Reviewer Comments for 'The Imaginary eruption. Volcanic Activity Through Kids' Eyes

General Comments:

The article offers a unique perspective about student knowledge of volcano hazards, and plenty of results to ponder. It gave this reviewer some new ideas about how the profession might advance its collaboration with curriculum developers, and how to design content for teacher workshops. The article addresses relevant scientific questions within the scope of Geoscience Communications. It reports on a novel approach for exploring student knowledge of volcanic eruptions. The scientific methods and assumptions for the greatest part are clearly outlined. Its results are plenty sufficient to support the outcomes and conclusions. This reviewer recommends additional citations in the Introduction, and the citations of other studies of student knowledge. The title and abstract reflect well the subject of the paper. The overall presentation of the work is clear and well structured; its language is precise. This reviewer has made minor recommendations for wording choices to allow full understanding and content appreciation by English-speaking readers.

Specific Comments:

Title: Consider a dash rather than period within it.

Sentences ending on lines 29, 30, 31, 32, 36, and 39 require the support of citations. Some recommendations that support text about the complexity of preparedness:

Chester DK (2005) Volcanoes, society, and culture. In: Marti J, Ernst GJ (eds) Volcanoes and the environment. Cambridge University Press, New York, pp 404–439

Gregg CE, Houghton BF, Johnston DM, Paton D, Swanson DA (2004) The perception of volcanic risk in Kona communities from Mauna Loa and Hualalai volcanoes, Hawai'i. J Volcanol Geotherm Res 130:179–196 https://doi. org/10.1016/S0377-0273(03)00288-9

Line 79 Please provide a sentence or two about curricula used by the teachers in the longterm, *prior to* the introduction of this activity? Do all teachers use the same curricula? A general statement about this will be helpful to the reader.

Somewhere in the Introduction, consider an additional one or two sentences about the importance of school children in bringing hazard and preparedness messages home to the parents. The children are the conduits of knowledge to the extended family. Additionally, it seems that some connection could be made between the 2008 risk perception study and this new study (just an idea).

Barberi F, Davis MS, Isaia R, Nave R, Ricci T (2008) Volcanic risk perception in the Vesuvius population. J Volcanol Geotherm Res 172:244–258. https://doi.org/ 10.1016/j.jvolgeores.2007.12.011

Cardona O (1997) Management of the volcanic crises of Galeras volcano: social, economic and institutional aspects. J Volcanol Geotherm Res 7:313–324. https://doi.org/10.1016/S0377-0273(96)00102-3

Carlino S, Somma R, Mayberry G (2008) Volcanic risk perception of young people in the urban areas of Vesuvius—comparisons with other volcanic areas and implications. Volcanol Geotherm Res 172(3,4):229–243. https://doi.org/10.1016/j.jvolgeores.2007.12.010

Johnston D, Becker, JI Coomer, M Ronan, K Davis, M Gregg, C (2006) Children's risk perceptions and preparedness: Mt Rainier 2006 hazard education assessment tabulated results. GNS Science Report 2006, 16 June: 30 https://scholar.dominican.edu/all-faculty/177/

Ronan K, Johnston D (2005) Promoting community resilience in disasters: The role for schools, youth, and families. Springer, New York NY

Technical Corrections:

Line 36-39 This is a run-on sentence. Split the sentence, and make the meaning clear.

- 43 Begin the sentence with The most recent (certainly not the last).
- 45 Separate Vesuvius and Ischia into two sentences to reduce confusion. It is also a run-on sentence.
- 52 Citation needed.
- 68 Sentence edit recommended: 'volcanic eruptions, by forming a collaboration with the local schools...'
- 86 Suggested: 'On Stromboli, we gathered 11 stories, 9 of which were completed...'
- 94 For clarity in English, the word realization could be replaced with *Completion*, or *Unfolding*, or *Advancement*.
- 95 lesson (singular)
- 104 The analysis provides clues about volcanic risks and what factors amplify or mitigate them.
- 108 For clarity: 'During the analysis we used all of the considerations raised...'
- 113 Change Indications to *Instructions*.
- 114 Delete also. Realization to Completion of each frame.
- 115 Realize to complete; indications to instructions.
- 122 (or when the allotted time passed), did we provide information
- 136 recommended: We collected 190 stories with text (2 stories without written text), and with drawings...
- 148 recommended: change corpus to assemblage
- 161 death or salvation: salvation does not translate well. Does it mean injured and alive? People complete *unaffected*?
- 171 Just a note that it is interesting how the students are often the protagonists in their own stories! 313 change buttered to *battered*.
- 327 remove *really*
- 343 lava flows
- 347 Sentence structure: Both events raised an eruption column...and generated pyroclastic flows...
- 413-414 non-volcanic
- 473-475 This concept of text book error or generality is very important. It is good to see it emphasized here. Later in Conclusions, you could note that scientists and textbook writers should become acquainted and agree to use terms that are not so simplistic.
- 483 These are other important points. Consider adding that graphics could demonstrate the *common sequence of events*—both precursory events, and during the eruption.
- 494 The concept of the family preparing together is of greatest importance. Authors could add some specific recommendations, such as the family having a scavenger hunt to find items for their emergency kit, working together to complete family communication plans, and similar.

Bravo! This is a very nicely executed study, and a well-structured report.