

Wikimedia Research
Showcase

Unlocking the Wikipedia clubhouse to newcomers: results from two studies

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A directed trail of my career

BS in Computer Engineering,
Sharif University of
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MS in Computer Science,
California State University



PhD in Intelligent Systems
Program, University of
Pittsburgh



Back to Pitt as faculty at the
School of Computing &
Information

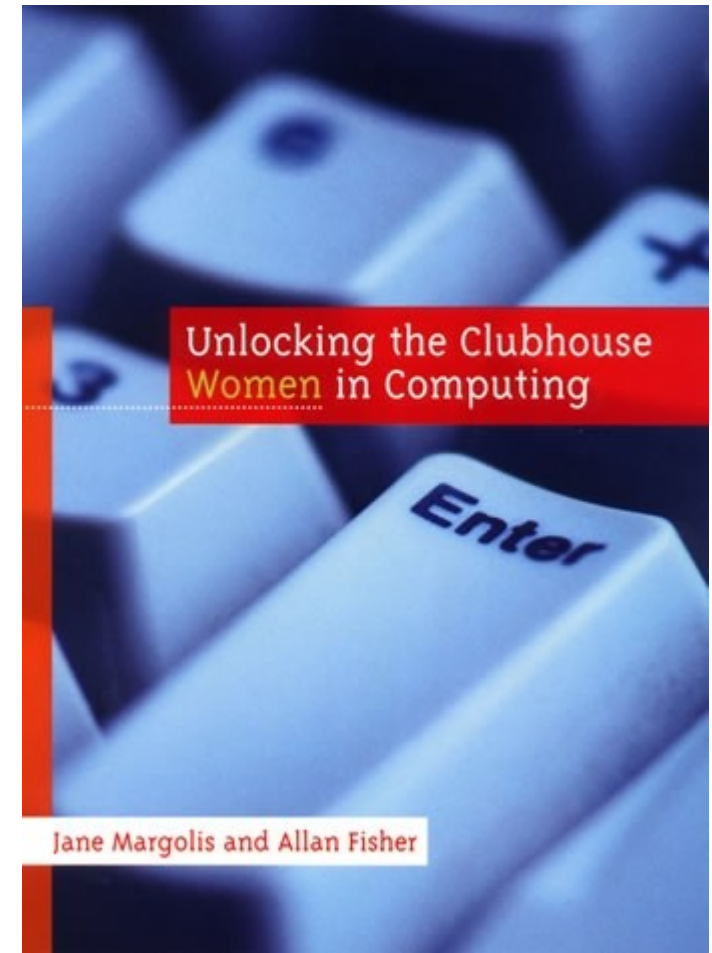


Postdoctoral fellow
Human Computer Interaction Institute,
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Unlocking the clubhouse

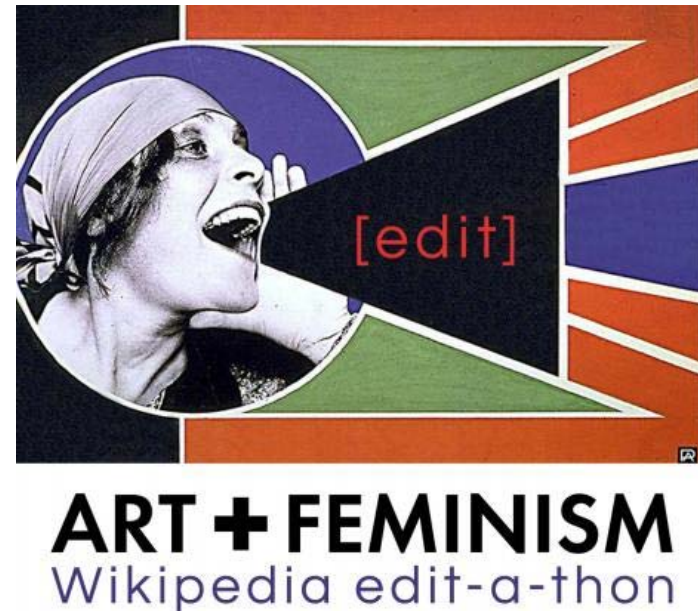
An influential piece in my career

Read it as MS student and ever since broadening participation became an important goal for me



Socialization of newcomers in Wikipedia

Lessons from two approaches in onboarding newcomers in Wikipedia



Wikipedia education program

A unique case of online structured socialization matching institutionalized practices in offline organization



Clear class instruction



Support from
Instructors and Wiki
Ed Staff



Cohort support of
peer classmates

We studied the success of Wiki Ed

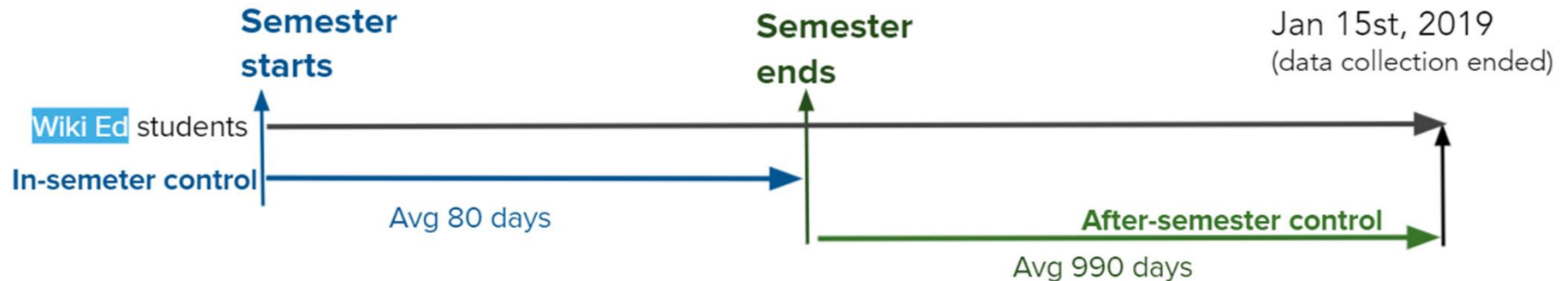
Collected students' editing and interactions data on Wikipedia from the time of their registration till 01/15/2019

4 semesters

770 college courses

16,819 students

Wiki Ed students vs. two control groups



In-semester control : 16,819

After-semester control: 16,819

- Matched on same registration time
- Compared performance during the semester
 - Quantity: total edits made to Wikipedia articles
 - Quality: the change in article quality scores
- Matched on registration time same as Wiki Ed students' course ending time
- Compare performance after the semester
 - Quantity: total edits made to Wikipedia articles
 - Commitment: assess survival of each editor

Wiki Ed program increased effort, improved contribution quality and long-term commitment

Wiki Ed students:

- Edited 14 times more during the semester (compared to control 1) and 8 times more after semester (compared to control 2)
- Improved the articles 6 times more during the semester (compared to control 1)
- 61% more likely to stay (compared to control 2)

Social interactions are one key ingredients

- More communication between students is related to more edits and improved quality and higher level of commitment
- Sending messages to Wikipedians is related to more edits and higher level of commitment
- Receiving messages from Wikipedians has mixed results

Social interaction with non-students Wikipedians has both positive and negative impact

“ Nice work on your draft article. I notice that you haven't linked to other Wikipedia articles. Wikilinks are valuable to readers, since they allow (readers) to learn more about the topics discussed in the article.

“ Your sentence is weakly worded. Its not just a “fair bit” in creates a burden.

Wiki Ed
Staff



V.S.

Other
established
Wikipedians



Wiki Ed is a successful intervention: it produced both short-term and long-term benefits for Wikipedia

- Structured socialization strategies strongly benefit newcomers in online production communities
- More online production communities should bring in newcomers as a cohort and facilitate group work
- Established members of the communities should have more constructive interaction with newcomers

Attracting & retention of newcomers is even more difficult ...

From diverse population & under-represented groups

- **Only 10-15%** of Wikipedia editors identify as female
- **Less than 10%** of contributions are made by female editors
- Lower number and lower quality of articles attractive to female population
- Lower number of articles on biographies of notable women

A 2021 study found that, in April 2017, 41% of biographies nominated for deletion were women despite only 17% of published biographies being women

Art+Feminism Edit-a-thon

- Collocated all-day events bringing together novices and experienced Wikipedia editors
- Increase the coverage of female representation and to encourage female editorship
- Particularly highlighted: no prior editing experience is required

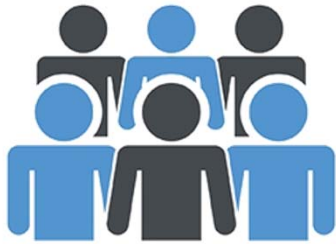


Organized by Wikipedia and
Feminism enthusiasts since 2014

We studied Art+Feminism in 2016

- Over 175 Art+Feminism events were organized
 - More than 2,500 participants
 - Edited 3,000 Wikipedia articles
- Our data
 - 59 edit-a-thons happening from Jan till March (International Women day)
 - Newcomers' editing behavior on Wikipedia
 - Newcomers' interactions on Wikipedia and Twitter
 - Participants are encouraged to communicate on Twitter
 - Official hashtags: #ArtAndFeminism and #NowEditingAF
 - Additional hashtags associated with tweets connected to these tags
 - 3,341 tweets from 1,171 users

Large percentage of participants are newcomers and engage actively on editing during the event

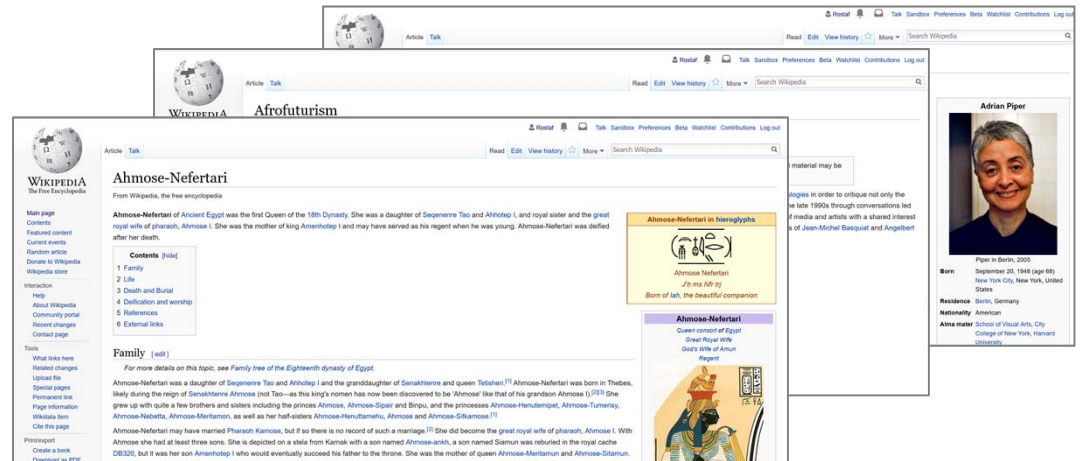


985 unique users

586 newcomers (60%)

Participation ranged: 3 to 131
($\mu=17.25$, $\sigma = 19.47$)

% of newcomers ranged: 0 to 100
($\mu=57\%$, $\sigma = 23.5\%$)



793 articles were edited: 475 (60%) edited by newcomers

2,928 edits: 1,579 (54%) by newcomers

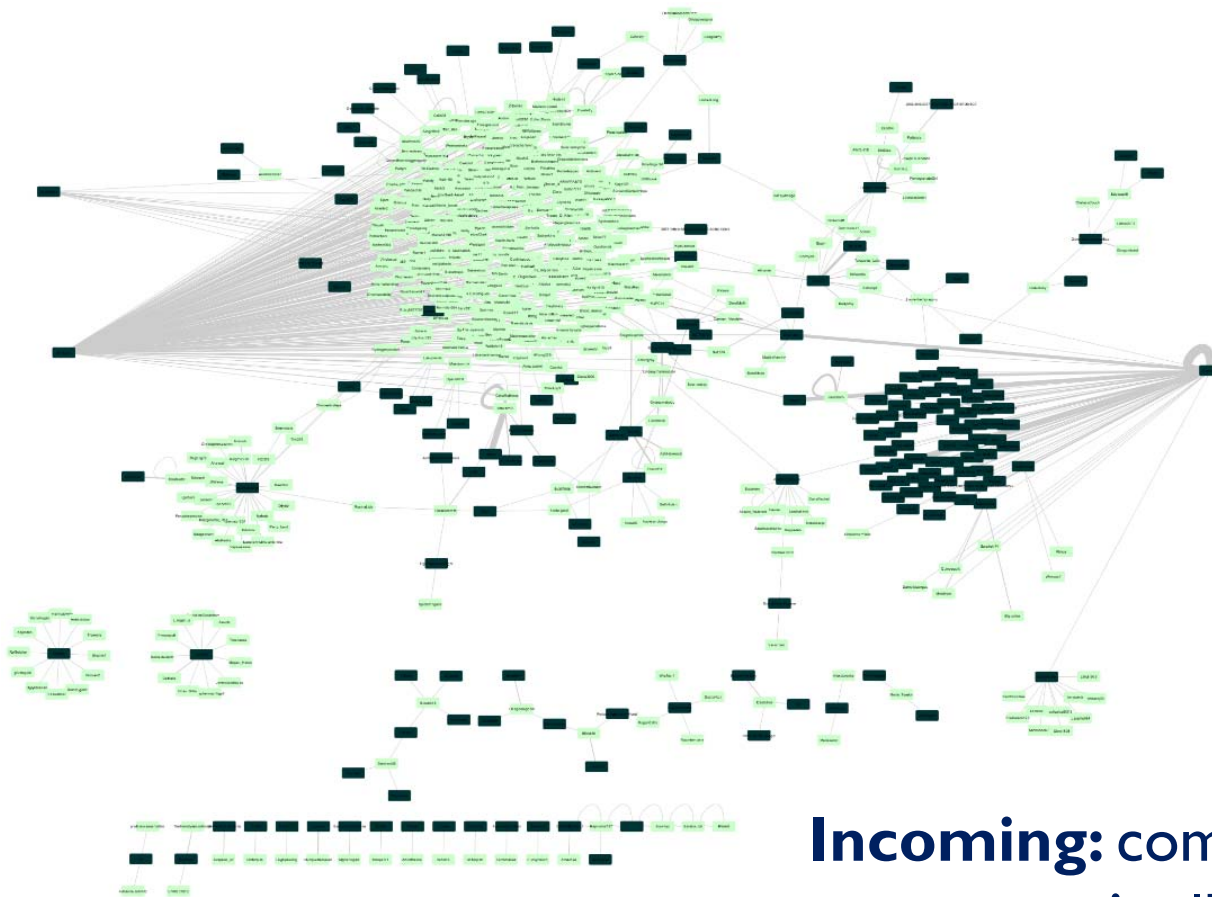
Subsequent participation

- 50 out of 586 newcomers (9%) continued editing Wikipedia pages at least one week after the event
- Significantly higher than general trend on Wikipedia
 - Only 1% of newcomers joining on the same day as edit-a-thon events continue editing Wikipedia a week after their first edit

Very little evidence of social interactions on Wikipedia

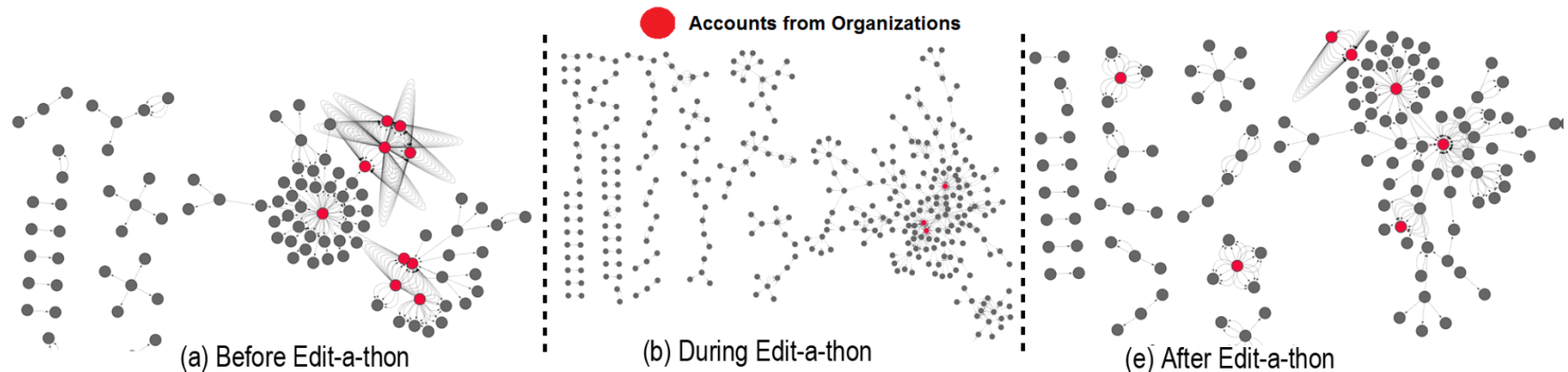
Newcomer

Existing member



Incoming: communication towards newcomers' talkpages from other newcomers or existing members

Small group of people interacted with each other on Twitter



March 5th edit-a-thon with most online interactions

- Large number of isolates
- Few accounts were mentioned a large number of times: Organizations
 - Usage of Twitter during the edit-a-thon events focused on official communication very little attempt in engaging the general participants
 - The general users seem to be quite active on Twitter otherwise

Users utilized much broader set of hashtags, not adopted by organizers

ArtAndFeminism popular but mostly used before or during the event

But not after

	Hashtags
Before	#artandfeminism, #gendergap, #feminist, #WomenInRed, #editathon
During	#artandfeminism, #gendergap, #feminist, #WomenInRed, #editathon
After	#microaggressions, #feministsplaining, #archivistproblems, #artlibrariessowwhite

Edit-a-thon events are very successful in attracting new members

- **Not very successful in retaining** these motivated individuals
- Higher level of production activities during the events and higher level of social interactions after the events can lead into higher retention
- Complementary platforms such as Twitter can be used to support further social interactions
 - Organizers are focusing on interacting with big institutions and Twitter rockstars. Missing out on engaging newcomers

Thank you!

Looking forward to your questions and comments

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