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# Utilizing a Learning Management System to Provide Nursing Professional Development

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The provider unit involved in this project was based in a university setting within a school of nursing and serves both the university nursing faculty and nurses within the community. To support effective online content design principles, usability, a connection to the content, and a method for participants to provide sound feedback, a nurse planner for the unit and an instructional designer in the university collaborated to transition nursing professional development activities to an online format utilizing a learning management system. Virtual learning is viable and a potentially effective option to provide interactive and innovative professional development.

Nursing faculty have unique needs for continuing nursing professional development (NPD) in addition to clinical education content. Nurse planners in approved provider units for NPD within schools of nursing have a responsibility to assess the needs of nursing faculty based on emerging evidence, performing gap analyses, and planning activities that utilize adult learning and specific design principles aligning with learner needs and interests (American Nurses Credentialing Center, 2015). In addition, nurse planners should incorporate organizational goals and state requirements for licensure.

## THE PROVIDER UNIT

The provider unit involved in this project was based in a university setting within a school of nursing. The provider unit serves both the university nursing faculty and nurses within the community. Other health-related interprofessional programs within the university include social work, speech and hearing sciences, and psychology. Traditionally, the unit provided 2–10 hours live, in-person NPD to nursing faculty throughout the year. With the onset of the

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coronavirus disease (COVID-19) pandemic, the unit needed to reevaluate how education was presented and elected to offer enduring activities. The decision was made to transition professional development for nursing faculty to an online platform during the pandemic.

## STATE REQUIREMENTS AND FACULTY NEEDS

The state of Texas requires all registered nurses whose practice includes older adults to complete at least two contact hours of targeted continuing education on older adult or geriatric populations before the end of each licensing period (Texas Board of Nursing, 2021). Nursing faculty must also complete educational activities in the area of nursing education. Anecdotally, even prior to the pandemic, some nursing faculty had expressed a desire for a more flexible format for the NPD offerings because of scheduling conflicts with practicum. Faculty also expressed a desire for the education to provide recent evidence-based knowledge with innovative strategies for use in the classroom or practicum setting when teaching nursing students.

## USE OF LEARNING MANAGEMENT PLATFORM

The university learning management system (LMS) was utilized to set up a continuing nurse education shell to house enduring learning activities. This was beneficial for several reasons. First, use of the LMS required no additional funding, as it was already in use. Second, the faculty were used to the LMS and had experience in setting up courses within the platform. The LMS allowed for an asynchronous approach to learning. Data suggest this type of format can be beneficial for enhancing knowledge (Evans et al., 2020; Mcafooes, 2020; McCrea et al., 2021). An instructional designer from the university with online education experience was consulted in the planning to support effective online content design principles, usability, a connection to the content, and a method for participants to provide sound feedback. A course shell for continuing nurse education was set up by the instructional design team of the university. All faculty members in the school of nursing were enrolled in the course.

## Design Principles

Designing and developing online courses requires measurable thinking skills, high level of interaction of engagement,

and making sure the content is accessible. High-quality guidance—which is all-around organized and paced, is intellectually clear, incorporates well explained models, and is furnished by presenters with subject matter comprehension—is vital (Linnenbrink-Garcia et al., 2016). The nurse planner and instructional designer utilized adult learning theory in development of the content, applying principles that actively involved the learners within an online environment and enabled them to assume responsibility for their own learning (Candela, 2020). Quality assurance is also very important toward the course design process. The design process and the cautious thought of various plan choices affect the quality of the instruction (Hodges et al., 2020).

### Usability

The purpose of an LMS is to enhance the learning process by allowing educators to deliver course materials, provide assessments, and measure the meeting of learning outcomes in an online environment. What is key is to make sure the participants are able to navigate the LMS, making it user friendly to access all of the content. Assessing and checking the ease of use of an e-learning framework is viewed as a significant task to guarantee the adequacy of the framework (Binyamin et al., 2016). This approach is an ongoing process with the instructional design team working with the faculty to make sure all of the technology in the course is functional and the content is accessible.

### Connection to the Content

A direct connection with the course covering participant to participant, participant to content, and participant to presenter is key to their success. Having that variety in place helps the learner grow across different spectrums being able to connect to the course. Online courses are effective and support both participant–presenter collaboration in expansion to participant–participant collaboration in techniques that license them to construct data and sort out some way to design structures for learning new materials (Schell & Janicki, 2013). Having a variety of high-level interaction and engagement in the course helps them achieve that all important comprehension of the content.

## THE LEARNING ACTIVITIES

Two activities were developed to meet the 2-hour older adult content required by the state of Texas. *Abuse, Neglect, and Exploitation of Older Adults* was a 1-hour contact activity, and *Health Issues in the Older Adult* was a 1.5-hour contact activity. The activities were available for 2 months on the LMS to the nursing faculty. Participants signed into the activities, confirmed they had read the disclosures, and listed their name as they would like it to appear on the completion certificate. This was set up in the gradebook as a completion activity, allowing the nurse planner to easily see who had signed in and read the disclosures for each

activity. The LMS platform allowed for a variety of learning activities to engage the learner.

### Abuse, Neglect, and Exploitation of Older Adults

This presentation included a 23-minute narrated PowerPoint, access to screening tools for abuse and neglect and a folder of information for reporting in the state of Texas. Participants completed a required activity in a case study format. A case study was presented with a scenario in the emergency department of a nursing presenter, a nursing participant, a family member, and the patient. The participant used the provided screening tools to screen the patient based on information in the case study. They then discussed if the data pointed to abuse and developed and submitted an appropriate plan based on the scenario and reporting requirements in the state.

The LMS allowed the presentation of materials in multiple formats, a key strategy for improving participant engagement and achievement (Frey & Popkess, 2020). Ten faculty members participated in the continuing nurse education, with 100% meeting the outcome of completing a screening tool and written plan of action for reporting abuse. In the evaluation comments, faculty reported appreciating the flexible format and the applicability of the content to teaching nursing undergraduate participants.

### Health Issues in the Older Adult

This activity included information regarding normal changes occurring during aging. Participants were provided a concept map to complete with normal and abnormal aging. This was uploaded as an assignment to the gradebook in the LMS platform. Faculty had attended a learning activity on concept maps the semester prior and were able to apply information from that session into a tool that could also be utilized in the classroom. A short-narrated PowerPoint on health promotion in the older adult was provided to the participants. After viewing the narrated PowerPoint, participants were given access to a case study involving an older adult, a nursing participant, and the suggested Centers for Disease Control and Prevention immunization schedule. Participants uploaded the completed immunization assignment, and it was marked as completed in the gradebook.

Short video clips of challenges in and management of behaviors in persons with dementia were provided. Providing engaging videos allowed for the students to connect directly to the content on the LMS. This design approach incorporating video-based learning continues to be a strong catalyst for active learning. The ability to have the videos directly embedded into the LMS made them easily accessible to the participants. After viewing the video clips, participants shared something new they learned and could apply to their teaching or nursing practice that could potentially redirect a person with dementia who is exhibiting a challenging behavior. This allowed sharing of ideas. The

ANE COMPLETE	SIGN IN GERI	CONCEPT MAP	USE AND SHARE YOUR KNOWLEDGE	IMMUNIZATION PLAN	END OF LIFE CARE QUIZ	GERI ISSUES COMPLETE
✓	✓	✓	✓	✓	✓	✓

FIGURE 1. Completed gradebook.

last content area included end-of-life issues with information provided on videos and a short end-of-life quiz.

Nine faculty members participated in this activity. All participants completed a concept map, completed the vaccination plan, commented with an intent to change practice on the blog, and earned 100% on the end-of-life quiz. Feedback on the evaluation for the activity was positive, noting the applicability of the content to teaching undergraduate nursing participants.

### Certificates of Completion

The nurse planner reviewed all of the requirements by assessing completion of each participant in the gradebook. Figure 1 illustrates the format of the gradebook when requirements were complete.

When participants met the requirements, a pdf of a completed certificate with the appropriate name from the sign in documents was uploaded to the platform.

### Discussion

Utilizing the LMS platform allowed flexibility in completion of the learning activity for the participants. It serves as a storage hub for completed documents. Once the course shell is set up, participants who join or leave the school of nursing can be easily added or deleted. Faculty feedback for the format was overwhelmingly positive. Not all faculty participated. Some faculty indicated they had already completed the geriatric content for relicensure. Participation was voluntary, so this was expected.

One limitation of the current LMS was it would not automatically produce a completion certificate. It is anticipated that this can be resolved in the future. Another limitation with long-term use is that only faculty with an active LMS account can access the content in the current format, limiting its use with nurses in the community. An unexpected benefit of using the LMS platform is that it allowed the faculty to see the learning platform from a participant view when completing and turning in assignments.

Over the last decade, there has been a growing demand for easy access to courses that develop knowledge and skill within the nurse's area of practice (Dahlke et al., 2020; Karaman, 2011; Ousey & Roberts, 2013; Rees et al., 2021; Wu et al., 2018). The use of enduring professional development activities in the LMS format provided an opportunity for nursing faculty to earn continuing education

in a flexible and innovative format with no additional cost to the school of nursing. Short-term outcomes were easily measured within the LMS with statements of intent to change practice, a posttest, and a case study analysis (Schumacher et al., 2018). A follow-up survey evaluating a self-reported change in the education of nursing participants regarding the older adult 6–12 months after the educational activity would allow for long-term evaluation of a practice change. As the older adult content is a recurring requirement for the state of Texas, the course will be updated yearly and made available to faculty needing it for relicensure or for desire of further education.

### Conclusions

Virtual learning is viable and a potentially effective option to provide interactive and innovative professional development. Further studies are needed to assess nurse faculty preferences in format for professional development. Inter-professional collaboration with instructional designers can help to integrate content into meaningful online experiences. The provider unit plans to utilize enduring programs in the LMS, live activities, and blended activities for future NPD activities.

### References

American Nurses Credentialing Center. (2015). *ANCC primary accreditation provider application manual*. Author.

Binyamin, S., Rutter, M., & Smith, S. (2016). The utilization of system usability scale in learning management systems: A case study of Jeddah Community College. In *Proceedings of the 9th International Conference of Education, Research and Innovation (ICERI2016)* (pp. 5314–5323).

Candela, L. (2020). Theoretical foundations of teaching and learning. In Billings, D., & Halstead, J. (Eds.), *Teaching in nursing* (6th ed., pp. 247–269). Elsevier.

Dahlke, S., Hunter, K. F., & Amoudou, O. (2020). Innovation in education with acute care nurses. *Journal of Continuing Education in Nursing, 51*(9), 420–424. 10.3928/00220124-20200812-07

Evans, D. J. R., Bay, B. H., Wilson, T. D., Smith, C. F., Lachman, N., & Pawlina, W. (2020). Going virtual to support anatomy education: A STOPGAP in the midst of the Covid-19 pandemic. *Anatomical Sciences Education, 13*(3), 279–283. 10.1002/ase.1963

Frey, J., & Popkess, A. (2020). Strategies to support diverse learning needs of students. In Billings, D., & Halstead, D. (Eds.), *Teaching in nursing a guide for faculty* (6th ed., pp. 409–435). Elsevier.

Hodges, C. B., Moore, S., Lockee, B. B., Trust, T., & Bond, M. A. (2020). The difference between emergency remote teaching and online learning. *Educause Review*. <https://er.educause.edu/articles/2020/3/the-difference-between-emergency-remote-teaching-and-online-learning>

Karaman, S. (2011). Nurses' perceptions of online continuing education. *BMC Medical Education*, *11*, 86. 10.1186/1472-6920-11-86

Linnenbrink-Garcia, L., Patall, E. A., & Pekrun, R. (2016). Adaptive motivation and emotion in education: Research and principles for instructional design. *Policy Insights From the Behavioral and Brain Sciences*, *3*(2), 228–236.

Mcafooes, J. (2020). Teaching and learning in online learning communities. In Billings, D., & Halstead, D. (Eds.), *Teaching in nursing a guide for faculty* (6th ed., pp. 409–435). Elsevier.

McCrea, K. A., Leathers, B. N., Heitman, L. C., Hawkins, E. K., Abbott, T. M., & Opsahl, A. (2021). Transitioning professional development classes to virtual instruction. *Journal of Continuing Education in Nursing*, *52*(9), 404–406. 10.3928/00220124-20210804-04

Ousey, K., & Roberts, D. (2013). Improving access to CPD for nurses: The uptake of online provision. *British Journal of Community Nursing*, *18*(2), 78–83. 10.12968/bjcn.2013.18.2.78

Rees, S., Farley, H., & Moloney, C. (2021). How registered nurses balance limited resources in order to maintain competence: A grounded theory study. *BMC Nursing*, *20*(1), 176. 10.1186/s12912-021-00672-6

Schell, G., & Janicki, T. (2013). Online course pedagogy and the constructivist learning model. *Journal of the Southern Association for Information Systems*, *1*(1).

Schumacher, S., Shinnars, J., & Graebe, J. (2018). Evaluating the effectiveness of educational activities: Part one. *The Journal of Continuing Nurse Education*, *49*(6), 245–247. 10.3928/00220124-20180517-02

Texas Board of Nursing. (2021). *Education—Continuing competency requirements*. [https://www.bon.texas.gov/education\\_continuing\\_education.asp](https://www.bon.texas.gov/education_continuing_education.asp)

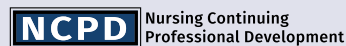
Wu, X. V., Chan, Y. S., Tan, K. H. S., & Wang, W. (2018). A systematic review of online learning programs for nurse preceptors. *Nurse Education Today*, *60*, 11–22. 10.1016/j.nedt.2017.09.010

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