Comment on egusphere-2022-204
Stephany Buenrostro Mazon (Referee)

Referee comment on "GC Insights: Geoscience students' experience of writing academic poetry as an aid to their science education" by Alice Wardle and Sam Illingworth, EGUsphere, https://doi.org/10.5194/egusphere-2022-204-RC1, 2022

Review of “Geoscience students' experience of writing academic poetry as an aid to their science education”.

The study aims to explore the experience of writing poetry – specifically a Haiku poem – based on a scientific text as an aid in the education of university geoscience students. The study asked college students to write a Haiku, a 3-line poem of 17 syllables, from one of three randomly chosen excerpt texts from The Royal Society of geoscientific topics. The experience of 11 participants was qualitatively analyzed by means of a survey.

The manuscript is written succinctly and to the point. The motivation of the study is clear and well-grounded on previous studies linking science and humanities.

Abstract

Clarification in the writing of line 11: “It was found the themes could be categorized...”. The authors could consider introducing the themes found in the study.

Line 12: “The results of this study present evidence that writing poetry can aid geoscience students...”. The sentence would seem to suggest that the act of writing poetry itself is what aids students, as opposed to writing poetry from scientific texts. Consider re-
The last sentence states it was ‘easier to memorise efficiently’, however this was not part of the assessment. The survey did not assess information retention at a later date, rather it is based on a participant’s comment. This conclusion without the context of the participant and survey therefore seems slightly misleading in the abstract.

The abstract is very short. I suggest to include the sample size, the survey as the data collection method, and results from the Task Meaning themes.

Methods

The methods section is clear in how the instructions given to participating students. However, given the sample size was small (11 participants), the paper could be strengthened by including samples of the social media marketing material used and the communication strategy (how many days was the call advertised? which channels? was it at a university level or through private social media accounts?). Social media analytics have shown that different channels are preferred by different age groups, and the predominant format of information (text, image, video) can also vary depending on the channel. This could all have an effect on which students saw the call, and could serve the authors and readers wanting to replicate the study to modify how they target their participants.

The authors could include a brief discussion on the possible bias of the participants in already having experience with poetry, and even using it in their personal life. From the 11 participants, 10 had previous experience with poetry, and 9 used it outside of their academic material.

Could the call or the marketing strategy have affected this? For example, the #scicomm hashtag would be visible to twitter users active in and/or following science communication activities. This is relevant to the study as the aim is to explore the use of poetry in learning, and so it is important to consider the spectrum of students with different dispositions to transdisciplinarity and/or artistic tendencies in how they use and benefit from using poetry.

While the Results found haiku to be an adequate form of poetry to distill essential information, there was no clear motivation as to why the authors chose the Haiku for the study as opposed to other forms of poetry. The importance of the succinctness and the
‘iterative process’ of the haiku could be emphasized in methods.

The except text assigned to participants are part of reports as information and educational material by the Royal Academy, rather than a purely scientific text, like a research article. The aim of the study is to explore how poetry can aid students in digesting geoscience education, and so, the chosen texts are appropriate for this task. As a recommendation however, it would be an interesting exercise for the students to take a more strictly scientific text and explore how they translate it to a poem.

Results

It would be interesting to understand how the Task Meaning themes were assigned: ‘Challenging’ constructed from ‘Frustrating’ and ‘Restrictive’. Is there a guideline as to the theme nomenclature? The word “Challenging” has a connotation of a positive hurdle, whereas frustrating and restrictive connote negative feelings. This is important in identifying the subjective experience of students who may be writing poetry for the first time.

Conclusion

The manuscript introduces and concludes the aim of the study as a way to explore “whether writing poetry can be used by geoscience students as an aid to their science education”. For this purpose, the authors used a survey comprised of 4 questions related to the experience (Q1: How did you find the experience of writing the poem) and information-distilling process (Q2: Did writing the poem affect your engagement with the science in any way. Q3: Was a haiku an appropriate form to use?, Q4: Have you experience of writing poetry before this exercise). However, there could have been questions assessing how efficient the format was in comparison to other studying methods, since Question 3 refers to using Haiku compared to other styles of poetry. Question 4 could be followed by asking participants if they would consider employing this format in their studies at a later time.

This is particularly important for supporting the aim of the study, poetry as ‘an aid in education’, as Participant 10 did not have prior experience with poetry and they did not find it useful for science engagement. This was not highlighted in the text.

I suggest reaching a pool of participants with a wider range of background experience with poetry to better explore how effective poetry is aiding students with their (geo)science
This study serves as an introduction to how poetry could serve as an educational aid in geoscience education, but the survey to participants could be more comprehensive and better address the research question so the discussion section could go deeper to explore more insightful outcomes that have not previously been suggested elsewhere.