

Home Grown Electronic Health record: Did Google Forms Meet Student Learning Outcomes.

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Background

Google Forms is a free tool that allows you to create quizzes, surveys, and other documents. It is an alternative to using paper. A need arose to create a simulated Electronic Health Record (EHR). The Google Forms EHR proved to be an innovative, flexible, and modifiable tool to meet the needs of various learning outcomes.

Purpose

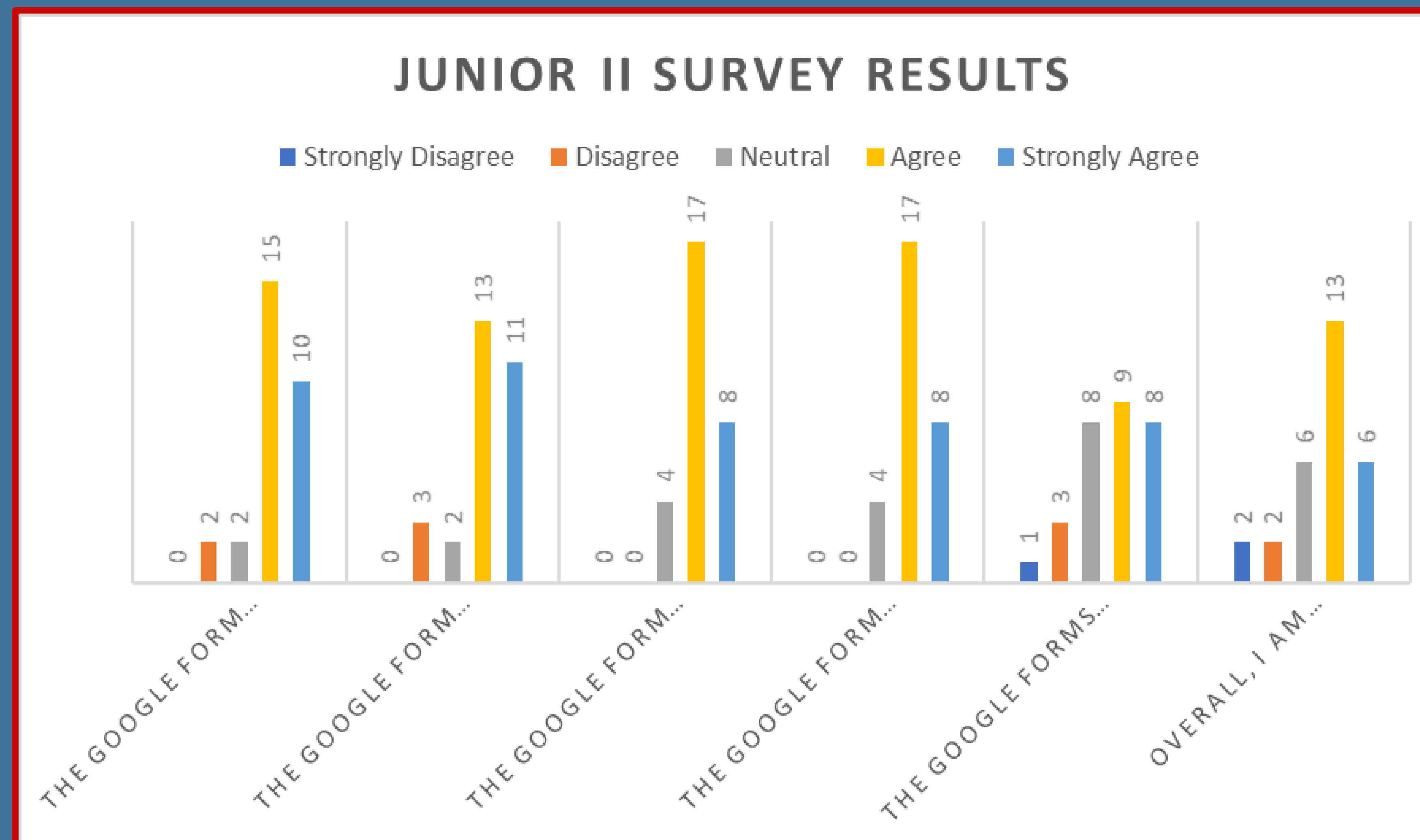
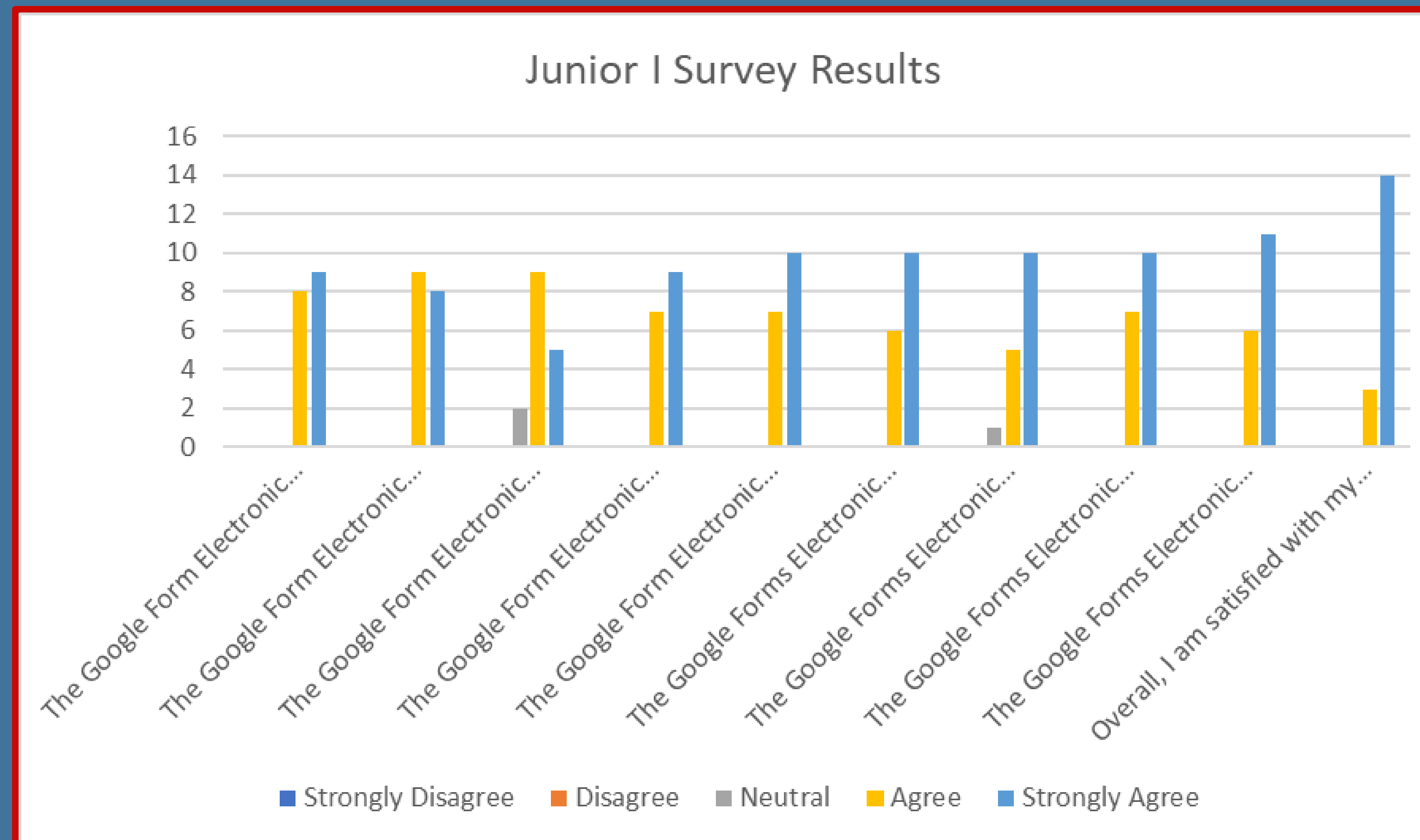
The purpose of this project is to evaluate the use of Google Forms for a simulated Electronic Health Record (EHR). The project arose as a result of changes within the institution relating to not purchasing a commercial simulated EHR.

Methods

Methods included development and piloting of the EHR in a lab course to mimic real world charting with medications and simple charting. A google account was required to access the free application "Forms". A Simulated Electronic Health record for recording data was developed for use and piloted over the Summer of 2019 with Junior I level Accelerated BSN nursing students (n=17). Further use of the Google Form charting was expanded to include a complete patient charts within the Junior II level (n=29) in Fall of 2019. Feedback for quality improvement was requested through a Survey Monkey link posted in the learning management system on the use of Google Forms at the end of both courses. Copyright was applied for and obtained on the created Google EHR forms. Students were not required to complete the survey and were informed that it would not have any impact on their performance or grades.

Research Question

Is Google Forms sufficient for simulating an Electronic Health Record (EHR) for the junior level BSN nursing students that which it was initially integrated.



Results

The junior I students felt the Google form EHR was easy to use with a mean of 4.53 for Chart #1. Chart # 2, the mean was 4.47. By chart #3, the mean dropped to 4.19. The Google Form EHR met the learning objective "Demonstrate effective written communication skills in the documentation of care" with a mean of 4.56. Overall, students were satisfied with their learning using the simulated Google Forms EHR with a mean of 4.82 and standard deviation of 0.38. The Junior II BSN students (n=29) had similar means for "ease of use" with Chart #1 at 4.14 and Chart #2 at 4.10. It is important to note that the Junior II Chart #1 is lengthier than the Junior I Chart #3.

Limitations

The results are limited due to slightly different survey being used for Summer and Fall cohorts. Survey return rate was low with the Junior I ABSN n=17 and the Junior II n=29. Users found the Google Form easy to use but information could not be saved which required them to complete the learning activity once they started it.

Conclusion

In conclusion, while the use of the Google form enhanced the classroom and lab experience, it has some limitations related to usability as a simulated electronic health record. As the charting became more detailed and the Google Form became longer, students were less satisfied with the EHR. Overall, it seems use of Google Forms for an EHR in the lab setting was positive. Further research is needed.

References

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