

Interactive comment on “Using paired teaching for earthquake education in schools” by Solmaz Mohadjer et al.

Anonymous Referee #1

Received and published: 20 November 2020

Referee's Comments on the Paper: “Using Paired Teaching for Earthquake Education in Schools,” Mohadjer, et al. November 20, 2020

This is a well-written paper describing in-classroom use of the “teaching-duet” or “paired-teaching” methods put forward by MIT BLOSSOMS <https://blossoms.mit.edu>. The paper reports on the creation of ten instructional geoscience videos at the level of middle school and/or high school, to teach the students (in paired-teaching mode) the science of earthquakes and the engineering design of earthquake preparedness and response to reduce loss of life and property. These topics are especially relevant to students in Tajikistan, one of the worlds' most earthquake-prone countries.

The referee believes that the paper is deserving of publication, after considering some modest revisions.

C1

1. The paper, in the middle, “goes into the weeds” on lots of little in-class details when the reader hungers for the “bottom line,” i.e., Did it work? Yes or No? And why? Suggest that lots of these minutia details be relegated to an appendix, perhaps shortening the main text by 50% or so. The main text can summarize “the weeds.” 2. “. . .the local language (Tajik) was used in teaching and in all written and media materials.” Does this mean that the paired teaching videos were available in Tajik as well as in English? The manuscript is unclear on this. It states that the live discussions the of students and teachers were in Tajik, but is unclear on the videos. If the students in Dushanbe were shown English-spoken videos, then the lack of before-and-after knowledge improvement is most understandable. 3. The key message is the “underwhelming” amount of new learning, especially in Dushanbe. This reviewer was unable to discern how much of this is due to language (were the videos in English?) and how much to culture. Interactive classrooms are quite novel in most countries – where the tradition is that the teacher is undisputed leader and the students dutifully follow. Perhaps it would have been better to start the students on paired-learning materials on more traditional STEM subjects like math or basic science. But this is easier said than done due to lack of video materials in the local language. 4. The failure of teachers in Dushanbe to serve as in-classroom teachers in the paired-teaching mode may be cultural and/or due to lack of training in this new pedagogical model. Please discuss. 5. The recently renovated school in Dushanbe: Was it designed with the latest protections for earthquakes, with their destructive threats to life and limb? Answering that question would have been a nice addition to class discussions, especially if the answer was very positive – that is, substantial structural improvements and student training improvements.

Interactive comment on Geosci. Commun. Discuss., <https://doi.org/10.5194/gc-2020-43>, 2020.

C2