This manuscript demonstrates the benefits of virtual microscopy for active learning in an educational setting in which there are large numbers of learners. There are no major compulsory revisions.

Minor Essential Revisions:
- Background, second paragraph: Need to define acronyms (PBL, CRL, TRAD).
- Methods, first paragraph: Last sentence in this paragraph states "VM group and CTL group". Not clear what "CTL group" is not clear here. I think this needs to be replaced with "LM group".
- Also correct group labels in Figure 3 legend and Table 1 with regards to CTL group vs LM group.
- Results, third paragraph: Be careful not to overstate findings from survey of VM group as fact. These are subjective. For example, "VM system improved students' communication ability" is not proved but an opinion. Consider "Students believed the VM system improved their communication ability". The following sentence should be edited similarly.
- Discussion, third paragraph: Correct duplicate commas in second sentence.

Discretionary Revisions:
- Background, first paragraph: Suggest rephrasing 'number of students is too high'. Perhaps just 'the number of students is high...'. The number of students is purposely high, and using 'too high' is confusing.
- Background, third paragraph: Strongly suggest replacing "The Virtual Microscope system (VM)" with "Virtual microscopy (VM)" throughout the text. "The Virtual Microscope" makes it sound like a specific product or brand when I think the more generic term 'virtual microscopy' is more appropriate.
- Discussion, third paragraph: It is not virtual microscopy alone but also different curriculum that led to 'learning critically'. Therefore, suggest adding to third sentence to clarify. "But virtual microscopy can provide an opportunity to learn critically in the setting of limited physical resources."

Level of interest: An article whose findings are important to those with closely related research interests
Quality of written English: Acceptable

Statistical review: No, the manuscript does not need to be seen by a statistician.

Declaration of competing interests:

I declare that I have no competing interests.