Wikipedians in the Global South: Towards Increased Wikipedians and Wikipedia Content Contributions From the Global South

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Abstract

Wikipedia is a widely recognized and valuable source of information, However, it encounters persistent challenges in attracting and retaining active contributors. It is recorded that only 10 people from the Republic of Zambia contributed content on wikipedia in the month of November 2023. We are proposing to experimentally determine the levels of awareness and willingness and to determine factors and techniques that have a potential to increase Wikipedia content contribution in the Global South.

Introduction

Digital content contribution from contributors originating from countries located in the so-called Global South is noticeably low, with a recent study by Graham et al. reporting that Sub-Saharan Africa stands out with the lowest levels of participation on GitHu and shocking low levels of Wikipedia contributions, with contributions originating from the whole of Africa being lower than those from Hong Kong [3].

This proposed project is aimed at devising technologically inclined techniques and approaches to increase the contribution of content in the Global South, with a specific focus on the Republic of Zambia. Specifically, we aim to raise awareness on the importance of Wikipedia content contribution and motivate potential Wikipedians to contribute content on and about Zambia. Our most recent work, in the form of a pilot study, enabled us to quantify awareness and willingness and Wikipedians can be motivated to contribute content [1].

This proposed work builds on our previous research and aims to determine high school and university students can be used to increase the contribution of Wikipedia content in Zambia. The specific research objectives are:

- To determine the relative levels of awareness and willingness of Wikipedia content contribution in Zambia in High Schools and Universities
- To experimentally determine the factors that can result in increased contribution of Wikipedia content
- To implement technological infrastructure for supporting content contribution for Wikipedia
- To experimentally determine techniques, approaches and factors for increased contribution of Wikipedia content

We propose to execute this work between June 2024 and June 2025.

Related work

Existing research conducted by the Wikimedia Foundation reported that 43% of respondents that contributed content on Wikipedia were enrolled in school or post-secondary education [7].

Furthermore, the proposed research is grounded in the Uses and Gratification theory [4], which has been successfully employed when examining how the use of digital content gratifies user needs [6].

Methods

The proposed research will use a mixed-methods approach, with the Uses and Gratification Theory [4] as the guiding theoretical framework.

The study setting will be high schools and universities in Zambia, sampled using convenience sampling.

Ethical clearance will be obtained from all appropriate entities.

Research design:

- Objective 1. Levels of Awareness and Willingness; and Factors for Increased Wikipedia Contribution—A nation-wide online survey will be distributed to ALL high schools and universities in Zambia, with random sampling used as the sampling technique
- Objective 2. Factors for Increasing Wikipedia Contribution—A nation-wide online survey will be distributed to ALL high schools and universities in Zambia, with random sampling used as the sampling technique

- Objective 3. Implementation of Technological Infrastructure—A repository platform will be designed and implemented using the Integration and Configuration software process model. The repository platform will be evaluated for its relative usability and usefulness using an expert evaluation strategy, with convenience sampling used to identify appropriate participants
- Objective 4. Techniques and Approaches for Increased Contribution—Controlled experiments will be conducted in order to determine how content contribution can be increased. Random sampling will be employed to identify participants from high schools and universities.

Expected output

The anticipated outcomes of this proposed project are:

- Knowledge Hub open access repository
- Knowledge Hub Publication at 5th African Human Computer Interaction conference (AfriCHI 2024)
- Experimental Results
- Roadshows and Editathons

Risks

The anticipated risks are as follows:

- Low participation rates, given the historical low levels of digital content contribution in Zambia
- Cultural and educational barriers
- Technological infrastructure challenges due to limited access to technology and Internet in certain regions of Zambia
- Survey Bias and Sampling Issues
- Changing educational landscape in Zambia

Community impact plan

This proposed work has the potential to increase the number of Wikipedians from underrepresented regions. This proposed research is aligned with two of Wikimedia's "2030 Wikimedia Strategic Direction": (i) Provide for Safety and Inclusion and (ii) Evaluate, Iterate, and Adapt.

Evaluation

The following evaluation and measures of success will be employed:

- Increased Awareness and Willingness—Monitor the percentage increase in awareness levels and willingness
- Quantifiable Increase in Contributions—Track the volume of Wikipedia content contributions
- Educational Institution Collaboration—Assess the extent of collaboration with educational institutions and the integration of the project into academic programs.
- Feedback and Community Involvement

Budget

We are requesting a total of USD 49,029.45 to help fund the proposed project— 34.11% to support two (2) postgraduate students, three (3) research assistants, one (1) developer, and salary for the Principal Investigator; 22.15% for equipment; 18.33% for supporting planned workshops and Editathons; 7.12% for subscription to cloud-based services and software packages; 5.61% publishing costs; 2.68% for project meetings and 10% institutional overhead.

Prior contributions

Our research group at The University of Zambia—DataLab Research Group¹—is exploring effective techniques for increasing Wikipedia content contribution. Our most recent work [1] involved the implementation of a Facebook plugin aimed at assessing the effectiveness of gamification on motivation and engagement in creating and contributing content on Wikipedia. This pilot study experimentally quantified Wikipedia contributions on Zambian Wikipedia articles by Zambia and the low levels of awareness regarding Wikipedia contributions.

Our research group has also focused on increasing online visibility of research in Zambia and approaches for increasing visibility of such content [5]. We are also exploring novel ways of encouraging Zambian educators to be co-creators of Open Educational Resources [2]. Results from these studies have given us insights into how to increase online visibility of content from the Global South.

I have been a Wikipedian since 2012², mostly helping add/create content—Wikipedia—and photographs/maps—Wikimedia Commons—on and about Zambia.

References

- Chalwe, C., Chanda, C., Muzyamba, L. and Mwape, J. 2023. WikiMotivate: A Facebook Plugin for Motivating Content Creation and Contribution on Wikipedia. University of Zambia.
- [2] Chanda, M., Chirwa, E., Kamanga, M., Kayula, M. and Phiri, L. 2023. Factors Influencing Co-creation of Open Education Resources using Learning

¹<u>https://datalab.unza.zm</u>

<u>https://xtools.wmflabs.org/ec/en.wikipedia.org/L</u> <u>ightonphiri</u>

Object Repositories. 14th International Conference on Computer Supported Education (Dec. 2023), 405–412.

- [3] Graham, M., De Sabbata, S. and Zook, M.A. 2015. Towards a study of information geographies: (im)mutable augmentations and a mapping of the geographies of information. *Geo: Geography and Environment*. 2, 1 (Jun. 2015), 88–105. DOI:https://doi.org/10.1002/geo2.8.
- [4] Katz, E., Blumler, J.G. and Gurevitch, M. 1973. Uses and Gratifications Research. *The Public Opinion Quarterly*. 34, 4 (1973), 509–523.
- [5] Phiri, L. 2018. Research visibility in the global South: towards increased online visibility of scholarly research output in Zambia. (Dec. 2018).
- [6] Rafaeli, S., Hayat, T. and Ariel, Y. 2009. Knowledge Building and Motivations in Wikipedia: Participation as "Ba." *Cyberculture and New Media*. R.F. J., ed. Brill. 51–67.
- [7] Wikipedia:Wikipedians: https://en.wikipedia.org/wiki/Wikipedia: Wikipedians. Accessed: 2023-12-16.