An Instructional Strategy in Discovery Learning

Nurse educators are challenged to develop learning strategies that engage students in inquiry-based education designed to reflect the capabilities of technology, especially in nonclinical courses. WebQuests offer a framework for cognitive activities supported by students' scrutiny of Web sites and resources using assigned criteria. "A WebQuest, as a constructivist, inquiry-oriented strategy, requires learners to use higher levels of thinking as a means to analyze and apply complex information" consistent with Bloom's taxonomy (Sanford, Townsend-Rocchiccioli, Trimm, & Jacobs, 2010, p. 473). The following example demonstrates the power of the WebQuest framework for undergraduate students exploring nurse theorists. This topic can be met with student resistance as the relevance often is not understood. The WebQuest design addressed this challenge.

The WebQuest provides an organized framework for developing learning activities that are dynamic and engage learners in critical thinking and problem solving. A WebQuest is simple to design and starts with a creative idea, followed by the application of six essential features with scaffolding as a central method of WebQuests construction.

The WebQuest includes:

> Introduction (generates interest and provides the background); Task (authentic, engaging, task aligned with learning objectives); Process (a scaffolded guide for task accomplishment); Resources (relevant, quality Internet-based resources to guide learning); Evaluation (grading rubric for task completion); Conclusion (provides reflection and meaningful closure). (Maxwell, 2009, p. 173)

The WebQuest page is the definitive source, is updated frequently, and includes articles and tools on structuring WebQuests (http://webquest.org/).

> The online site Questgarden. com is an authoring tool and hosting service that provides guidance for WebQuest design and development. WebQuest.org, a site developed by the original creator, includes a repository of WebQuests that can be accessed for free use and modified to meet learning objectives. Additional resources include design patterns and templates for development, process checklists, and rubrics for evaluating WebQuests and learner performance. (Sanford et al., 2010, p. 478)

The quality of Web sites selected impacts the utility of the WebQuest and must feature relevant, current, and user-friendly materials organized to allow for efficient use of computer-searching activities. Direct links to Web sites are embedded in the resources section of the WebQuest to facilitate efficiency. Learners are directed to a variety of the most informative sources available on the Internet to accommodate different learning styles while addressing each component of the evaluation criteria.

A WebQuest was created for an undergraduate evidence-based practice and informatics course to engage students in an exercise exploring nurse theorists. Students had been introduced to the concepts of evidence-based practice and the interrelatedness of theory, research, and practice as the foundation of sound nursing practice. The goal of the Theorist WebQuest was to identify nurse theorists and their contributions to the discipline of nursing, facilitating immersion in the connections between theory, practice, and research.

The class was divided into groups to complete the WebQuest and to prepare an oral presentation. An evaluation rubric was designed to assess task completion including objectives for describing theory characteristics and the metaparadigm ascribed to by the theorist, with a focus on debating the applicability of the theory in clinical or administrative environments. Web-based resources were selected that offered a comprehensive overview of the selected theorists' metaparadigm with additional resources (peer-reviewed journal articles) describing the use of the particular theory in clinical practice.

Students reported satisfaction with this learner-centered assignment but felt thwarted by the time limitations given this was an in-class exercise. Students were given 2 hours to complete the WebQuest and prepare their oral presentations. The remaining 2 hours of this class session accommodated the group presentations, allowing time for questions and discussion debating the utility of specific nursing theories in contemporary practice.

Via course evaluations, students reported evidence of this assignment's effectiveness, but more formative and summative evaluation will be required to determine sound pedagogical application. Overall, students spoke about the benefits of exploring nurse theorists' contributions to evidence-based practice and establishing the foundational linkages between theory, research, and practice. Learning outcomes included an improvement in students' information literacy skills and confidence in using information effectively. Information competency skills such as analyzing, synthesizing, and evaluating were demonstrated with this collaborative learning activity.

The WebQuest approach empowers students to participate in higher order thinking and information skills aligned with constructivist principles (Lahaie, 2007). Faculty evaluations support that WebQuests could be incorporated easily into nursing education initiatives.

References

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