**Overall note:**

The article is well organized, although there are rooms for improvement. Below are constructive comments that may help improve the quality of the manuscript.

**1.   ABSTRACT**

**Background**:

·      In a background section, please indicate the motivation behind this study. Briefly explain the program (ICT Integration in Science Education in Israel) and what is being implemented in schools.

·      Consider these questions to further elaborate the section:

-       Why does the study have to focus on the aspects of students’ motivation, self-efficacy, achievement, and collaboration?

-       Why should the investigation be conducted among the disadvantaged community?

**Contribution:**

·      Apart from the study's analysis, highlight the main findings and its novelty to the area of ICT integration in teaching and learning, particularly in Science subjects.

**Findings:**

·      Since the author claims that the study employs a mixed-method research design, the findings from both phases of data collection need to be presented briefly.

**2.   INTRODUCTION:**

·      Many sources of reference are dated, e.g., Resnick (2002), Pedro (2006), Abu-Asaba (2007).

·      In this section, it was explained that the integration of ICT can help improve students’ learning in many ways such as – equipping students with the 21st century competencies, improve students’ achievement and digital literacy, developing their critical thinking skills, providing access to more learning content, as well as improving scientific learning and students’ attitudes toward learning Science.

·      The author then highlights Fu’s (2013) four parameters in measuring the effectiveness of ICT integration, which covers: student motivation, student collaboration, student self-efficacy, and academic achievement. Thus, the author decided to use the four parameters in the study. However, it is not clearly justified why the four aspects need to be addressed in relation to the study's context in particular.

·      In other words, the research problems is not well stated. We need to be convinced of why the author wanted to focus on these four aspects and the problem needs to be associated with the context of  ICT integration program in the Israeli schools as well.

**3. LITERATURE REVIEW**

·      The literature review section would be more appealing if the author can perform synthesis writing instead of annotated essay. In other words, try to summarize the findings from past research by re-arranging the main themes. Avoid listing the results based on the authors or researchers, but go by the themes instead.

·      The decision to measure the four aspects of this study was merely based on a reference (Fu, 2013). No further justification was provided on this decision, which is not sufficient.

·      Although there are citations from past research on the effectiveness of ICT integration in Science classes, it will provide a better insight on how and what was done in the past studies in relation the ICT integration. For example, we want to know how students interact with the ICT in their learning sessions and what kind of learning activities are involved in that session. Was it merely the use of ICT as a tool? Or tutor? Or tutee?

·      It is not clear enough to us of the initiative regarding the ICT integration in Israeli schools. When was this started? How many schools are involved? Were the schools selected? What are the objectives of the initiative? What kind of technology integration is used in this program?

·      Some of the references are dated – e.g., Shemesh et al. (2008), Vorgan (2010). Please add more recent literature.

**4. METHODOLOGY:**

·      It is claimed that this study employs mixed-method research where there are two main data collection methods used – a pre and post-test for quantitative and observations for qualitative. However, it is not clearly explained which type of mixed-method research was used in this study. Is it exploratory, explanatory, or concurrent? Please provide us with a more thorough explanation of the research method with related references.

·      Please add more information on the implementation of the ICT integration classes:

-       What topics are covered?

-       How long did it take overall for the performance to be completed? From October to ..?

-       What kind of learning activities involved in the study? (control as well as experimental)

-       How did the author managed to ensure that the activities in each group are parallel to each other, given that the control and experiment groups are from two different schools, conducted by different teachers? Is there any briefing of guidelines given to both groups of teachers?

·      The procedures taken should also be presented – e.g., ethical consideration, getting access to the schools for conducting the study, etc.

·      Who did the observations? The author/researcher? How long did it take? How was the observation data analyzed?

**Intervention:**

This section can be improved by providing more explanation on:

·      The actual duration of the overall implementation of the classes for both group (control & experiment)

·      Topics covered during the period

·      Types of technology used in each group

·      Learning activities and assessments are given to the students for each group – are the assessment the same, although the learning technology used is different?

·      Map the learning activities and assessment with the four elements measured – motivation, self-efficacy, achievement, and collaboration

·      Regarding quasi-experiment, please explain how the author controlled all the extraneous factors that might affect the validity of the findings.

·      Line 277-278 – mentioned that the sample was heterogenous and included students with special educational needs and learning disabilities. Which group has special needs students, and how the author deal with this difference?

·      Line – 287 – The schools' selection in this study was made using a convenience sampling technique. Explain the criteria of the choice that suits the needs of the study.

·      Line 349-351 – please avoid asking readers to refer to certain sources for further elaboration, instead, provide the explanation in the article.

**5. FINDINGS**:

·      Line 497- Structured observation was used to measure the difference between the level of collaboration among students. How was the degree of collaboration categorized under high or moderate? Are there any rubrics used? What type of data derived from the observation? Score? Mean? This needs further explanation.

·      In the results section, qualitative data results were given for collaboration variable. However, research question for this variable was to compare two classes according to collaboration variable. The research question and the analysis do not match. In the research questions, it was understood that statistical difference will be investigated in collaboration variable. With these data collected qualitatively, it cannot be said that the two classes are equal or superior to each other. The research question suitable for qualitative analysis should be rewritten.

**6. DISCUSSION:**

·      The discussion was done by referring to past research which is a good practice. However, this section can be enhanced if the author can bring along the objectives of the ICT initiatives in Israel schools and pinpoint the discussions based on the expected outcome of the initiative, which will make the whole discussion more meaningful.

**7. CONCLUSION**

·      There is no conclusion section in this paper.