Pharmacology Brain Boards: A Final Examination Review in a Traditional Skills Fair Modality

Emily A. Davis, DNP, RN, CNE
Indiana University School of Nursing

Sandra Davis, PhD, RN, CHSE
Linfield University

Tonja Padgett, DNP, RN, ACNS-BC, CNE
Indiana University School of Nursing

Introduction

The pedagogy of collaborative learning is a current trend emphasized today in modern education. Koh's (2019) systematic review found that collaborative learning has a positive influence on student outcomes and found support that collaborative learning—a flipped classroom approach—emphasizes problem solving, builds self-direction, and improves collaboration. This type of learning experience is intentionally designed to enhance traditional group work into an activity that focuses on deep learning (Garrison, 2016). This comprehensive understanding of collaborative learning has been married to a traditional nursing learning modality—the yearly skills fair—with a final examination review that benefits the group and the individual.

The yearly skills fair is a common event in nursing units. Saleh et al. (2017) found that skill fairs help validate and enhance competence. This supports the theory that competency validation is important in the nursing field and that nurses welcome competency validation. In nursing education, final examinations serve to inform competency validation in the subject matter and queries whether the student has retained the material and is ready to advance. This class activity is designed based on the traditional nursing skills fair described as Brain Boards. These student-composed boards allow the student to review material from the entire semester while working in a group to assess their learning needs.

This is the author's manuscript of the work published in final edited form as:

Davis, E. A., Davis, S., & Padgett, T. (2021). Pharmacology Brain Boards: A Final Examination Review in a Traditional Skills Fair Modality. *The Journal of Nursing Education*, 60(1), 59.
<https://doi.org/10.3928/01484834-20201217-15>

Method

An undergraduate nursing Pathophysiology-Pharmacology course with 140 prelicensure, junior-level Bachelor of Science in Nursing students were placed in groups of four members, for a total of 35 groups. Each group selected an available medication from previously lectured pharmacology material that the final examination would cover. The groups created a poster presentation of their assigned medication in a creative, colorful manner with an emphasis on pharmacokinetics, adverse effects, contraindications, patient teaching, nursing administration, and interactions. The groups also included three questions on their boards that were pre-approved by the instructor and reviewed the main concepts of the Brain Board. These questions prompted interaction during the skills fairs with answers found on the back of each board (if needed). The groups had two objectives during the fair: (a) to collaborate with their groups to answer the brain board questions, and (b) to review and recognize the material that they needed individually to further review before their final.

Results

Faculty provided a voluntary 7-question Likert-type survey to the students ($n = 36$). The students rated the activity based on four values: (a) helpfulness, (b) difficulty in completion, (c) thoroughness of a final examination review, and (d) the support of collaborative learning. Ninety-two percent of students rated the project as *moderately helpful* to *extremely helpful* to prepare for the final. Seventy-three percent reported the project as *very easy* to *extremely easy* to complete. Ninety-six percent of the participants reported that the project was *moderately* to *extremely thorough* in helping them to prepare for the final examination. Eighty-four percent of the respondents stated that they viewed the project as supporting collaborative learning. The last question on the survey requested that students provide qualitative data of their perception of the activity. Various responses were recorded, such as, "I appreciated the final concept, especially the day of review of all boards," "That was extremely helpful," and "Thank you for the skills fair, it was very helpful."

Conclusion

This fun and interactive activity can be successfully used in a variety of courses, such as a medical–surgical course with a focus on system disorders or as an NCLEX® review in a capstone course. The assignment was not overly complicated, it allowed for the students to help educate one another, and it reviewed material in an active format that promotes the traditional skills fair they will encounter when entering the workforce.

References

- Garrison, D. R. (2016). *Thinking collaboratively: learning in a community of inquiry*. Routledge.
- Koh, J. H. L. (2019). Four pedagogical dimensions for understanding flipped classroom practices in higher education: A systematic review. *Educational Sciences: Theory and Practice*, 19(4), 14–33.
<https://doi.org/10.12738/estp.2019.4.002>
- Saleh, U., O'Connor, T., Afaneh, T., Moore, Z., Patton, D., & Derwin, R. (2017). The use of a competence fair to validate nursing competence. *Nurse Education Today*, 57, 1–7.
<https://doi.org/10.1016/j.nedt.2017.06.007> PMID:28675822