**Review for Goedhart 2023**

Manuscript Number: PCOMPBIOL-D-23-01680

Full Title: Studentsourcing - aggregating and re-using data from a practical cell biology course

Article Type: Education

**Summary**

Goedhart presents an educational article on how to collect and store data collected during practical cell biology courses that he refers to as “studentsourcing.” Two cases are used to support this method. The first is applicable to the resources that most biology classes would have, while the second addresses a use case for more advanced studies. The manuscript suggests that data collected from both instances are helpful for teaching and possibly the greater scientific community.

The author does an excellent job providing code and data (GitHub) for others to reproduce and/or customize for their practical lab courses, as well as examples of how to put it into practice. “Use case 1” is accessible to any science class with access to a microscope. It provides good data to (1) address data visualization, (2) experimental design, (3) data processing, and (4) evaluating accuracy.

In “use case 2,” the author provides a more advanced laboratory class example that teaches students about technical replicates as well as how analysis methods can affect measurements.

**Minor Issues**

* Goedhart suggests that data could be useful for the scientific community. More information on the instrument and imaging parameters needs to be provided to be reused. Along with the measurement data, metadata would need to be provided. Framework for what needs to be included can be found with the “MicCheck App” (<https://rebecca-senft.shinyapps.io/MicCheck/>) Including this in the GitHub repository would allow the greater scientific community to re-use the data confidently. Montero Llopis et al. 2021 does a good job explaining why.
* The manuscript is in English, but the examples in Figure 1 are in Dutch. It would improve the clarity of the figure if the "record" part of it were changed to English. However, I don't think it's necessary to change the screenshot of the form.
* The article suggests that the broader scientific community could re-use the data collected by classes en masse due to the large sample size. There is no data or example in the body of the text to support this. Therefore, this should be in the discussion, and it would be of benefit for the author to suggest some ways in which the data might be used.

**Recommendation**

Accept with minor revisions.