#### **Peer Review Report**

# Review Report on Flipped Classroom formats in a Problem-Based Learning Course: Experiences of first-year Bachelor European Public Health students

Review, Public Health Rev

Reviewer: pablo Rodríguez-Feria Submitted on: 27 Apr 2022

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#### **EVALUATION**

### Q 1 Please summarize the main theme of the review.

The manuscript aims at stimulating the interaction between students mutual, and between students and teachers. This is done by studying the students' experiences of flipped classroom formats in the course on 'Ageing in Europe'. The authors conducted a questionnaire to collect this information over three years, and the questionnaire was filled by 304 students. The authors concluded that Flipped classroom formats, including debate, making a mind map, giving a pitch, role-play, had been appreciated by students. Therefore, these formats can extend the Maastricht University PBL design.

#### Q 2 Please highlight the limitations and strengths.

Strengths: The main strength is that this manuscript presents the results over three years. The questionnaire is presented to the readers, and it is coherent with the study's aim. Likewise, the methodology is robust, and authors present five tables and 1 figure which complement the manuscript.

Limitations: the main limitation is the students' participation to fill the questionnaire, and that instructors provide the questionnaire to the students. Nonetheless, this limitation will be presented every time that researchers use questionnaires.

## Q 3 Please provide your detailed review report to the authors, structured in major and minor comments.

The manuscript does not present major comments, as the introduction, methods, and results are aligned one with each other. The Equator Network provides the guideline GREET: Development and validation of the guideline for reporting evidence-based practice educational interventions and teaching (GREET) (Development and validation of the guideline for reporting evidence-based practice educational interventions and teaching (GREET) | The EQUATOR Network (equator-network.org)). This guideline provides a benchmark when reporting educational interventions and teaching. Therefore, authors may include in a supplementary material the GREET 's checklist to increase the value of this manuscript

#### Minor comments.

Authors use enumeration by providing letters, numbers, or nothing. Readers may be confused by the reasons of using three methods to enumerate.

- 1. Tittle: No comment
- 2. Introduction
- a. Page 1 line 7 authors provided the acronym for PBL "problem-based learning (PBL)", but in line 13 is presented the acronym again "At Maastricht University, Problem-Based Learning (PBL)". Authors should present the acronym once and then PBL.
- b. Page 1 line 11 and 12. The authors wrote "A review of the literature in PBL seem to confirm this statement (4-6)". The authors provided three references which are three reviews, but authors have written "a review" and not three reviews.

- c. Authors numerate in letters (v.gr a,b,c... and numbers 1,2,3...). Therefore, readers may ask if there is a difference in using one system or the other. For instance, page 2 line 36 "A flipped classroom approach meets the following characteristics: (a) content delivery in advance, (b) awareness of the educator of students". In the same manner, page 2 line 46 "Two elements should be implemented for a successful model, in- and outside the 46 classroom, (1) student learning that facilitates critical thinking, and (2) student engagement".
- d. Page 3 line 47. Authors provide a strong statement without reference. "Students' perception on flipped classroom formats in European higher education institutes is rarely studied". It will increase
- 3 Methods
- a. Authors do not use enumeration. Page 7 line 156 "Mrs. X and which housing with care option would be best in her case: living at home with support, moving into a regular nursing home or an innovative, small-scale homelike care...". Authors should keep consistency over the manuscript.
- b. Authors should mention if the questionnaire was created by the authors and if the questions were piloted.
- c. Authors provided discussion in the results section. Page 8 line 173 "In Y4, a pen and paper questionnaire was used because of disappointed results in response rates in Y2 and Y3". Likewise, authors should avoid imprecise language such as "disappointed results", as in the results one can use percentage and readers will make their own conclusion about the response rate.
- 4. Results.
- a. Authors mixed results and discussion. Page 10 line 192 "It is difficult to determinate the response rate of 193 Y4, because resit students could also join these sessions"
- b. Authors repeated for example in the same sentence. Page 10 line 201 "Students liked the in-class activities, such as debate, making mind map, giving a pitch, role-play 2 e.g"
- 5. Discussion: No comment
- 6. Tables and figure. Can authors verify figure's tittle? It is interesting about how the lectures are invited into the EPH 1008 Ageing? It is because partnership across organisation and or their expertise? among others.

#### PLEASE COMMENT

Q 4 Does the reference list cover the relevant literature adequately and in an unbiased manner?

The reference is selected based on the introduction, methods and discussion.

Q 5 Does this manuscript refer only to published data? (unpublished data is not allowed for Reviews)

Yes.

Q 6 Does the manuscript cover the issue in an objective and analytical manner

Yes.

Q 7 Was a review on the issue published in the past 12 months?

No.

#### Q 8 Does the review have international or global implications?

The manuscript has global implications. The value of this manuscript can increase by using GREET GUIDELINE as a supplementary material to increase the reporting of the manuscript.

