Advice for Beginners on How to Use Student Wikipedia Page Editing in a Science Class

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Wiki Edu

YEAR OF **SCIENCE**

Road Map of today's presentation

- Why Wikipedia?
  - Why I do it: It meets the highest aims of higher Ed.

- Getting started doing it.
  - There is **A LOT** of technical and training support!
  - Some practical advice.

- Fears, pitfalls, and surprises.
  - Finding articles
  - Keeping students from embarrassing themselves
  - Privacy issues
  - Selling the assignment to the students

The most fundamental core mission of a university is discovery

1) Fostering students' self-discovery as they mature
2) Discovery (learning) by students of truths about how the world works
3) Faculty working with students to make novel discoveries about the world.

Discovery = revealing truth

Science is a social, team activity with the goal of discovery.

- No discovery is complete until it is publicized and accepted by the scientific community

- NO ONE EVER MAKES A SCIENTIFIC DISCOVERY IN ISOLATION!
    -if a discovery is never published, it never happened as far as the scientific community is concerned.

- Scholarly contribution is teaching others what you have discovered for yourself.

# The highest Learning Outcome of any university education is for the students to become contributors.

Writing for Wikipedia is an authentic exercise that can teach our students the **PROCESS** of making a contribution to Science.

The Discovery Process:

- **Identify something missing or wrong.**

- **Create a solution (thinking of it and doing it)**

- **Contribute the solution to the community**

The Discovery Process:

- **Identify something missing or wrong.**
  - Evaluating and picking an article to edit
    - Good citations? Mistakes? What is missing? Is it biased?
- **Create a solution (thinking of it and doing it)**
  - Editing the article
    - Synthesizing and evaluating sources to provide new written material and media for the site
- **Contribute the solution to the community**
  - Publishing
  - Interacting with the community
    - Dealing with peer review of varying quality.
    - Politely justifying and negotiating changes on the talk pages
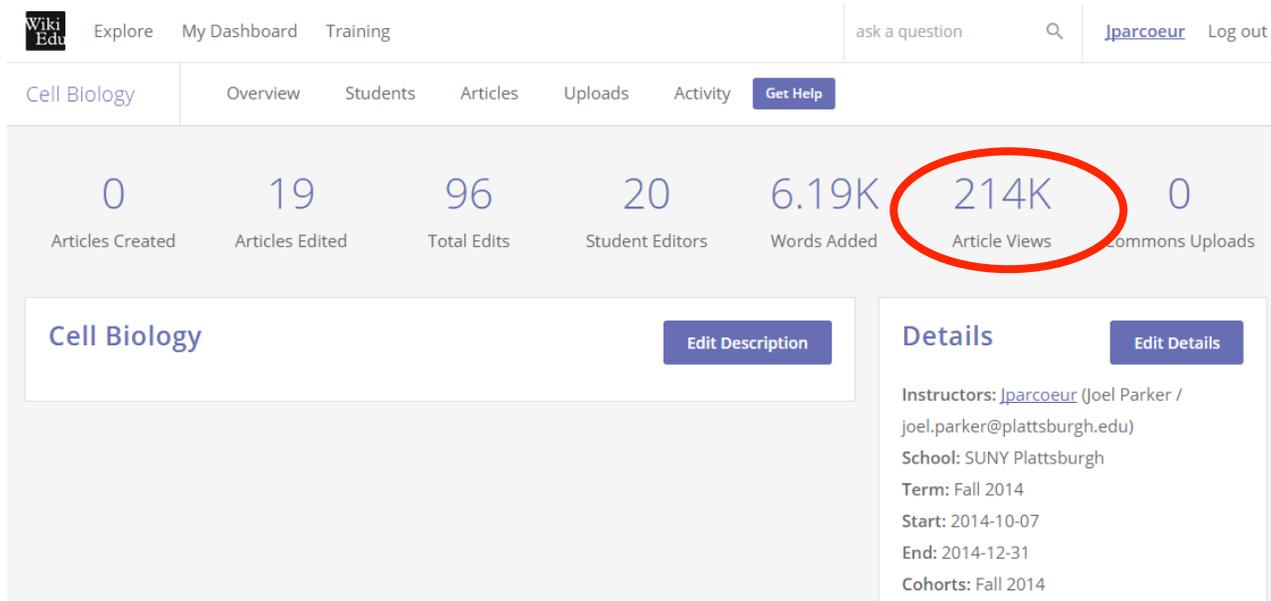
How big of a contribution can your students make?

My first two small exercises resulted in about 10,000 page views per student.
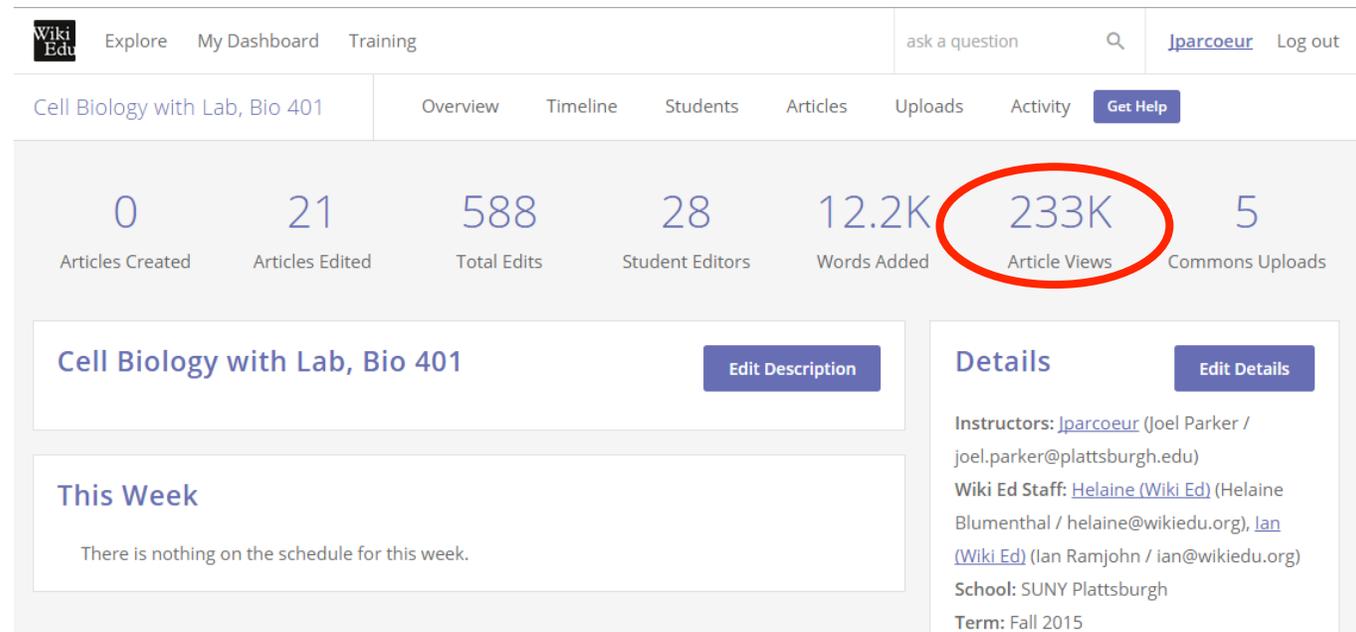
Unicellular Organisms

- Before:
  https://en.wikipedia.org/w/index.php?title=Unicellular_organism&diff=687641571&oldid=685587854

- After:
  https://en.wikipedia.org/w/index.php?title=Unicellular_organism&diff=692025564&oldid=692014867

Adaptive Response

- Before: https://en.wikipedia.org/w/index.php?title=Adaptive_response&diff=687936092&oldid=632421190

- After: https://en.wikipedia.org/w/index.php?title=Adaptive_response&diff=692597655&oldid=692597552

That sounds exciting, so let's do it!

Here is what you need to know:

- You need training!
- Your students need training.
- You need to pick the assignment type and plan for enough time.
- Be aware of privacy issues.
- Students love it!

Instructor training

- Set up your account and do the easy online training modules!
https://en.wikipedia.org/wiki/Wikipedia:Training/For_educators

Wikipedia is an online encyclopedia.

Wikipedia has a neutral point of view.

Wikipedia is free content

Editors should interact with each other in a respectful and civil manner.

Wikipedia does not have firm rules.

Instructor training

- There are templates and recommended timelines for different types of assignments (critiquing an article, editing/adding to an article, translating, copy editing, adding graphics, adding an article, a whole class or as an assignment)

- Specific people will be assigned to give you help!
  - Last week I had to wait a whole 53 minutes for my assigned helper to respond to a problem

The Dashboard is Awesome!

- You set up your assignments week by week with a Dashboard tool that is very easy to use and templates that keep you on track.

- Easier than Moodle or Blackboard because less complicated

- Quick tour

https://dashboard.wikiedu.org/courses/SUNY_Plattsburgh/ Cell_Biology_with_Lab,_Bio_401_(Fall_2016)

Student training

- Make the training modules as graded parts of the exercise!
  - Do them in multiple assignments. For example, sign up plus 3 for the first assignment, picking an article and critiquing plus 5 modules for the second assignment.
  - You can watch it all from your "Dashboard"

- The plagiarism and copyright module is a particularly good one and documents that the students have taken it.

Student training

- Things will go wrong with setting up usernames and early attempts at writing in their sandboxes.

    - Email your assigned editor for help for technical problems

    - Go through simple writing in the sandbox in class, include the tilde key and citation keys.

A beginner's anxiety: are there enough articles of the right topic and type?

- Finding articles is easier than you would think. Search your topic and the term "stubs" and a list of usually hundreds of topics needing work will come back.

- Avoid good articles; the trick is to stay focused on **contributing** by fixing sub-standard articles.

- Try to avoid medical articles

Fear number 1: Privacy

- This is a public exercise done in full view of the world wide web!!!!!
  - I communicate, assess and critique all student work individually and via university email.
- Wikipedia understands the need for anonymity for some users and facilitates this.
  - You must explain to the students that they can remain anonymous and only need to tell you their usernames.

Fear number 2: It's a public assignment

- You have to make it clear that everything they save or post is recorded in their history.
  - Will record plagiarism, obnoxious comments, etc. with dates and times.
  - They need to watch what they write even in their sandbox.
- To mitigate this risk, I put the students into small groups, and have each student identify another student as their proof reader and a different student as a fact checker.
  - Tell them that nothing substantial should be posted on any article that has not been checked by those two other students.

Fear number 2: It's a public assignment

- Watching out for students with poor social skills.
  - Easier to monitor, intervene and support these students than for internships
- One huge advantage is the writing level jumps a letter grade
- Outside feedback
- Trolls have not been a problem, yet.
  - Advanced science topics largely get a pass

Students love this assignment

- Only good feedback on the course opinion surveys.
- This generation is internet wise
  - They are already well versed in dealing with all types of people on line and handling their own online images.
  - They are more connected to the rest of humanity than any other generation before them. The public nature of the assignment puts them into a space they are comfortable with.
- Our students appreciate the contribution more than we do.
  - Our students must see Wikipedia as one of the most valued resources in their academic careers to date

Contributing to Wikipedia as a rite of passage

Writing for Wikipedia allows students to transition from using Wikipedia as a learning resource, to contributing to their favorite online learning resource.

WIKIPEDIA
YEAR OF SCIENCE

Don't cite Wikipedia.
Write Wikipedia!

www.wikiedu.org

Don't cite Wikipedia, Write Wikipedia!!!!!!!

An ideal exercise for advanced science classes.

Questions?