Reviewer's report

Title: The feasibility and impact of embedding pedagogical strategies targeting physical activity within undergraduate teacher education: Transform-Ed!

Version: 0 Date: 30 May 2019

Reviewer: Sandy Gibbons

Reviewer's report:

Background section:
The authors provided sufficient evidence to support the need for children to be more physically active throughout the school day. Much more information/rationale/evidence is necessary to support the situation of the "evidence-based active pedagogy" within the preservice teacher education program -- the authors mention much of the actual rationale in their discussion (e.g. references 37, 38, 40 to name a few), which, should have been introduced in the "background and/or literature review" leading up to the purpose of the study (e.g. mention other promising practices in introduction, don't wait until discussion.

It appears that the concept of "transformative education" is important --- I suggest the authors provide more information on how this actually shows up in the design and delivery of the intervention -- in more detail.

A frustrating part throughout the manuscript was reference to "additional files." These files were more than "supplementary." In my opinion, they were necessary to understand and interpret parts of the manuscript. The reader should not have to go to these files to understand the manuscript.

Design:
Figure 1: This is somewhat confusing. I suggest using only the affirmative numbers at all stages (aka the numbers of participants that consented and participated).
Please provide more rationale for the inclusion of the "senior academics" -- what was the purpose of including their input? It is clear as to why you would want information from the students, academic teachers of the course, and primary principals -- however, the "senior academics" is less clear and give the amount of focus in the results from this group -- more rationale would be helpful.

Intervention:
Provide more information on the course in which the "evidence-based active pedagogy" was included --- what was the content and structure of this course? Where were the students in their program? More information on content and structure of lectures and practical sessions is necessary to understand the actual intervention.
Lines 163 - 172 - more information is needed to better understand the content of and how the strategies were implemented (e.g. did students actually practice with primary students?) and how they translated from preservice into a primary classroom (e.g. were the practical sessions in primary schools?).
found myself going to the "additional files" to find out much of this information --- it was frustrating to have to go to the additional files to get information to explain. I would like to see more of the information from additional files in the body of the manuscript. In my opinion, the reader shouldn't have to keep going to the additional files to understand the intervention.

Measures/data collection
As mentioned earlier -- please provide more information on purpose of focus groups with "senior academics" ---and sample focus group questions -- within the text. The senior academics were not actively involved in any part of the intervention, yet their input comprised much of the results section.

Results:
Table 1: I am unsure as to the purpose of the information in this Table. The personal experience of the students was not mentioned in the design and I'm not sure how it fits in the overall study -- it seems to appear in the results without any lead up? I suggest that it be removed.
Given that this was examining feasibility of Transform Ed -- it was troubling that the two groups who were the most actively involved (students and academic instructors of the course) received the least amount of attention in the results -- both these groups experienced first hand how the intervention "worked or didn't work," and I would think the information from them would be front and centre. The bulk of the results focused on the "focus group discussion" of senior academics and principals --- yet neither of these groups had any first hand involvement in the actual pilot of the intervention. All their discussion was hypothetical, which, in such a pilot I think is much less important and provides little actual guidance to actual feasibility --- they weren't involved in the planning/delivery etc., such that their comments about "yes, it is feasible" hold minimal weight (in my opinion). Given this described as a pilot of Transform ED --- the information from those directly involved in the implementation should used. I would expect to see more information from the "deliverers" and "receivers" of the intervention and less from the senior academics (having no actual involvement in the pilot).

Discussion:
As mentioned in my comments about the "background/introduction/lit review," I think much of what you mention in your discussion, should have been introduced at the beginning of the manuscript to "set up" the rationale for "why evidence-based active pedagogy" is a good fit in preservice teacher education. For example, all information on teacher identity (e.g. 37, 38, 40) should have been introduced to the reader earlier. The "practice" of not introducing "new" literature in the discussion (that hasn't been mentioned in the intro/lit review is relevant here. As transformative education was a major concept -- please strengthen the definition and how it plays out more clearly in content and structure of the pilot.

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Quality of written English
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