Poster Session: Innovations in Dietetics Practice and Education

Learning Style Triads Differ within a Hospital Clinical Nutrition Team

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Learning Outcome: Utilize an basic tool for recognizing individual strengths and weaknesses with potential to unlock communication and embrace diversity of learners.

Clinical Nutrition Practitioners have a responsibility for helping others to learn. Choosing effective communication for training, coaching, and mentoring has the potential to circumvent frustration and lead to more satisfying outcomes including engagement and motivation. Learning styles are manifested through perception, processing, and interpretation of experiences. Information enters the brain in 3 main ways: sight, hearing, and touch. The avenue you use the most is deemed your style preference. Visual learners learn by sight, auditory learners via hearing, and tactile-kinesthetic learners with touch. Using Dr. Jeri LaVigne's inventory of learning styles with triad combinations, 8 Registered Dietitians completed the online quiz at www.efficientbrain.com. Five participants had identical triads of Visual, Kinesthetic, and Auditory — VKA. Three remaining participants had different triads of VAK, KAV, and KVA. The group majority tested 75% with a first indicator for a visual preference and minority resulted in 25% for a primary kinesthetic style. Plans were discussed to vary teaching techniques immediately within practice. A sense of accomplishment was reported by trainers with less stress and reduction in time when implementing a more "hands-on" training approach with a new hire. This trainee with a kinesthetic preference remarked, "I wish I had known this sooner" and "would have made undergrad studying easier for me". Trainers and trainees agreed "one size does not fit all" and appreciate the awareness of unique differences provided by this tool. Curiosity was expressed by the participants to learn more about their particular learning styles triad. Key insights gained will be used to enhance interactions and increase learning potential in the future.

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Lightboard, Camera, Nutrition!

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Learning Outcome: The attendees will learn: (1) the use of two technologies which promote online student and client education, (2) improve quality of online education with tools that enhance communication skills, (3) learning the use of Quality Response (QR) codes to educate the public.

Background: Within the past year, online education has increased by 9.7%. Creating an engaging learning environment online remains a challenge. In 2016, the University of Central Missouri (UCM) launched Lightboard, a novel, innovative tool, that allows instructors to directly address students through a video lecture. The device is unique in the sense that the instructor is filmed facing the audience and is able to illustrate complex topics such as, nutritional genomics or interpreting statistics, with bright colors or embedding graphics. Additionally, this technology can be developed on any campus because the hardware is open sourced.

Use of Lightboard: The objective was to develop video lectures for an online graduate nutrition course using the Lightboard technology. Video lectures were recorded throughout the semester in an on-campus studio by an instructional design specialist at UCM. One student from the course attended these sessions while another accessed it only online. The recorded sessions were then posted to the class website.

Evaluation of videos recorded with Lightboard: One unique aspect of this pilot project was that it evaluated the videos created with Lightboard with, both in class and online students. Qualitative feedback demonstrated that the Lightboard lectures allowed students to revisit challenging topics and aligned well with the power point slides which were embedded into the video lectures. The students stated that the lectures were engaging and led to a greater understanding of the material.

Conclusion: Feedback suggests that Lightboard provides an innovative and engaging platform to educate future nutrition practitioners with cutting edge nutrition science.

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Organizational Systems Design Model for Improved Data-Driven Decision Making in Undergraduate Nutrition Science Programs

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Learning Outcome: As a result of attending this poster presentation, the learner will be able to discuss best practices for organizational systems design models for improved data-driven decision making in undergraduate nutrition science programs.

Background: Higher education nutrition science and dietetics faculty are highly skilled in collecting a vast array of data for the purposes of teaching, research, and service. Faculty are continuously collecting ever expanding data sets to meet institutional reporting requirements, but often fall short in properly utilizing the data to adequately inform teaching and curricular decisions. Oftentimes this shortfall is a result of limited availability of administrator and faculty time leading to possible gaps in student learning.

Methods: The purpose of this poster presentation will be to describe the implementation of one organizational system's design model utilized in a department of nutrition science to reframe the priority to focus on continuous quality improvement and data-driven decision making in teaching and learning. This model was designed at the institutional, college, and department level placing emphasis on faculty engagement, process efficiency, and improving student learning. In addition to common assessment practices such as identify means of assessment and curricular mapping, a priority is placed on faculty engagement which requires regular meetings, sharing the workload, maintaining accountability, creating efficiency, and closing the feedback loop at all levels.

Results: This model requires a continuous quality improvement mindset and dedication to the process. Administrators, faculty, and students alike are reporting subtle improvements in team work, course scaffolding, communications, teaching and learning satisfaction, and quality of students entering the program.

Conclusion: Future studies aimed at assessing the process outcomes are warranted to continue improving the system.

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Simulation Enhances Dietetic Intern Competence in Enteral Nutrition

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Learning Outcome: Implement and develop a high fidelity simulation to increase confidence of Dietetic Interns (DI) recommending enteral nutrition (EN) formulas and adjustments to the interdisciplinary care team as well as a training tool for teaching home enteral nutrition to patient or caregivers.

Background: CDR's 2013 practice audit indicating knowledge gaps in critical thinking in entry level Registered Dietitians/Nutritionists (RDNs) combined with a shortage of preceptors makes simulation an appealing option for education programs to meet competencies.

Methods: The Dietetic Internship Director (DID), Nutrition Support RDN and Simulation Coordinator at the Memphis VAMC collaborated to develop an EN simulation based on preceptor identified knowledge gaps of dietetic interns (DI) including assessing tolerance, bowel sounds, site care, tube occlusion and home EN administration. The simulation utilized guided case studies with integration of both low and high fidelity mannequins.

Results: Eight DI completed a simulation introducing basic concepts of EN followed by an advanced EN simulation prior to their Nutrition Support Rotation. Participating DI rated the following criteria on a 1-5 scale; realism (4.1), fun (4.4), increased knowledge of assessing EN tolerance (4.5) and value to future application (5). Scores on knowledge based assessment increased an average of 43%.

Application/Conclusions: Implementation of a high fidelity nutrition simulation conducted with existing simulation materials is enhanced with a multidisciplinary approach. Overall dietetic interns were satisfied with the education provided. Suggested changes including the utilization of the Electronic Medical Health Record, standardized patients, and additional cases will be implemented for future classes.

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