



Background

- Near-peer teaching (NPT) is increasingly utilized in undergraduate medical education.
- At our institution's NPT program, Peer Teaching Program (PTP), teachers are recruited and trained during the final block of first year, simultaneously learning and teaching Immunology and Microbiology to classmates.
- This year, in-person teaching and training were conducted virtually due to the COVID-19 pandemic.
- The aim of this study was to understand how near-peer teaching in a newly virtual curriculum impacted first year student experiences learning infectious disease content.

Methods

- Semi-structured one-on-one interviews with student-teachers and student-learners were conducted after their microbiology block.
- Interviews were recorded, transcribed, coded and analyzed to identify themes as informed by constructivist grounded theory.
- Mean 2020 NPT program student rating was compared to prior years using a one-way ANOVA.

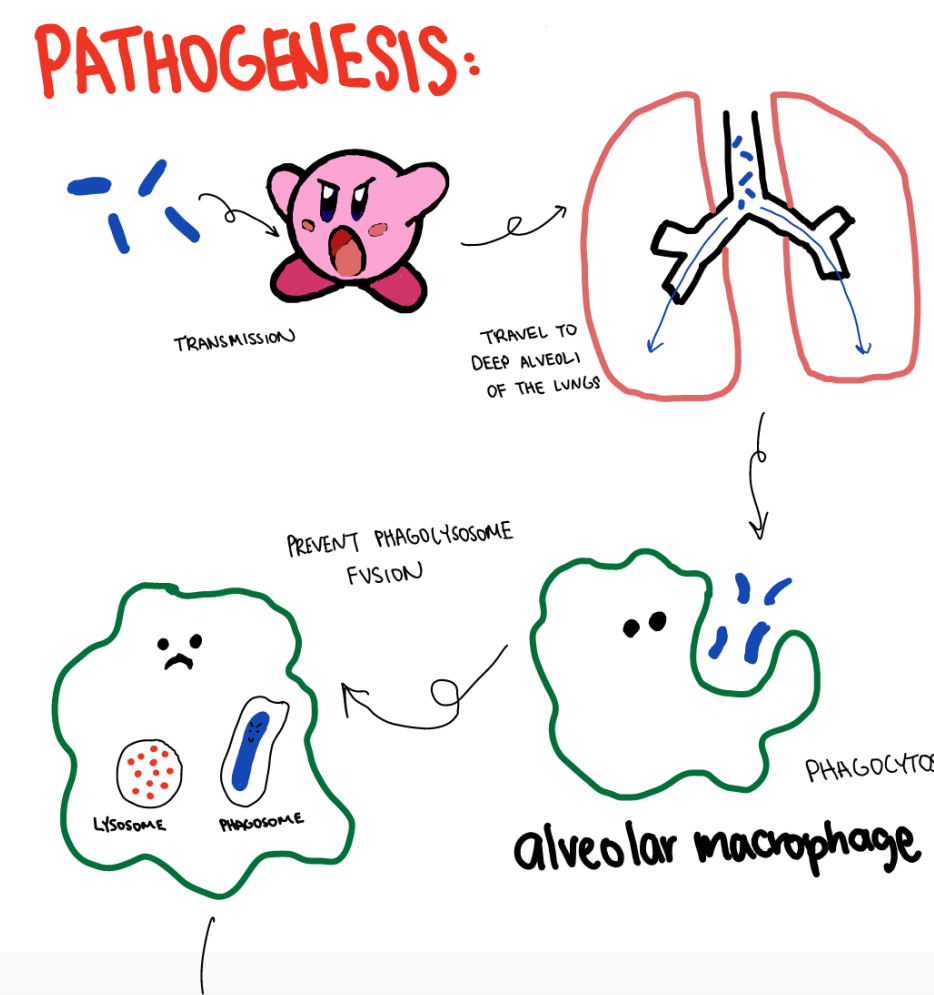
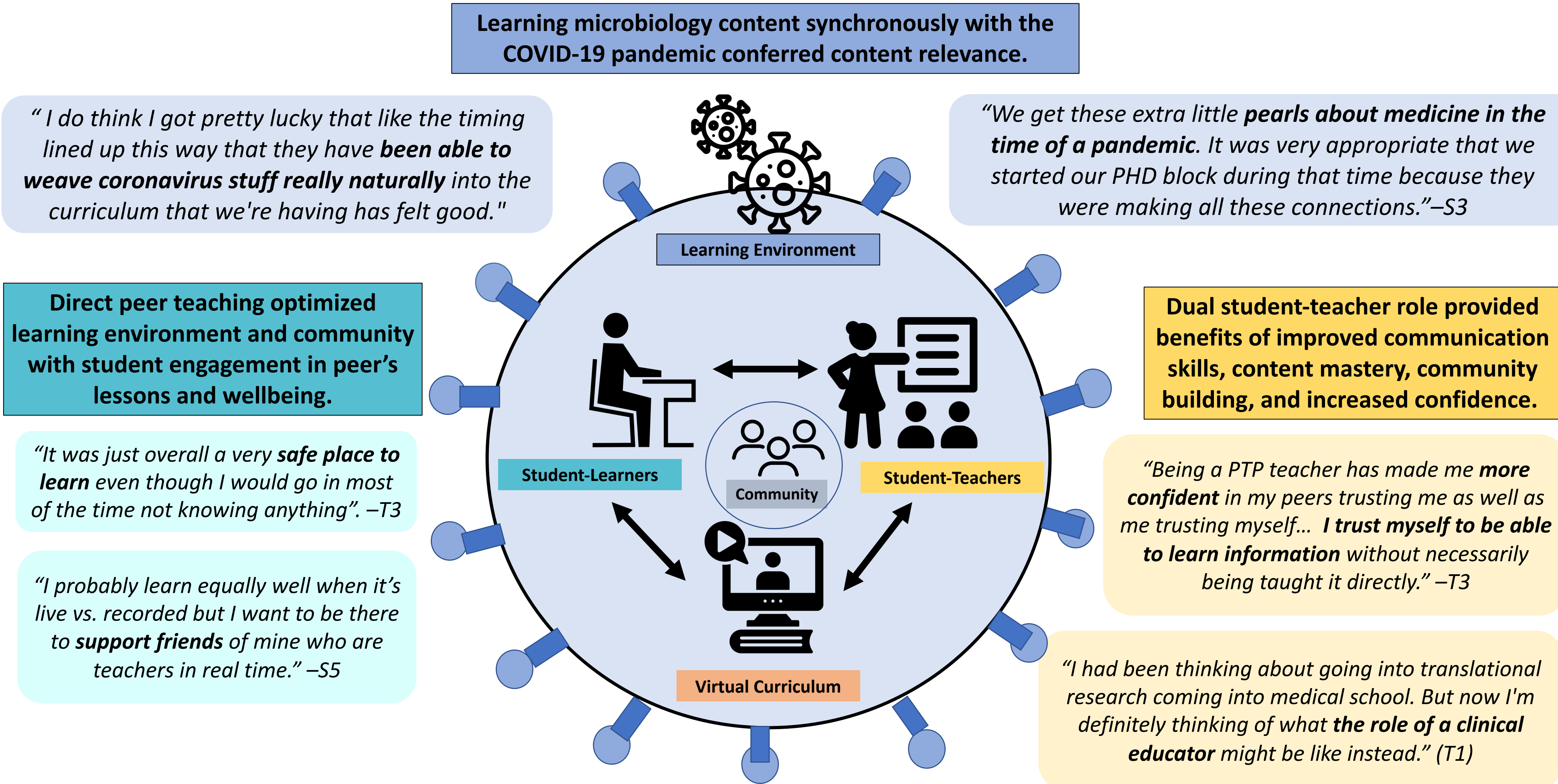
Quantitative Results

Year	# of Ratings	Mean Rating (Std Dev)
2020	66	4.74 (0.54)
2019	66	4.70 (0.58)
2018	67	4.55 (0.68)

- One-way ANOVA p=0.16
- No significant difference found between 2020 program ratings and ratings from previous years

Qualitative Results

Qualitative analysis of interviews with students (n=5) and near-peer teachers (n=7) yielded the following themes.



Virtual learning enhanced accessibility and visualization of infectious disease content.

"One of the things that is really nice about teaching virtually is that I can use a lot of photos. It doesn't have to be drawings or cartoons, I can actually get photos of real findings: lab findings, physical exam findings, x-rays." –T6

"Something that I've had a difficult time with before PTP with this block was organizing the bugs and I think PTP was very helpful... being able to put a face to the name of the categories like creating an additional layer of association for my brain, which has been pretty helpful." –S3

Model



Virtual peer learning spaces were utilized for social support and community as student learners and student teachers engaged with infectious disease content within the context of the progressing pandemic.

Discussion

- The shift to virtual direct peer teaching in our NPT program during the Covid-19 pandemic presented an opportunity for creative virtual teaching strategies and increased lesson accessibility via recordings.
- Students were supportive of receiving lessons from their direct peers, and utilized the virtual space to foster social community.
 - Unexpectedly, virtual lessons were perceived as non-inferior to in-person lessons, prompting consideration of virtual sessions permanently in the future.
 - The memorization-based nature of infectious disease content makes it well-suited for the re-structuring and creative teaching strategies offered by virtual NPT programs, benefitting both learners and teachers.

Conclusion

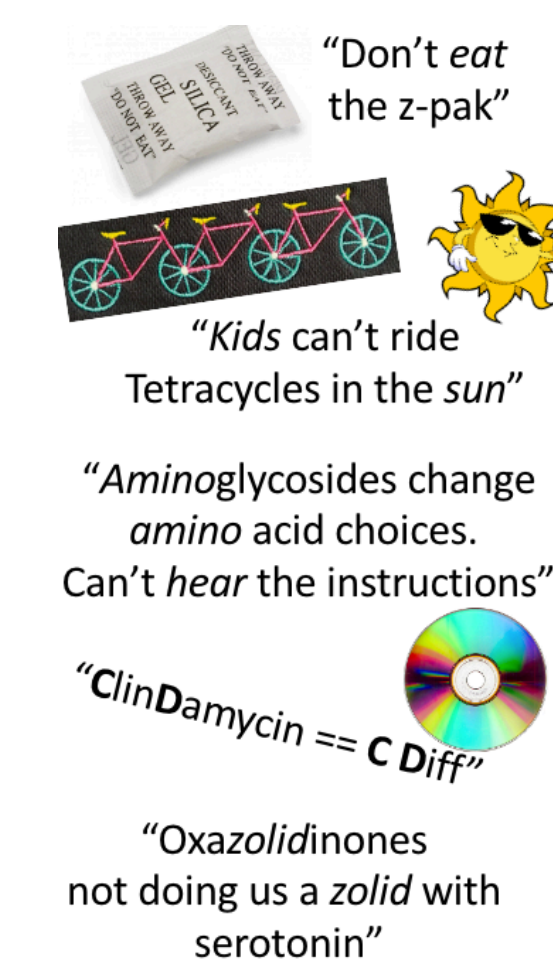
Findings from this study support the use of virtual near-peer teaching programs in infectious diseases medical education.

Limitations

- Limited sample size
- Lack of qualitative data available from prior years for comparison
- Quantification of coded themes not performed

Acknowledgements

Thank you to our 2020 cohort of PTP teachers and coordinators who rose to the challenge of adapting PTP to the COVID-19 pandemic.



"Don't eat the z-pak"

"Kids can't ride Tetracycles in the sun"

"Aminoglycosides change amino acid choices. Can't hear the instructions"

"ClinDAMYCIN == C Diff"

"Oxazolidinones not doing us a solid with serotonin"