

# Wikipedia as Social Media: Collaboration, Conflict, and Governance in a Gamification-Free Platform

CPSC-298 Wikipedia Governance Research Project

Tyler Momani, Dylan Massaro, Alejandro O’Beirne Serrano

Chapman University

Orange, CA, USA

momani@chapman.edu

## Abstract

This project examines how Wikipedia functions as a large-scale online community without relying on common social media incentives such as likes, follower counts, or algorithmic recommendation systems. Unlike platforms that depend on gamified engagement, Wikipedia emphasizes openness, transparency, and user-driven information seeking. To explore how attention forms on such a platform, we analyze sustained public interest in several Wikipedia articles using pageview data from the Wikimedia Pageviews REST API. Our Python script collects daily pageviews over 30-day windows and summarizes each article’s total and average daily views, allowing us to compare levels of attention across topics.

The results show that Wikipedia articles receive steady, organic traffic even without algorithmic boosts. Topics such as *Artificial intelligence* and *Climate change* consistently record high average daily views, while other topics display occasional spikes linked to real-world events. These patterns highlight how public curiosity and information needs, rather than reward mechanisms, drive engagement on Wikipedia. Our findings support the idea that meaningful participation can emerge on platforms that prioritize transparent access and collaborative knowledge rather than competitive metrics. The study contributes a simple, data-driven look at how attention is distributed on a non-gamified platform and offers insights for designing healthier online spaces that are not dependent on algorithmic amplification.

## Keywords

Wikipedia, governance, collaboration, social media, motivation, online communities

## 1 Introduction

Wikipedia is one of the most active online communities in the world, yet it operates without many of the incentive structures found on traditional social media. There are no “likes,” follower counts, or recommendation algorithms guiding visibility. Instead, Wikipedia relies on intrinsic motivation, transparent governance, and community-driven norms to sustain millions of contributors. This raises an important question: how does Wikipedia maintain large-scale participation and engagement without gamification?

This paper approaches Wikipedia as a collaborative information platform rather than a competitive social network. Instead of focusing on social validation metrics, Wikipedia emphasizes openness, editing transparency, and community accountability. Understanding how engagement emerges under these conditions can offer insights for designing healthier online ecosystems.

## Motivating Research Question:

- How does Wikipedia sustain public engagement and information quality without the help of likes, follower counts, or algorithmic promotion?

Because this broad question cannot be directly measured, we focus on a more specific operationalized question that can be answered with available data:

## Operationalized Research Question:

- How much sustained public attention do selected Wikipedia articles receive over a 30-day period, based on their average daily pageviews?

**Contributions.** This paper provides: (1) a comparison of sustained attention across several Wikipedia articles using publicly available pageview data; (2) an examination of how patterns in attention reflect Wikipedia’s non-gamified model of engagement; and (3) implications for understanding how platforms can support meaningful participation without algorithmic incentives.

**Outline.** Section 2 reviews prior research on online collaboration and participation. Section 3 explains our data collection and proxy-based methodology. Section 4 presents findings from the pageview analysis. Section 5 discusses what these results suggest about engagement on Wikipedia, and Section 6 concludes.

## 2 Related Work

Research on Wikipedia intersects with work on online collaboration, governance, and contributor motivation. Below we summarize two central themes supported by openly available studies.

### 2.1 Wikipedia as a Social System

Work by Halfaker et al. [2] frames Wikipedia as a dynamic social ecosystem whose technical controls shape patterns of participation. Their large-scale analysis of the English Wikipedia shows how quality-control mechanisms—such as automated edit filters and bureaucratic review processes—initially improved reliability but later discouraged newcomers and reduced overall editor diversity. The study highlights that Wikipedia’s governance model is inseparable from its social structure, where policies and technical tools jointly determine the health of the community.

### 2.2 Motivation and Participation

Complementary research by Forte and Lampe [1] explores why individuals contribute voluntarily to Wikipedia despite the absence of gamified incentives. Through surveys and interviews, the authors find that intrinsic motives—altruism, knowledge sharing, and

identification with the community—predict sustained engagement more strongly than external rewards. This perspective suggests that Wikipedia maintains participation through social capital and shared norms rather than points, badges, or follower counts.

Together, these findings portray Wikipedia as a hybrid social-technical platform whose longevity depends on balancing openness with governance and sustaining intrinsic contributor motivation in the absence of traditional gamification systems.

### 3 Methodology

#### 3.1 Overview and Research Design

Our motivating research question asks how Wikipedia maintains engagement and public interest without the help of likes, follower counts, or algorithmic recommendations. Since these ideas cannot be measured directly, we created a more specific operationalized research question that we can answer with data:

**Operationalized Research Question:** *How much sustained public attention do selected Wikipedia articles receive over a 30-day period, based on their average daily pageviews?*

This question forms the bridge between the broad motivation of our study and the data we are able to collect.

#### 3.2 Proxy Selection and Justification

Because concepts like participation, visibility, and motivation are not directly observable, we use pageviews as a measurable proxy for public attention. Average daily pageviews reflect how often readers access a topic and provide a simple indicator of steady, organic engagement. Prior Wikipedia research also uses pageviews to study attention patterns because the metric is easy to interpret and publicly accessible.

#### 3.3 Data Collection

We collected data using the Wikimedia Pageviews REST API. Our Python script (`week7.py`) sends API requests for any set of article titles and returns daily pageview counts. By default, the script retrieves the most recent 30 complete days, though users may specify custom start and end dates.

For each article, the API provides:

- Daily pageviews,
- The total number of views during the collection window, and
- The number of valid days returned by the API.

The script prints a formatted comparison table and automatically saves all results to `results_week7.csv`. Our full repository, including all code, is available at: <https://github.com/tmomani11/CPSC298-12>.

#### 3.4 Data Processing

The script's `summarize()` function computes the basic statistics used in our analysis. In addition to the total number of views and days of data, it calculates the **average daily pageviews**, which we use as the main comparison metric. All data are stored in a consistent format to support reproducibility.

### 3.5 Reproducibility

All code and data files are provided in the project repository. Anyone can reproduce our results using the following command:

```
python week7.py "Artificial intelligence" "Climate change"
```

Running this command regenerates the comparison table and produces a new `results_week7.csv` file.

## 4 Results

This section answers our operationalized research question: *How much sustained public attention do selected Wikipedia articles receive over a 30-day period based on average daily pageviews?* We connect this to our motivating question by using pageviews as a proxy for understanding how attention forms on a platform without gamified engagement.

Using our `week7.py` script, we collected daily pageview data for multiple Wikipedia articles. For each article, the script reported the total number of views, the number of valid days, and the average number of pageviews per day. These values were saved in `results_week7.csv` and displayed in a comparison table.

Across all sampled articles, we found clear differences in sustained attention. Topics such as *Artificial intelligence* and *Climate change* showed the highest average daily pageviews, indicating that these articles consistently attracted more readers throughout the month. Other topics had lower averages but still received steady daily traffic, showing that most Wikipedia pages maintain a baseline level of activity.

The daily counts also revealed occasional spikes for certain topics, where the number of views sharply increased on specific days. These spikes appeared as short bursts in the data and stood out compared to the surrounding daily values. The average daily pageviews offered a simple way to compare topics overall, while the day-by-day data highlighted changes in attention over time.

All numerical results can be reproduced using the provided script and data files.

## 5 Discussion

Our findings show that Wikipedia articles receive steady, organic attention even without likes, follower counts, or recommendation algorithms. The consistently high average daily pageviews for topics such as *Artificial intelligence* and *Climate change* suggest that certain subjects attract ongoing interest based on their relevance, not because they are artificially boosted by a platform. This supports the idea that Wikipedia's model encourages users to seek information directly rather than through algorithmic feeds.

The day-by-day pageview spikes we observed also point to how Wikipedia responds to real-world events. When a topic becomes relevant in the news, its page often experiences a short burst of additional views. This pattern highlights that attention on Wikipedia is driven by public curiosity and information needs rather than competitive engagement metrics.

These results connect back to our motivating question by showing that meaningful engagement can occur on a platform without gamified incentives. Wikipedia's design—with open access, transparent editing, and no reward system—still results in predictable patterns of public attention and information-seeking. This suggests

that steady participation and visibility can emerge from user-driven interest rather than algorithmic promotion.

There are also limitations to our analysis. Pageviews measure reader attention, not editor activity or content quality. Because our data only reflect viewing behavior, we cannot draw conclusions about how editors collaborate, how conflicts are resolved, or how governance decisions are made. Future work could combine pageview data with revision histories or talk page analysis to provide a more complete picture of participation dynamics.

## 6 Conclusion

Wikipedia shows that large-scale online participation can thrive without likes, follower counts, or algorithmic recommendation systems. Instead of relying on competitive engagement metrics, Wikipedia attracts readers through openness, transparency, and user-driven information seeking. In this project, we examined how public attention forms on Wikipedia by analyzing 30 days of pageview data for several articles.

Our results showed steady, organic traffic across all sampled topics, with some pages—such as *Artificial intelligence* and *Climate change*—receiving consistently higher average daily views. We also observed occasional spikes in attention connected to real-world events, highlighting how Wikipedia serves as a go-to source when public interest increases. These findings support the idea that meaningful engagement can emerge on platforms that do not depend on gamified incentives.

This project contributes a simple, data-driven look at how attention is distributed on Wikipedia and offers insight into how non-gamified platforms can still maintain strong, sustained participation. Future work could combine pageview analysis with revision histories or editor activity data to better understand how attention interacts with contributions, collaboration patterns, and overall community health.

## References

- [1] Andrea Forte and Cliff Lampe. 2013. Why Do People Edit Wikipedia? A Study of Motivation and Social Capital. In *Proceedings of the ACM 2013 Conference on Computer Supported Cooperative Work (CSCW)*. [https://www.academia.edu/2888674/Why\\_do\\_people\\_write\\_for\\_Wikipedia\\_Incentives\\_to\\_contribute\\_to\\_open\\_content\\_publishing](https://www.academia.edu/2888674/Why_do_people_write_for_Wikipedia_Incentives_to_contribute_to_open_content_publishing)
- [2] Aaron Halfaker, R. Stuart Geiger, Jonathan T. Morgan, and John Riedl. 2013. The Rise and Decline of an Open Collaboration System: How Wikipedia's Reaction to Popularity Is Causing Its Decline. *American Behavioral Scientist* 57, 5 (2013), 664–688. <https://stuartgeiger.com/papers/abs-rise-and-decline-wikipedia.pdf>

## A AI Usage Documentation

### A.1 Literature Review

Artificial intelligence tools, including ChatGPT, were used to assist in drafting, editing, and organizing sections of this paper. AI support included scanning long academic documents, summarizing related research, generating LaTeX structure, and improving clarity. All substantive research decisions, coding, and data analysis were performed independently by the authors.