

Successful Online Socialization: Lessons from the Wikipedia Education Program

Ang Li*, Zheng Yao*, Diyi Yang
Chinmay Kulkarni, Rosta Farzan, Robert Kraut



University of Pittsburgh
School of Computing
and Information



Human-
Computer
Interaction
Institute



Newcomers are **essential** for online production communities

But, they **struggle** to stay:

They are likely to leave ...

e.g. 60% of new Wikipedia editors make no edits after their first day on the site

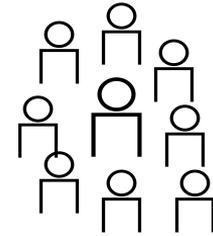
Their contribution quality are likely to be poor

e.g. contributions from new Wikipedia editors are more likely to be reverted

Most online production communities provide **little structure** to support and socialize new members

... typically **require newcomers themselves** to figure out what they need to know in order to contribute to a project

A structured socialization program works well offline



Cohort support



Have clear tasks and goals



Have someone to guide us throughout the process

Jones, G. R. (1986). Socialization tactics, self-efficacy, and newcomers' adjustments to organizations. *Academy of Management journal*, 29(2), 262-279.

But does it work online? How?

Wikipedia
Education
Program

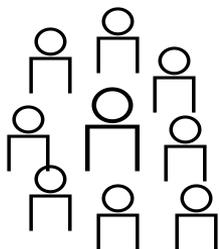
Wiki Education Project (Wiki Ed): a unique case of online structured socialization



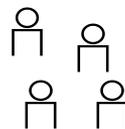
Clear class instructions



Support from Instructors
and Wiki Ed staff

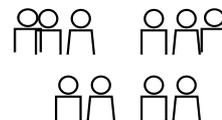


Cohort support:
peer classmates



Weak cohort support:
Work individually

VS.



Strong cohort support:
Work in groups

We studied the success of Wiki Ed

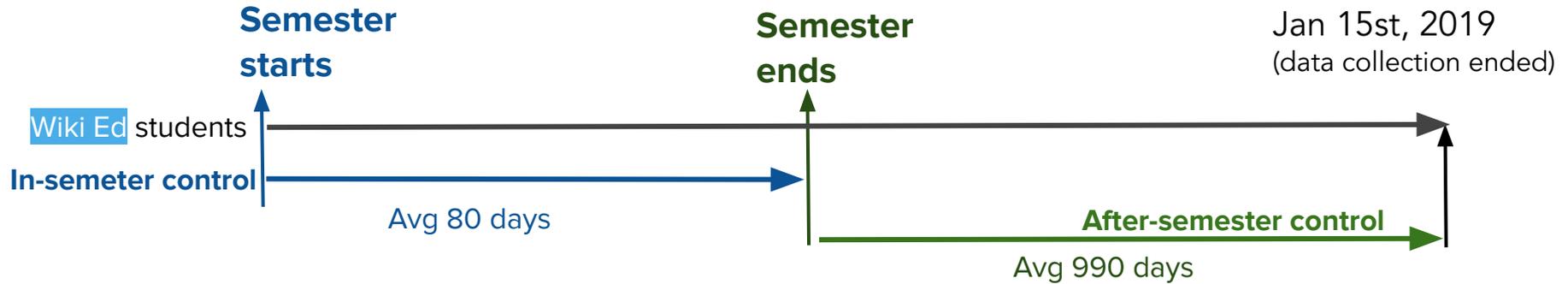
Collected students' editing and interactions data on Wikipedia from the time of their registration till 01/15/2019

4 semesters
Spring 2015 - Fall 2016

770 college courses

16,819 students

Compare Wiki Ed students vs. Two control groups



In-semester control : 16,819

- Matched based on the **same registration time**
- Compared **performance during** the semester
 - **Quantity:** total edits made to Wikipedia articles
 - **Quality:** the change in article quality scores

After-semester control: 16,819

- Matched based on the **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

The **Wiki Ed** program improved effort, quality and commitment

During semester

After semester

Content edits

Article quality

Content edits

Commitment



VS.



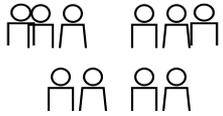
↗ 14 times more edits

↗ 5 times Improvement

↗ 3 times more edits

↗ 51% more likely to stay

Wiki Ed students VS. (Controls)



VS.



↗ 1.2 times Improvement



Students working in group VS. (individually)



↗ 25.8% more edits



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



Social interactions with Wikipedians

Conclusions and Implications

- 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
 - a. More online production communities should bring in newcomers as a cohort and facilitate group work
 - b. Established members of the communities should have more constructive interaction with newcomers

Thank you!

Questions?

Ang Li: anl125@pitt.edu

Zheng Yao: zyao2@andrew.cmu.edu

