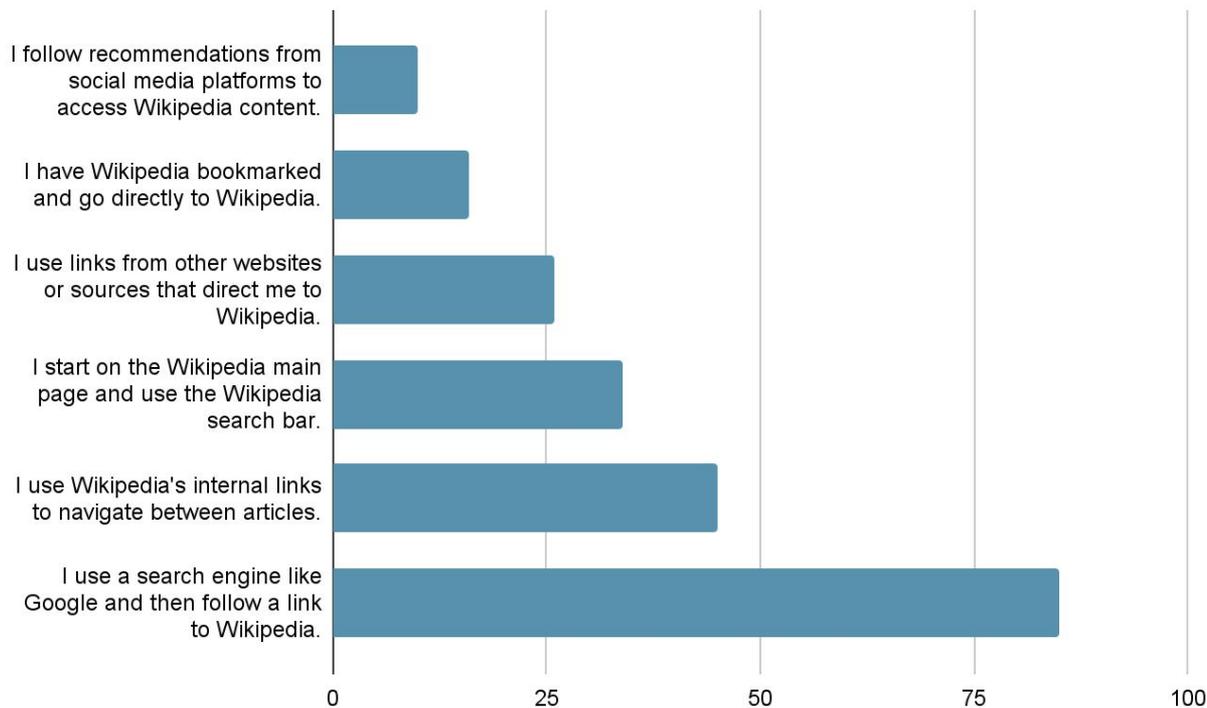
"Other" reported arrival routes include:

- **using the app** (2),
- **adding "wiki" to a search query** (1), and
- **typing the Wikipedia URL directly** (1).

Newly registered Editors and Readers visit for mostly the same reasons . . .

Why do you visit Wikipedia? (Select all that apply)
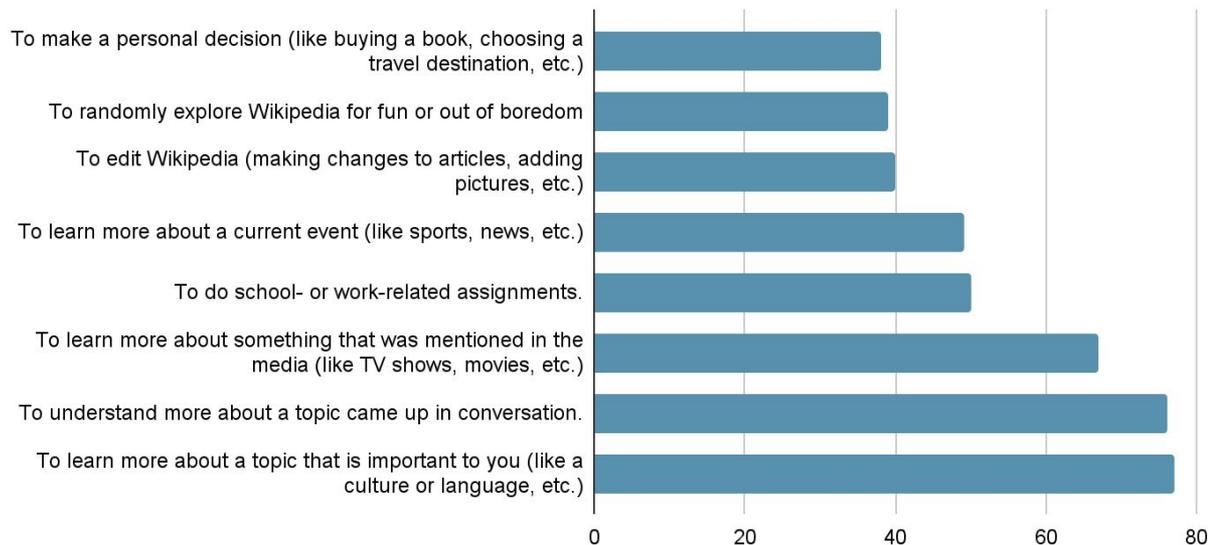
To edit Wikipedia (making changes to articles, adding pictures, etc.)
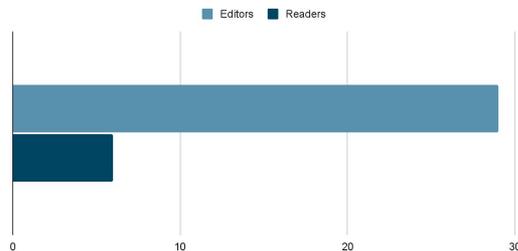
. . . with the only observed difference being that Editors visit more frequently "to edit Wikipedia".

They also visit Wikipedia for research, and a few "other" reasons.

"Other" reasons for visiting Wikipedia

Research
Find the right translation for a term, switching languages
Research and publication
Looking for information and creative commons images of Mathematical objects
To learn more about subjects and places in historical books I'm reading.
To get information about a word, phrase or whatever than is in the dictionary
To learn about places important in my genealogy research
If it's something work-related, I use Wikipedia as a starting point to get reliable sources.

Editing
To improve my knowledge and start the editing process.
To review and inform any corrections required.

Misc.
To get factual news
apparently for all of the reasons

3b.   How do they read Wikipedia?

A quarter of respondents read Wikipedia in more than just English.

What language(s) do you mostly use to read Wikipedia?

English+2
4.3%

English+1
21.5%

English
74.2%
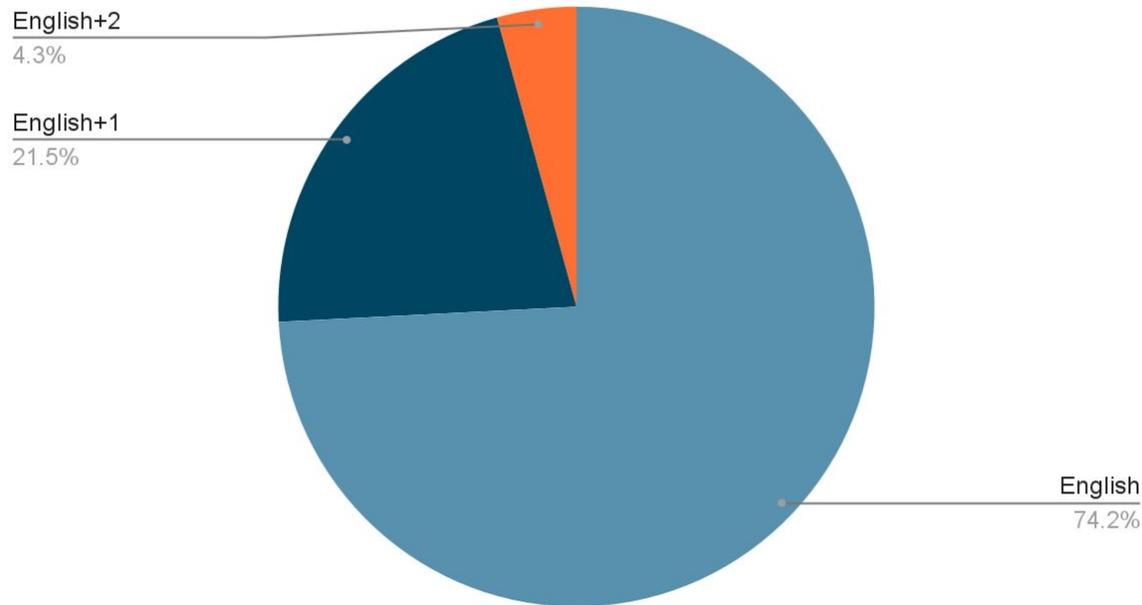
"Other" languages reported:
- French
- German
- Russian
- Portuguese
- Italian
- Hindi
- Arabic
- Hausa
- Fulani
- Dutch
- Turkish
- Indonesian
- Swedish
- Bahasa Indonesia
- Romanian
- Chinese (Traditional)
- Sanskrit
- Greek

On Wikipedia, their most frequent reading genre is "history".

Which topics do you most frequently read about on Wikipedia?
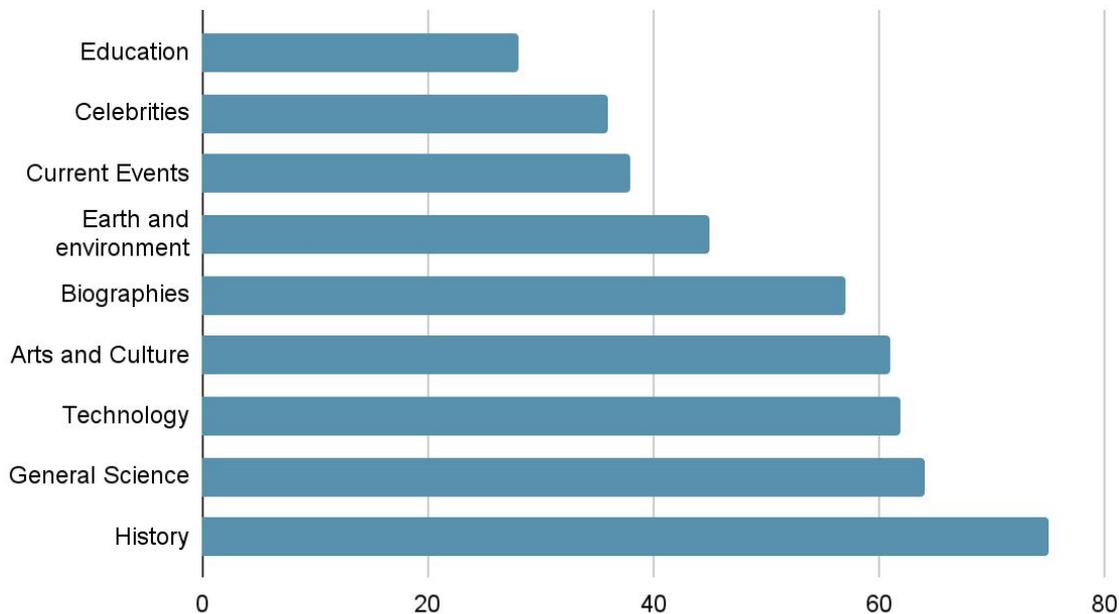
"Other" reading topics reported:

- Access to Wikipedia's informational organization: *I often use Wikipedia for lists of names, like "shades of pink" or "people with the first name..."*
- Astronomy
- Aviation
- Geography
- Health
- Mathematics
- Medicine
- Military
- Movies
- Nature
- Philosophy
- Religion
- Sports

They use a variety of reading strategies, and for different purposes.

How do you usually read Wikipedia articles? Select the options that best describe your usual approach.
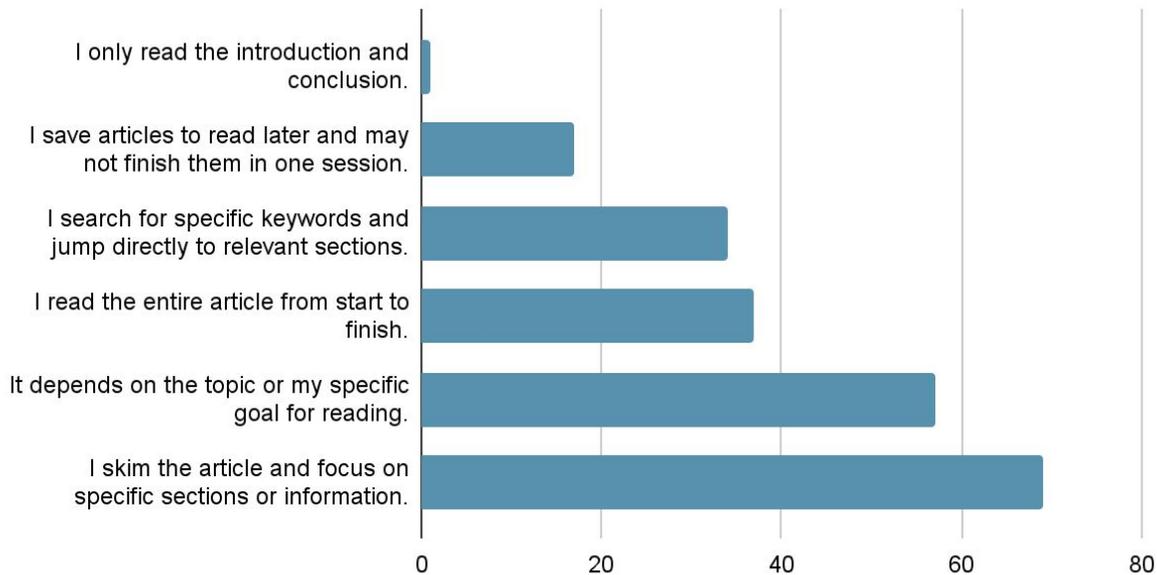
"Other" reported strategies further indicate that **individual readers use different strategies in response to different motivations**:

- *I follow all internal links to topics that I do not fully understand*
- *sometimes I read a whole page, if the subject turns out to be more interesting than originally assumed*
- *I read the entire article from start to finish if the topic is interesting enough*

As a group, they don't report many problems with the reading experience.

When you are reading articles on Wikipedia, what kinds of problems or challenges do you experience?
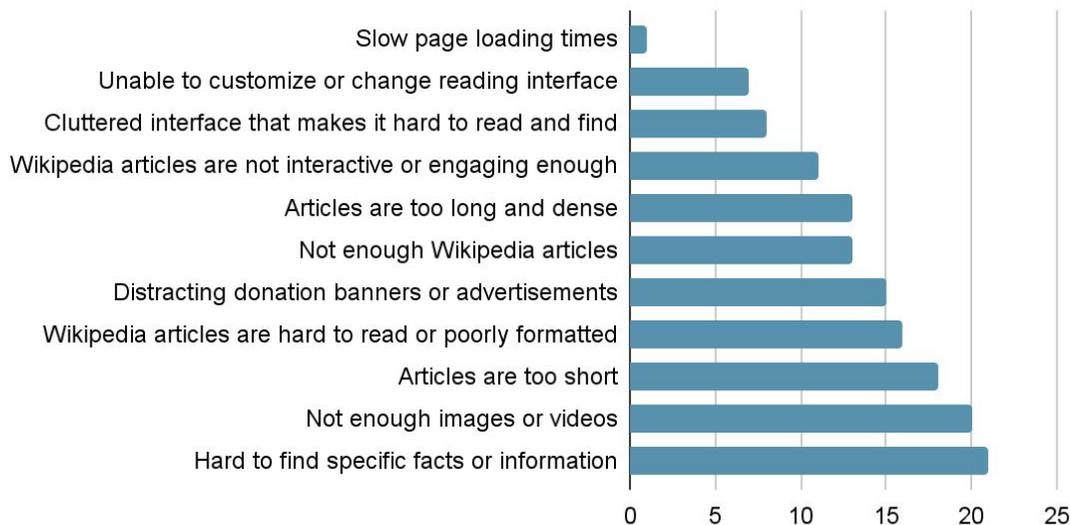
A few more Readers (10) than Editors (4) report "distracting banners or advertisements."

A few more Editors (9) than Readers (2) report that articles are too long.

Category	Value
Slow page loading times	1
Unable to customize or change reading interface	7
Cluttered interface that makes it hard to read and find	8
Wikipedia articles are not interactive or engaging enough	11
Articles are too long and dense	13
Not enough Wikipedia articles	13
Distracting donation banners or advertisements	15
Wikipedia articles are hard to read or poorly formatted	16
Articles are too short	18
Not enough images or videos	20
Hard to find specific facts or information	21

(x-axis: 0, 5, 10, 15, 20, 25)

Although they can identify various "other" problems.

Problem area	Selected responses
Accessibility	*More accessibility options, like being able to change the font type for legibility*
Accuracy and bias	*Many articles on controversial issues - particularly political figures, events, and issues - are severely biased.*
Broken or dead links	*Bibliography links don't always resolve*
Content gaps	*Not enough Australian articles*
Poor layout	*The tables for things like a musician's discography or a director's filmography, for example, are often confusingly organized, or the information which is most important or likely to be sought is closer to the bottom or right side, and require scrolling which is quite inconvenient on a mobile device.*

When they encounter problems, they often simply avoid reading article content.

How do you typically overcome the problems you experience while reading articles on Wikipedia?
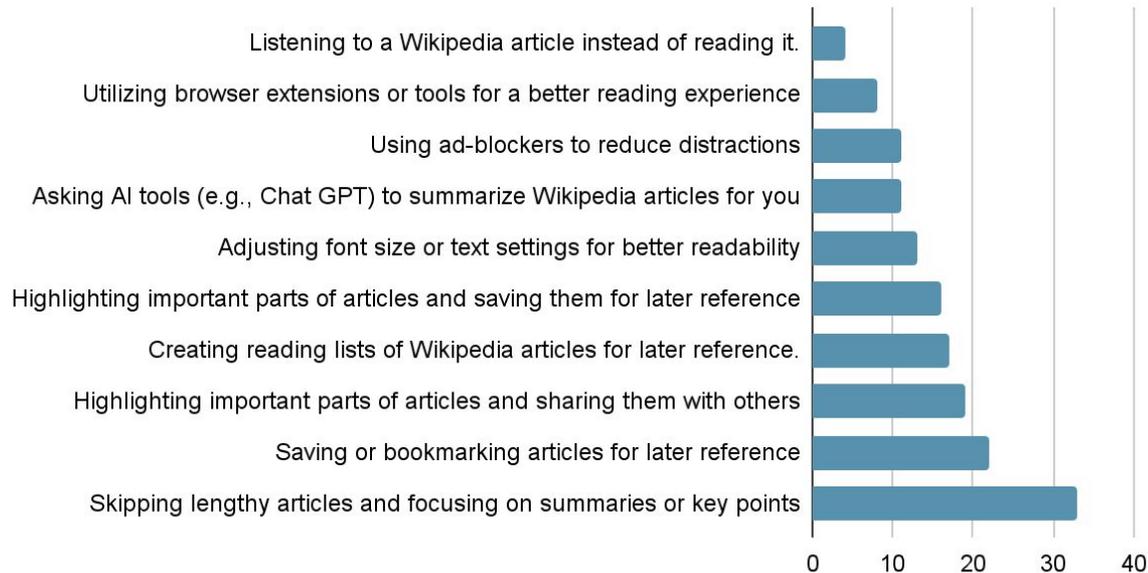
Individual respondents also reported a few "other" problem-avoidance strategies:

- **Using native browser search (Ctrl+F) to find specific keywords**
- **Ignoring the donation banner**
- **Consulting alternative sources**
- **Learning how to edit to fix problems**
- **Skipping straight to the references**

Strategy	Value
Listening to a Wikipedia article instead of reading it.	~4
Utilizing browser extensions or tools for a better reading experience	~8
Using ad-blockers to reduce distractions	~11
Asking AI tools (e.g., Chat GPT) to summarize Wikipedia articles for you	~11
Adjusting font size or text settings for better readability	~13
Highlighting important parts of articles and saving them for later reference	~16
Creating reading lists of Wikipedia articles for later reference.	~17
Highlighting important parts of articles and sharing them with others	~19
Saving or bookmarking articles for later reference	~22
Skipping lengthy articles and focusing on summaries or key points	~33

0   10   20   30   40

[surveyed new account holders describing *where else* they go when Wikipedia lacks the information they need]

- *If it is important to me, I allocate the time to read closely. I may also turn from the Wikipedia article to a book from my public library.*
- *Taking parts of Wikipedia and googling them to find other websites that sometimes do a better job of the summary*
- *Look elsewhere. If I do find what I am looking for, then I should really add to Wikipedia.*
- *I don't take any measures; I just look outside of Wikipedia if I can't find what I'm looking for quickly.*
- *Read books*
- *Search the link referenced in Google*
- *I try Google searches for various/related terms and look for other sources.*
- *Cross-compare with other sources*

3c. **Did they get what they were expecting from their accounts?**

Their accounts generally met their expectations.

Did you get what you expected from your Wikipedia account?

Editors   Readers
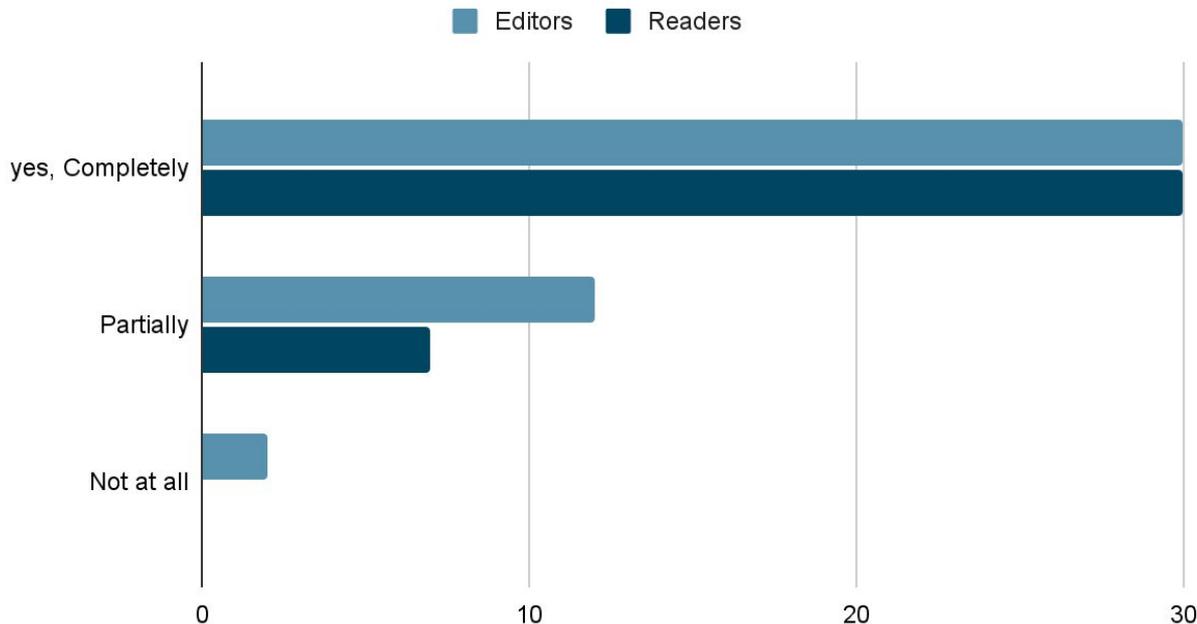
Two editors reported expectations that were "not at all" met:

- *I was hoping to be able to edit any article, but it seems many are extra protected.*
- *I just wanted to create my artist page but now I have to update pages I have no interest in to be able to create my own.*

Most editors' expectations for their accounts were "completely" met:

Editing and specific ways of contributing (18 responses)
- *Ability to edit article, contribute via talk pages and expand my connection to Wikipedia as a whole*
- *The ability to edit articles easily using some simple markup*
- *I was expecting to get access to create a new page, which I understood will be possible after I make sufficient edits*
- *A way to edit an article and be able to monitor afterward if there were any comments or changes made to this edit by others*

Contributing to shared information and knowledge (7)
- *Information updates, contributing to information, research*
- *To get new articles for research, be able to publish my articles, learning, and writing new papers*
- *The ability to add my infinitesimal bit to global knowledge*
- *The ability to impact people's knowledge*

Access to community (2)
- *Ability to edit article, contribute via talk pages and expand my connection to Wikipedia as a whole*

"Other" expectations (5)
- *Everything is okay right now. I am using **Teahouse** for learning*

[a new account holder whose expectations were "completely" met, on what they were expecting from their account]

Mostly, identity clarity for others looking at my edits and comments. I had been making edits for a while without an account but as I engaged in talk pages more I wanted to have a consistent identity, and one which was not contaminated by others on the same university network.

However, several editors were expecting more help getting started editing.*

More help getting started (8 responses)

- *More simplicity in the editing and revision process.*
- *Instructions on how to edit are very complicated and links referred to are not available.*
- *A clear way to bookmark pages to edit later.*
- *I was hoping for more help when editing existing sites/pages that I am interested in....there are a lot of rules that need to be met to edit pages, and the rules' directions are hard to follow.*
- *I thought managing an account will be straightforward.*

Better support for IP blocks

- *[I was expecting a] Quick response to emails concerning IP address blocking me from editing.*

*Responses of 12 editors who reported that their expectations had been "partially" met by their account.

[a surveyed English new account holder, looking for better onboarding]

It would be helpful to have some more targeted basic "how to" and best practices aligned with most common functions, rather than the 100+ articles and guides I was presented by on the "getting started" page! It was so intimidating I haven't done any [editing] . . .

[Arabic interview participants describing their search for more onboarding resources, and the need for instructional videos]

*At the beginning, I didn't understand anything about Wikipedia or how it works. Then, I started to understand more about the Talk page. I used **YouTube** to understand how to create content on Wikipedia. So, I started to self-teach myself via YouTube.*

. . .

*I've tried to search for how to get myself familiar with the tool and learn how to use Wikipedia for editing and publishing content. I searched on **YouTube** but information there is so limited especially for the Arabic users who may not know English to see videos in a different language. Also, Wikipedia doesn't have its own channel on YouTube so that they learn users how to better use the tool.*

Most readers' expectations were also "completely" met. They were expecting:

Ability to edit (6)

Access to community (3)

- *. . . to see what kind of help Wikipedia is looking for.*

Donation-related features or information (3)

Ability to save articles and create reading lists (3)

- *The ability to save articles that I like or reference frequently*

Access to more content in area of interest (2)

Access to generalized account features (2)

- *Just to have a user account with the usual, alerts, inbox, watchlist.*
- *. . . and to customize the window to my personal preferences.*

Linking content and data across devices (2)

- *To be able to access my information across multiple devices.*

A generally richer Wikipedia experience (2)

- *Access to new features and inner workings of Wikipedia.*
- *Not much, I like browsing Wikipedia and decided to make an account for any perks that come with that.*

View own reading history (1)

Readers with "partially" met expectations were expecting to get:

A better user interface

- *An enhanced experience , not in any major way, but enhanced somehow*
- *Nothing particular at all. Better user interface, I guess.*

More features

- *I expected more features like advanced search options etc.*
- *Methodology for sending the response of certain content /data.*
- *Simple results*

"Other"

- *I had no idea of what to expect. But I did find some things that I could buy for stocking stuffers at Christmas*
- *section with donation info*

3d.   What would they change about reading Wikipedia?

Accessibility, and especially Dark Mode

Improvement area	Selected responses
Dark mode (8 responses)	*A dark mode would be the best change for me. It would also be nice to find ways to use more whitespace and vary layouts more; this makes it easier for me to navigate large amounts of text.* *Maybe a dark mode option. But that's a stretch, just to find something to say. I like dark mode in most apps, on my computer and phone, but not reading apps.*
Accessibility (4)	*Just the accessible font change. Different fonts read better for people with astigmatism than for people with dyslexia, for instance* *More options for formatting the page sizes, such as being able to go back to the formatting that was used up to a few months ago, and allowing links to keywords more than just once per section*
Design (7)	*I would like the option to customize the Wikipedia interface to suit my preferences. This could include changing the layout, font styles, color schemes, and overall aesthetics of the page.* *I'd make it more modern and immersive to make finding relevant information easier* *The graphic interface, it looks old-fashioned, I dig it but I think it can be fixed.* *Give it some color, maybe customizable backgrounds* *Maybe different colors for the headings and subheadings*

[an interviewed Arabic reader on their desire for dark mode]

I think that the design of Wikipedia should include dark mode because it is very annoying for me as a reader to have to read articles in white background.

Reading tools

Improvement area	Selected responses
Reading lists	*An easier list system. It took me forever to figure out how to make a list of articles I wanna look into (I'm not sure I know how to get back to that list).*
Recommended articles	*I would love to see a personalized recommendation feature that suggests articles based on my past interests and contributions. Imagine having a curated feed tailored to my favorite topics, making it easier to discover new and relevant information.*
AI tools (3 responses)	*Probably, create an internal A.I chatbot to summarize lengthy articles*

Locating and accessing information

Improvement area	Selected responses
Contributor info	*Name the author/source of articles. I would like students to be able to reference Wikipedia but there are problems with accuracy*
Article section search	*A more granulated internal Wikipedia search engine that would take me straight to, for instance, the regions of France, or the weather of France, rather than a complete article on "France". In which I usually find what I am looking for, but it would help to be taken there.*
More dynamic or detailed TOC (2)	*Contents/index page is more specific about the contents of its section* *I would provide an option to change organizational style at the top of the article. For example, being able to switch between chronological, alphabetical, or by popularity would be of great convenience, especially on some longer articles . . .*
Improve article readability (4)	*The denseness, to make it more fun and interesting to read* *Explain in simple words*
Address content gaps (3)	*I wish that more minor articles such as municipal politics were better updated.* *As I said more about Australia*
Organization (6)	*Ensuring all articles, but especially the longer ones, have a consistent concise summary and table of contents that accurately reflects the content/span of topics covered.*

Interactivity and multimedia

| Improvement area	Selected responses
Interactivity	*Probably integrating interactive elements like quizzes so that users can test their knowledge as they read. And to be honest, I'd love that if it were to be implemented lol.*
Download audio	*A way to download audio readings offline in more voices if there is not already enough*
Article preview	*I'd love to navigate the different pages while still being able to reference previous ones without having to open it in a new tab*
Multimedia (7)	*I would add more pictures and videos* *Summaries and videos and infographics. I think a lot of people understand better in a non-written medium. I used to write off any other way of learning except dense writing and reading as shallow. However, I've recently come across a lot of people that understand concepts quite deeply from long explainer youtube videos as well.* *I would include more podcasts* *Maybe blur possible disturbing images on medical articles with the option of unblurring by the viewer* *Add more images to Mathematics articles*

4. **What do interviewed new account holders think about the 8 reading feature concepts the Growth team has been exploring?**

AI reading assistant and summary chat-bot

Automated article summary chat-bot	Automated article summary chat-bot
Ask me to create a summary for you in the format you prefer! Here are some ideas to help you get started: [Flashcards] [Practice questions] [Abstract summary] [Detailed summary] ...or, you can type in how you'd like me to summarize the article.	Imagine a long time ago in 1969, some brave astronauts flew to the Moon in a special spaceship called Apollo 11. One of those astronauts, named Neil Armstrong, became the very first person to step on the Moon's surface! He said, "That's one small step for man, one giant leap for mankind." After that, they had more missions and sent more astronauts to the Moon a few more times. These missions were very important because they helped us learn more about space and our world. They also inspired lots of people to dream big and think about exploring other planets one day. [Can you summarize the "Moon landing" article for a 9-year old? ▷]

When you read things online, how often do you ask a chatbot (e.g., ChatGPT) to help summarize complicated articles?

LEFT: Design artifact shown to English interview participants, depicting possible functions of an "automated article summary chat-bot."
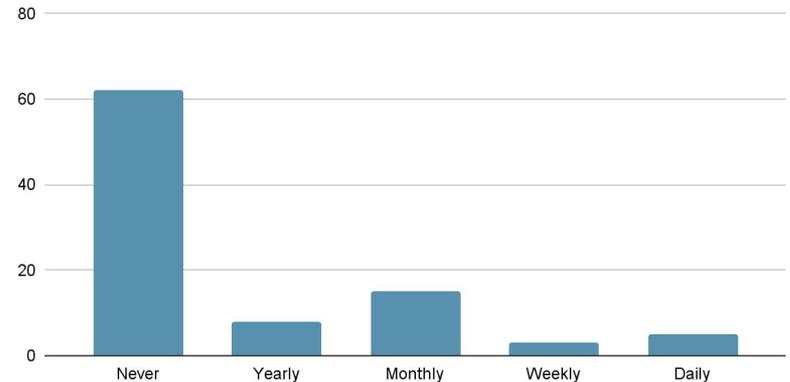
Right: Survey respondents (who were not shown the artifact) report that they rarely use such tools when reading online.

Interview participants put the chat-bot in their "top 3" features shown.

Although interview participants noted that this concept may **drastically change the Wikipedia reading experience**, most of them placed it in their "top 3."

Some noted that many other sites have chat-bots that are seen as intrusive, ineffective, and act as agents of the sites' profit-driven agendas. How would Wikipedia's be different?

In an indication of a possible generational divide, enthusiasm for this concept came from **younger participants** who were interested in its potential to ease the burden of reading long articles.

On the other hand, **older participants** tended to be skeptical about using an immature technology to "improve" the Wikipedia reading experience.

I like the idea. There is an article that I was reading on Wikipedia recently, it was very long and in a very small font. I didn't have enough time to read it. So, a tool that can summarize it for me would be very valuable.

— Arabic interview participant

Although the concept prompted some confusion and concern in some interviews.

The meanings of some suggested options were unclear and confusing for Arabic participants.

Some Arabic participants were unsure about how the feature will work.

We're still trying to feel our way through generative AI. So obviously Wikipedia factuality is really important and ChatGPT and other products tend to hallucinate a lot. They make mistakes very confidently, so I would be concerned about the proliferation of misinformation with a feature like this.

— English interview participant

AI reading assistants: detailed interview findings

Concerns

Enthusiasms

Expectations

Wikipedia relies on immature or biased machines that mislead readers and feed them misinformation.

The AI chatbot could help users summarize long articles and save their time especially if they don't feel like reading or if they are still unsure whether the content is worth their time or not.

The AI chatbot will be in a secondary position (e.g., on the bottom side of the page as regular chatbots). It will be inactive unless they interact with it.

The AI chatbot becomes the first spot users interact with. So instead of engaged with reading, they become reluctant readers.

The summary the AI tool will produce could be shared on other social media platforms; especially ones with limited space for contribution, like Twitter / "X"

The AI chatbot will provide meaningful suggestions/options for the users to choose from and it won't be as limited as other bots.

These AI machines confidently make mistakes, and this could negatively affect Wikipedia's reputation of credibility and accuracy.

The tool will be a significant step for Wikipedia ("leading the way" in AI), and it could not only summarize articles but also suggest the best articles to be read based on their questions to the bot.

Users will still be able to interact with the bot in a free writing mode in case they didn't find what they need in the preset suggestions.

Listening to articles

Earth ▶ Listen to this article

Article   Talk

Earth is the third planet from the Sun and the only place known in the universe where life has originated and found habitability. Earth is the only planet confirmed to sustain liquid surface water.

Generally, when you read things online, how often do you listen to articles instead of reading them?

LEFT: Visual artifact shown to interview participants depicting a button feature to "Listen to this article."

NOTE: A Spoken articles feature exists on English Wikipedia and in 26 other languages. However, this feature has proven difficult to scale.
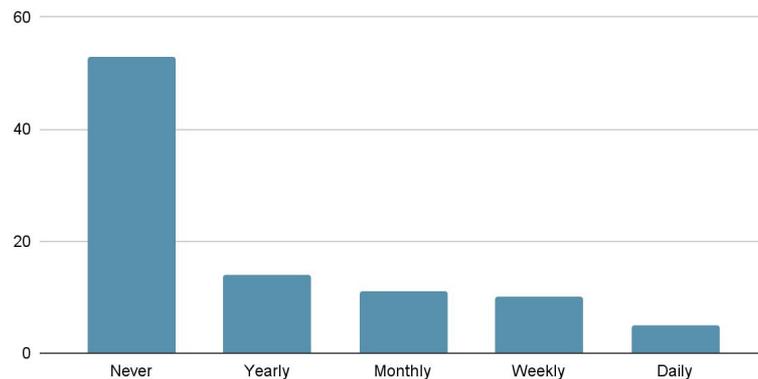
RIGHT: Survey respondents (who were not shown the artifact) indicate that they rarely "listen to articles instead of reading them."

Interview participants are ready to listen.

Interview participants thought this feature was appealing and struggled to imagine its downsides—half of them placed it in their "top 3," although few have used such a feature in the past.

Participants conceptually linked this concept to their consumption of podcasts, YouTube videos, and audiobooks, and they also noted that this feature builds on **Wikipedia's reputation of support for languages and language learning**.

They saw themselves using it in the context of:

- **accessibility** challenges,
- **multitasking**, and especially
- **language learning** (by listening to articles in a second language).

. . . and maybe listen to it translated that would just be wow. It would greatly enhance my experience with Wikipedia if I could have information on foreign languages. I don't really need to listen to English. But if it's another language, that would really appeal to me very much.

— English interview participant

Interview participants are ready to listen.

That would be pretty good because it would help me more with multitasking. Just so again, especially as long as it didn't pause in the background if I went to another tab. I would find to be the most useful and so I could have something playing in the background if I'm just looking for some easy listening.

— English interview participant

Participants liked the design. They expect to see pause, forward, and backward buttons.

الأرض ◉ استمع لهذا المقال

مقالة   نقاش

الأرْض هي ثالث كواكب المجموعة الشمسية بعدًا عن الشمس بعد عطارد والزهرة، وتُعتبر من أكبر الكواكب الأرضية وخامس أكبر الكواكب في النظام الشمسي، وذلك من حيث قطرها وكتلتها وكثافتها، ويُطلق على هذا الكوكب أيضًا اسم العالم.

Listening to articles: detailed interview findings

Concerns

The perceived quality of reading could be low, especially given that desires for listening experiences may be extremely subjective and individualized.

Reading in other languages (e.g., Arabic, ..) could imply pronunciation and/or dialectal choices that may not appeal to all listeners.

Will the feature be limited to use only when the article in question is open in the browser or the app? Will the feature be available when a mobile device isn't actively being used?

Enthusiasms

Participants would use this feature to listen to articles in other languages that they would like to learn or master. They could also listen to how specific words are pronounced.

This feature may help users with multitasking by listening to articles while engaged in doing something else.

This feature could potentially enhance accessibility for individuals with special needs.

Expectations

The feature will include a play, move forward and backward buttons. It could allow them to choose between male and female voices whether machines (e.g., Google Translate or Map) or humans.

The feature will automatically highlight the part being read to help users keep track of where they are. It will them to speed up audio as well.

The feature will allow users to move to other tabs while the audio keeps playing in the background.

making and saving highlights
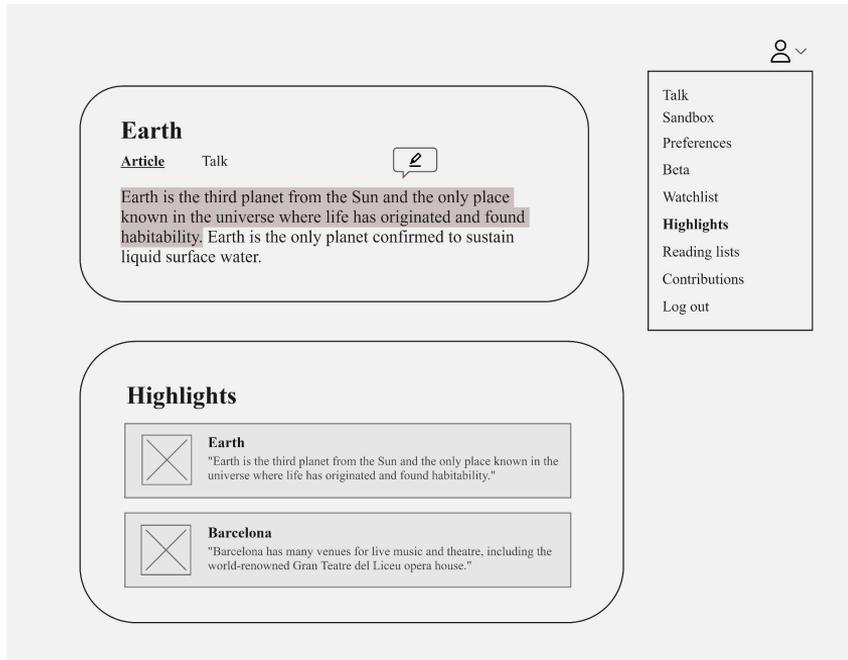
Generally, when you read things online, how often do you highlight interesting parts of an article?
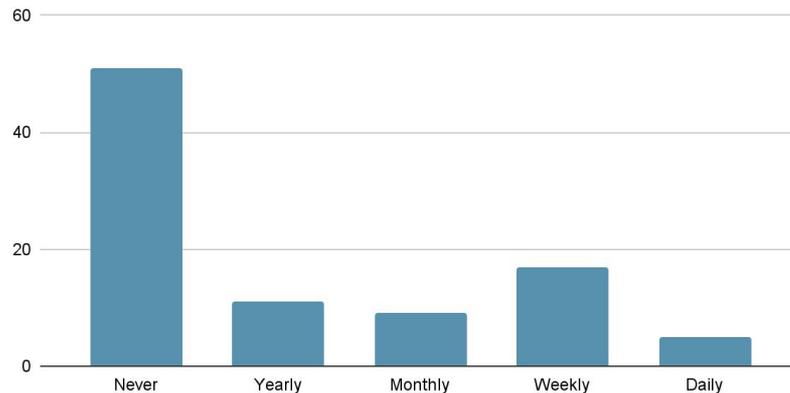
LEFT: Visual artifact shown to interview participants depicting submission of questions.

ABOVE: Survey respondents (who did not see the artifact) report that they rarely highlight while reading online.

Interview participants like to highlight, but wonder whether they would use the feature in Wikipedia.

Interview participants note that they do highlight when reading online, but that their current **highlighting practices emerge from their individual reading behaviors**, and include copy/pasting, taking screenshots, and underlining (in print media).

Interview participants questioned whether they would have a need for such a feature in the Wikipedia UI, and some also pointed to the dynamic nature of Wikipedia articles, which may render previously saved highlights outdated or inaccurate.

I don't highlight it. I copy and paste a lot of information and add it to my Notepad . . . What I usually do with Wikipedia is I'll start with a subject and then save a lot of the pages from Wikipedia to swipe record it because I know it changes a lot . . . I don't know if that was something I would use. It doesn't seem like something I would need.

— English interview participant describing their process for highlighting Wikipedia.

Highlighting is intriguing, but it's hard to link the concept to current practices.

Participants were confused about the "Pen" icon. They associate it with the "editing" action .

I would definitely make sure I was logged in—a lot of times it logs out and I don't notice until I get that message to donate but if you're talking about the feature in particular, yeah, I think it would be very helpful because like I said a lot of times I'm interested, in a specific piece of information, either because I'm trying to solve a problem or just because I'm a giant nerd and I'm just curious about something.

— English interview participant

الأرض

مقالة   نقاش

الأرض هي ثالث كواكب المجموعة الشمسية بعدًا عن الشمس بعد عطارد والزهرة، وتُعتبر من أكبر الكواكب الأرضية وخامس أكبر الكواكب في النظام الشمسي، وذلك من حيث قطرها وكتلتها وكثافتها، ويُطلق على هذا الكوكب أيضًا اسم العالم.

يسلط الضوء

الأرض
الأرض هي ثالث كواكب المجموعة الشمسية بعدًا عن الشمس بعد عطارد   والزهرة، وتُعتبر من

برشلونة
تمتلك برشلونة العديد من الأماكن للموسيقى الحية والمسرح، بما في ذلك دار أوبرا" Gran Teatre del Liceu ذات الشهرة العالمية".

يتحدث
رمل
التفضيلات
بيتا
قائمة المراقبة
يسلط الضوء
قوائم القراءة
مساهمات
تسجيل خروج

making and saving highlights: Detailed interview findings

| Concerns	Enthusiasms	Expectations
Participants note that the content of articles on Wikipedia frequently see updates and revisions, so saving them as pages would be more beneficial than highlights for keeping track of changes	Generally participants with a research background find it exciting to have the opportunity to highlight interesting information and save it for future reference. Especially since it's a daily activity for researchers.	Participants were consistently confused by the "Pen" icon, mistaking it for an editing tool.
They believe that highlighting may be more suitable for reading on paper rather than digital devices.	This feature may help them organize and access information in a better way.	They expected the feature to function similarly to other platforms like Microsoft Word and PDF, allowing them to choose from a variety of colors for their highlights before saving them.
Some participants are concerned that highlighting a large amount of text can make it difficult to search through the highlighted sections.	They think that this feature could potentially encourage them to log in using their accounts to save highlights regularly.	They expressed a desire for a "search" option so that they could more easily locate their saved highlights.

Creating reading lists

Earth 🔖

Article   Talk

Earth is the third planet from the Sun and the only place known in the universe where life has originated and found habitability. Earth is the only planet confirmed to sustain liquid surface water.

Talk
Sandbox
Preferences
Beta
Watchlist
Highlights
Reading lists
Contributions
Log out

+ Would you like to add "Earth" to a reading list? *Add to reading list*

Earth 🔖

Article   Talk

Earth is the third planet from the Sun and the only place known in the universe where life has originated and found habitability. Earth is the only planet confirmed to sustain liquid surface water.

Reading lists

3 saved articles
Planet

1 saved article
French cuisine

All your saved articles

Generally, when you read things online, how often do you create reading lists to save articles for reading later?
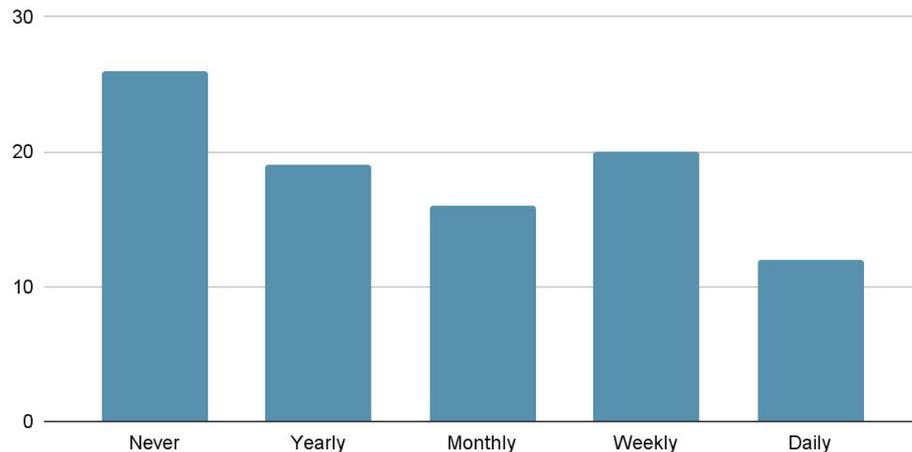
LEFT: Visual artifact shown to interview participants depicting a "Reading lists" feature. **ABOVE**: Survey respondents (who did not see the artifact) report mixed rates of reading list creation.

Interview participants endorse the concept, but don't see an immediate application.

Interview participants wonder how this feature would differ from the ways in which they currently use reading lists.

Many currently create and use reading lists, as do many of the survey respondents. However, interviews indicate that reading lists are idiosyncratic and are directly tied to the way people read Wikipedia—that is, **they currently curate reading lists in their browsers and without logging in to a Wikipedia account.**

[Public reviews of the Wikipedia Reading Lists Chrome extension](#) likewise express dissatisfaction with the interaction between Wikipedia and their browser.

It would mean I could maybe read a little bit about a subject instead of feeling like I need to look at the whole article at once and then maybe I get sidetracked by a bunch of other links to other interesting topics on the same article. So it would just make it easier to go back to something.

— English interview participant

Interview participants want to know how lists are generated and curated.

It looks like you can have separate reading lists. So I guess I would be interested to know if the reading lists are generated by the site or by the user . . . I think honestly, I would prefer the second one, but I'd like to have the option to make my own lists. Or maybe in a perfect world you'd be able to turn the feature on and off.

— English interview participant

Participants are confused about the "Bookmark" icon.

Participants prefer a button with a "add to reading lists" phrase or a "star" icon.
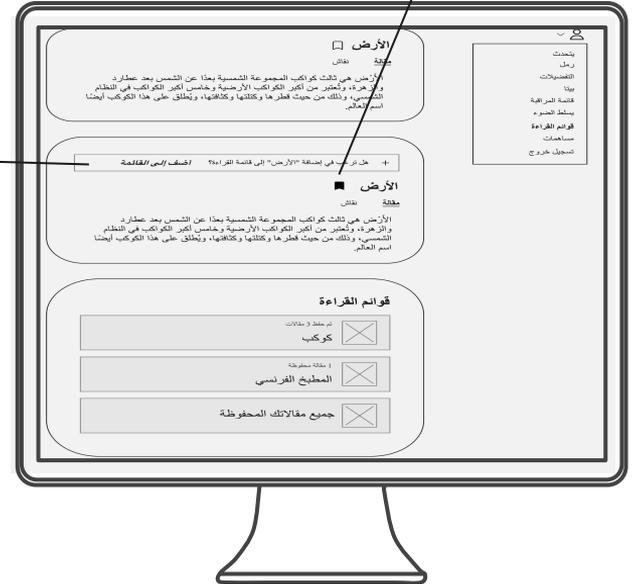
Creating reading lists: detailed interview findings

Concerns

Uncertainty of whether their lists will be private or public. Participants need reassurance that their lists are saved privately and can only be accessed by them.

Adding articles to reading lists might discourage them from reading more, thinking they can come back later.

Overall, some participants don't believe this feature will improve their experience on Wikipedia. They highlighted that it would require creating an account.

Enthusiasms

Generally participants save Wikipedia articles in their browsers. They think they could use this feature to organize articles by topic, save them for later, and access them more easily

This feature may help them save articles they are interested in but don't have time to read or ones they want to keep track of changes in.

This feature could potentially be helpful for doing comprehensive research and in educational and academic settings

Expectations

Participants wonder if articles are sorted by the site or by users. Ideally, they would like to have the option to turn this feature on and off based on their preference.

The "bookmark" icon was confusing to some participants. They suggest using a "star" icon or the phrase "add to list" instead.

They want the option to "add to an existing reading list" and "create a new list" available on a single screen to avoid going back and forth between screens.

asking questions about articles

Subject of your question

Description

Submit question

Is the new study about Earth worth adding to the article?

According to a recent study the Planet Earth may have been formed in only 3 million years instead of the 10-100 million years thought earlier. Should this new study be included in the main Earth article or not?

Submit question

Generally, when you read things online, how often do you submit questions or suggest specific improvements for articles?
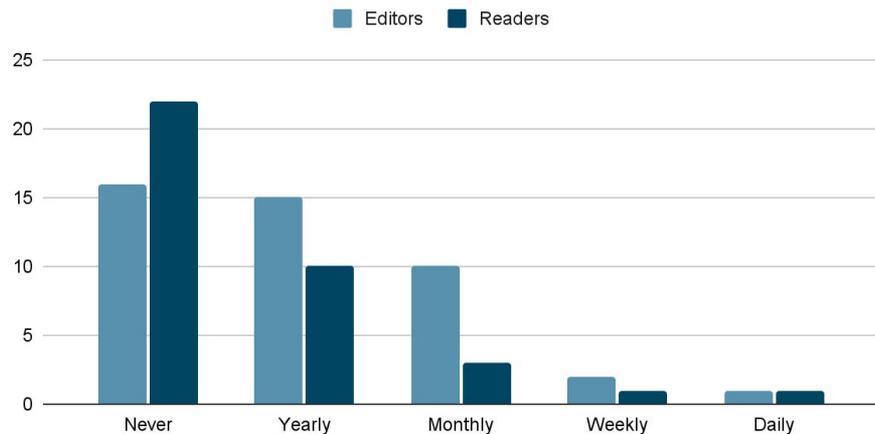
Editors   Readers

LEFT: Visual artifact shown to interview participants depicting submission of questions. **ABOVE**: Survey respondents (who did not see the artifact) report that they rarely submit questions or suggestions, although newly registered **Editors do this behavior more frequently**.

Interview participants struggled to grasp the concept.

Participants generally found this concept to be out of sync with their normal online reading behavior. Most struggled to understand how it would work and how it differed from a traditional comment section.

The uncertainty expressed by participants is possibly related to widespread uncertainty about how Wikipedia works on the part of readers (including the new account holders interviewed).

Wikipedia-knowledgeable participants wondered what would differentiate this function from the current functions of Talk pages.

I guess my question is who would answer the question? Is it for the article writer or for the Wikimedia Team? Then, how will I get the answer? Via email, maybe?

— Arabic interview participant

The concept prompted questions and uncertainty.

You'd have to have a database to store and sort the information. And there would be a lot of nonsense to filter. But if it's available, it seems worth exploring. . . It could affect one's research either good or bad. It would seem to be more Interactive. Could be good. maybe? Could be distracting? It seems like it could enhance my reading experience but it's very hard to say how Yeah. But it seems more along the line of the AI approach to things.

— English interview participant

Participants don't know whom they will be submitting questions or suggestions to.

موضوع سؤالك

وصف

أرسل السؤال

هل تستحق دراسة الأرض الجديدة الإضافة إلى المقالة؟

وفقا لدراسة حديثة، من الممكن أن يكون كوكب الأرض قد تشكل خلال 3 ملايين سنة فقط بدلا من 10 إلى 100 مليون سنة كما كان يعتقد سابقا. هل ينبغي إدراج هذه الدراسة الجديدة في مقالة الأرض الرئيسية أم لا؟

أرسل السؤال

asking questions about articles: detailed interview findings

Concerns

Enthusiasms

Expectations

Some participants find it difficult to understand the functionality of the concept and raised questions such as: Who will answer their questions? How will they answer them? What would be the expected response time? What type of questions should they ask? Are there any limitations on the kind of questions they can ask? How is it different from the Wikipedia Talk Page?

Some participants are concerned about having to create an account to use such a feature and whether it should be available to everyone, even those without accounts.

Although some participants are unsure about the possibilities that the new feature can offer, some have expressed excitement and a willingness to use it to help others by answering questions, or by sending suggestions to experts in the community.

This feature may help them enhance interaction among users by allowing them to seek help from others on confusing topics and request changes, leaving it to more knowledgeable individuals to take the necessary steps.

Some participants have suggested that opening the comments section on articles would be a better option than having a separate box for asking questions.

Others believe that having two separate boxes, one for the subject and another for the question, is unnecessary and that one is enough.

They expect to receive notifications when their questions are answered or when their suggestions are being discussed. Others expect to receive the answers via email within 24 hours.

sharing article snippets

Earth

Article   Talk   ⌞◁⌟

Earth is the third planet from the Sun and the only place known in the universe where life has originated and found habitability. Earth is the only planet confirmed to sustain liquid surface water.

Earth is the third planet from the Sun and the only place known in the universe where life has originated and found habitability.

Earth   **WIKIPEDIA**

Generally, when you read things online, how often do you share facts and highlights from articles with others?

	Never	Yearly	Monthly	Weekly	Daily
30				■	
20		■	■		
10	■				
0					■
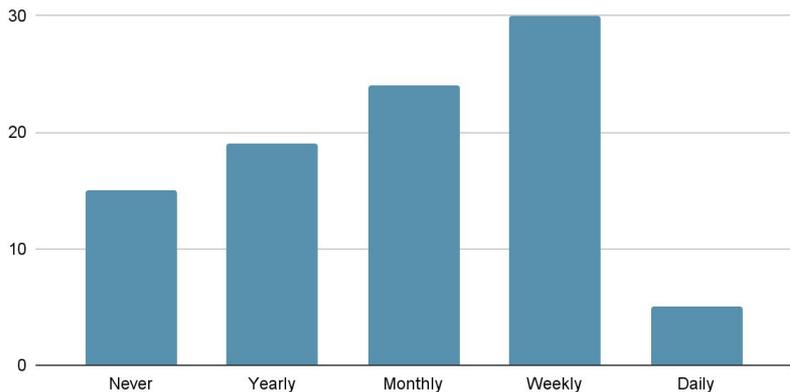
LEFT: Visual artifact shown to interview participants depicting creation of snippets. **ABOVE**: Survey respondents (who did not see the artifact) report that they frequently share facts and highlights with others online.

sharing article snippets: interest is mixed

Interview participants expressed a range of views about the snippet feature concept.

Positive: This feature will make it a lot easier to share things on social media or via text.

Negative: The shared information will be decontextualized or incomplete. Also, when would I use this thing?

Although survey respondents indicated a generally high rate of sharing "facts and highlights," only 3 of 12 interview participants prioritized the snippet feature from among the concepts presented.

I don't think I'd use such a feature.

— Arabic interview participant

I feel like this is something that could be very easily taken out of context because I think I've seen examples of that happening in the past.

— English interview participant

sharing article snippets: interview enthusiasm

This would make sharing easier on other social media platforms like TikTok and Snapchat.

— Arabic interview participant

So you can share the definition with other people . . . I think it's pretty cool. because you could just share it or post something anywhere and then it would show up as the definition on Wikipedia.

— English interview participant

Participants would like to see a hyperlink or a show more link from which they can access the whole article page.

الأرض

مقالة   نقاش

الأَرْض هي ثالث كواكب المجموعة الشمسية بعدًا عن الشمس بعد عطارد والزهرة، وتُعتبر من أكبر الكواكب الأرضية وخامس أكبر الكواكب في النظام الشمسي، وذلك من حيث قطرها وكتلتها وكثافتها، ويُطلق على هذا الكوكب أيضًا اسم العالم.

الأَرْض هي ثالث كواكب المجموعة الشمسية بعدًا عن الشمس بعد عطارد   والزهرة، وتُعتبر من

الأرض

WIKIPEDIA
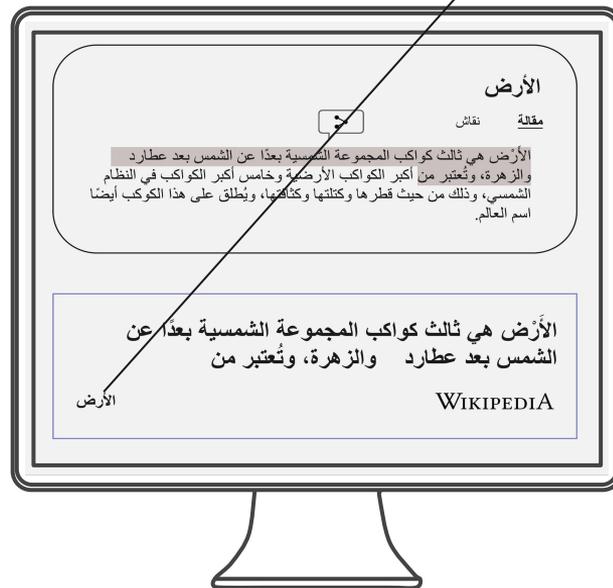
sharing article snippets: detailed interview findings

Concerns

Sharing small pieces of information in this manner can lead to the information being taken out of context or becoming nonsensical and difficult to comprehend for others.

Some participants think that sharing content as an image can result in longer loading times

This feature could be abused, and it is crucial to consider how the individuals who receive partial information will be able to access the complete article.

Enthusiasms

Some participants are excited about the prospect of being able to share article snippets on social media platforms such as Twitter and Facebook.

They believe that this feature would make it easier for them to share information with others. Instead of having to copy and paste some text, they can simply share the snippet image, which includes the article's source and name.

This feature would be particularly helpful when navigating Wikipedia from a mobile device. It could be useful during debates with friends, allowing providing evidence to support arguments.

Expectations

Participants suggest adding a hyperlink (such as the article's title) to allow others to access the entire article and view the context of the excerpt.

Others believe that we should include a symbol indicating that there is more to this part (such as three separated dots or quotes used in scientific papers), possibly with a "show more" option to access the entire article.

When they click on an image within an article, they expect to see the content of the image highlighted within the article for easy location. This is similar to using the search function on Google.

subscribing to topics

Earth

Article   Talk

Earth is the third planet from the Sun and the only place known in the universe where life has originated and found habitability. Earth is the only planet confirmed to sustain liquid surface water.

Solar System	Nature	Planets of the solar system

Solar System

23 articles in this topic

[Subscribe to this topic]

Planets and dwarfs: Terrestrials (Mercury · Venus · Earth · Mars) · Giants (Gas (Jupiter · Saturn) · Ice (Uranus · Neptune)) · Dwarfs (Ceres · Orcus · Pluto · Haumea · Quaoar · Makemake · Gonggong · Eris)

Generally, when you read things online, how often do you subscribe to a topic to find related articles?
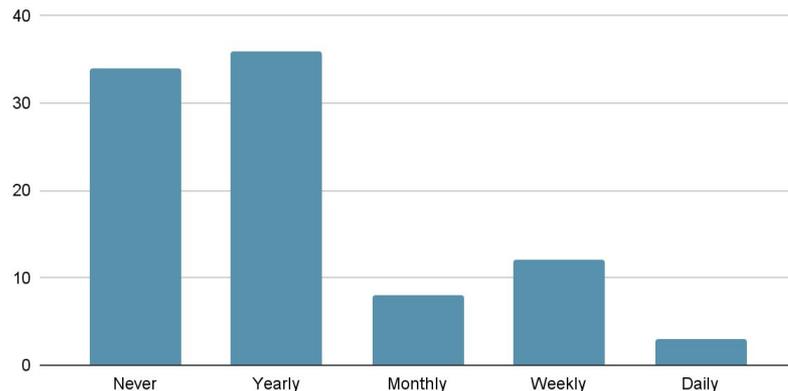
LEFT: Visual artifact shown to interview participants depicting topic subscription. **ABOVE**: Survey respondents (who did not see the artifact) report that they generally rarely "subscribe to a topic to find related articles."

Interview participants generally didn't express enthusiasm about the concept.

Participants struggle to imagine a scenario in which they'd want access to *all articles* in their topic.

They also question how the subscription would work:

- By notifications? On what criteria?
- Alerts when articles are added? Changed?
- What exactly are we "subscribing" to?

Some wondered if subscribing would affect "the algorithm," thereby changing their experience elsewhere on Wikipedia.

I'd like to do a deep thought sometimes . . . I'll also just look at a single article and then I might look at a few directly related articles, but I don't know if I would look into all of the articles on a specific topic so I don't know if I would use the Subscribe feature.

— English interview participant

subscribing to topics: what exactly are we subscribing to?

Participants were confused about the concept of sorting articles by topics and subscribing to them.

subscribing to topics: detailed interview findings

Concerns

Participants often come across articles on topics they find interesting and want to read more about. However, they may not necessarily want to subscribe to all articles on the same topic.

They generally do not expect to subscribe to every article on a specific topic and may feel overwhelmed if they receive too many articles on the same topic.

Enthusiasms

A few users believe that the feature could enable them to subscribe to topics they are interested in, similar to other platforms such as YouTube and LinkedIn.

Expectations

Participants have certain expectations when they subscribe to a topic. They expect to receive notifications for similar topics within the same category.

Others also expect to receive notifications when the articles they have subscribed to get updated or changed.

They would like an option to prioritize their subscribed topics based on their importance and relevance. This would allow them to see how different topics relate to each other.

Sharing reading lists with others
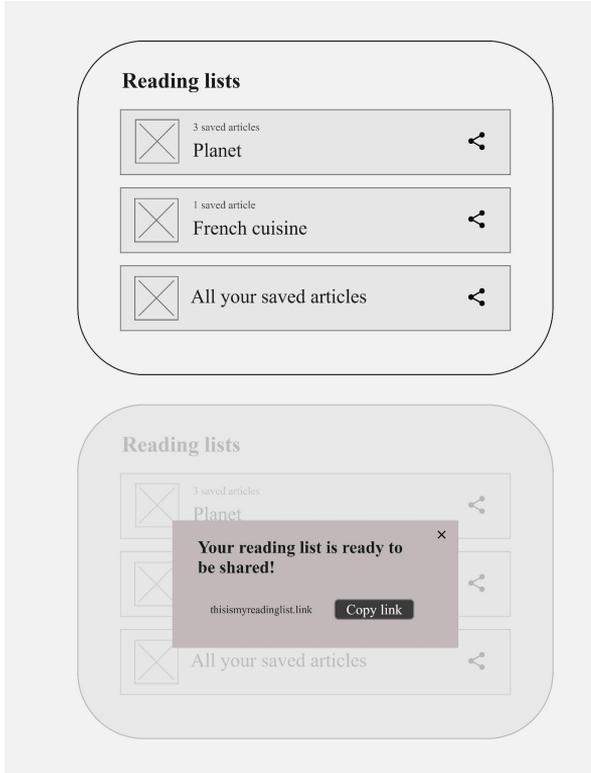
Generally, when you read things online, how often do you share reading lists with others?
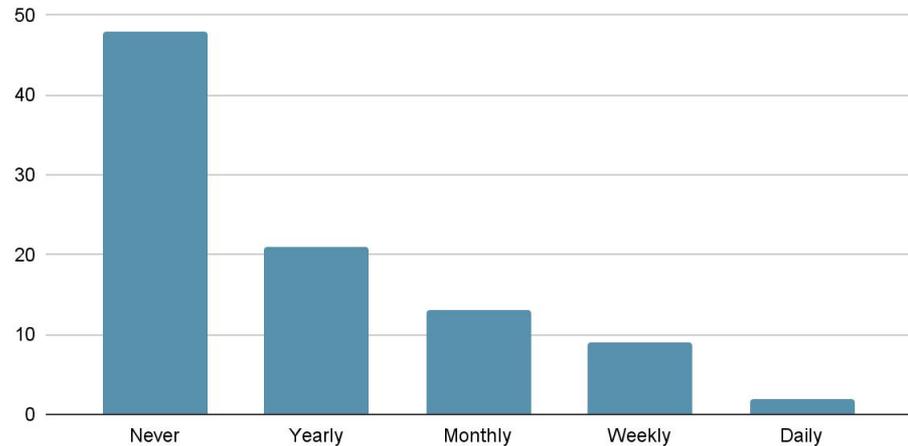
LEFT: Visual artifact shown to interview participants depicting a "share reading lists" feature. **ABOVE**: Survey respondents (who did not see the artifact) report that they rarely or never share such lists with others.

Interview participants were generally unenthusiastic about the concept.

Participants in English and Arabic interviews indicate that they—along with survey respondents—rarely share reading lists with others.

Often, they create reading lists for their own personal use or later reference, although this activity is not described in social terms.

Given the personalized nature of reading lists and reading preferences, participants struggled to imagine situations in which they would need or want to share an entire reading list with others.

I usually save the reading articles for myself and I don't share it with anyone because my friends are not so into reading.

— Arabic interview participant

Share Reading lists: limited enthusiasm

It might make it fun to curate a list of interesting subjects and then maybe share it with people I'm talking to online if I'm looking to share a specific subject of information altogether at once. So, I can link the whole list instead of one article at a time, which is very very useful.

— English interview participant

Participants don't like the pop up message and prefer a share icon next to lists.

قوائم القراءة

تم حفظ 3 مقالات
كوكب

1 مقالة محفوظة
المطبخ الفرنسي

جميع مقالاتك المحفوظة

قوائم القراءة

قائمة القراءة الخاصة بك جاهزة
للمشاركة!

نسخ الوصلة   link.com

جميع مقالاتك المحفوظة
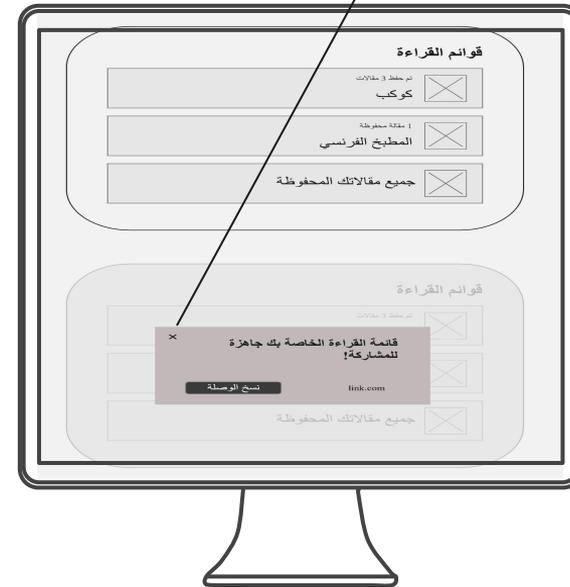
Share reading lists: detailed interview findings

Concerns

Participants are still uncertain about whether they share all their lists or only specific ones.

Participants believe that people have different reading interests and sharing an entire reading list is rare. They may choose to share specific articles only

Some participants are concerned about the durability of the links they share and whether they will be accessible forever or expire within a certain period of time.

Enthusiasms

Some participants are excited about the possibility of sharing reading lists on Wikipedia. They believe that this feature aligns well with Wikipedia's mission of sharing knowledge.

This feature may help them share lists with friends and family, even if their interests in reading differ.

Expectations

Having a share button placed at the top of each list for easy access. When they click on the share button, they would like to receive a message that confirms the copying process instead of a pop-up message.

5. Appendix: Some extra findings

New editors described their journeys.

Editors often begin unintentionally by correcting spelling or grammatical mistakes, updating outdated information, and other similar tasks.

Then, some of them become passionate about editing and take pride in their contributions. Arabic editors, in particular, are often inspired to begin their editing journeys by the lack of information available in Arabic compared to English. Thus, many of them start by translating articles from English to Arabic before writing their own articles.

Initially, new editors often face frustration when starting their editing journey due to the cluttered interface. With too many editing options to choose from, they can feel overwhelmed while trying to take the first steps to create articles. This can either lead them to exert too much effort in self-learning about Wikipedia or lose their motivation and give up on being editors.

Arabic participants express an emotional connection with Wikipedia.

Interviewed Arabic participants expressed a deeper emotional attachment to Wikipedia than their English counterparts.

English participants praised Wikipedia's value as a resource and emphasized the need that it maintains a neutral, factual, and impartial tone. They believe that this is what sets it apart from other "news outlets" with their own agendas.

On the other hand, **Arabic participants** articulated a sense of ownership towards Wikipedia, describing it as their own project. They look for new ways to contribute to building knowledge and take pride in their contributions to creating content on Wikipedia. They are also dedicated towards protecting the content from vandalism

Arabic participants in this research expressed great appreciation for being asked about their opinions on new concepts and for understanding their needs. They generally expressed their thanks to the Wikimedia Foundation for giving them a chance to be heard and seen.

Arabic new editors are looking for *more*.

Interviewed Arabic participants note **a lack of accessible information *in Arabic* about:**

-   policies;
-   how to edit;
-   what to do and what not to do;
-   how references work; and especially
-   how to work with media, licences, and Wikimedia Commons.

They often go to YouTube in search of how-to editing videos, however most on- and off-wiki learning resources exist in English.

In this respect, **Arabic new editors face greater burdens than their English counterparts**.

For example, when I click on inserting an image, it reroutes me to the article with a code. What if I don't know how to deal with such a sophisticated interface. I need the interface to be simpler with fewer options.

— Arabic interview participant