THE USE OF CASE STUDIES AND SMART DEVICE APPS TO INCREASE STUDENT ENGAGEMENT



Nicole M. Giancaterino, DNP, MSN, RNC, CNE – Assistant Professor | ngiancaterino@chamberlain.edu Deanna A. Janz, DNP, MSN/Ed., RN – Assistant Professor | djanz@chamberlain.edu Chamberlain University

chamberlain.edu

Introduction

The purpose of this project is to demonstrate to educators how to incorporate technology-based instruction methodologies with the utilization of smart device apps and case studies throughout a nursing course.

Setting

- Classrooms at Pre-Licensure Bachelor of Science in Nursing (BSN) Campus
- Remote (personal laptop and devices)



Approach

In an eight week BSN course, an online case study approach was used to assist students with critical thinking and retention of obstetrical concepts. "Zeondra" and "Aria," both just weeks into their pregnancies, were introduced during the first lesson within the course case studies. They progressed throughout the course to deliver healthy babies and complete their journey as new postpartum family units. Along with case studies, the instructor implemented use of a free app and progressive virtual case studies as supplemental methods for digital learners both within and outside the classroom, is supported (Flood & Commendador, 2015).

During the course, each student:

- Used simple registration instructions to enter a virtual pregnancy
- Explored various gestational stages of the pregnancies and weekly class discussions centered on progression of the virtual pregnancy
- Received text message alerts on changes to the virtual baby via their laptops and telephones
- Had access to videos of all aspects of the baby's development in the womb
- Shared what they learned about expectations and appropriate care of a real pregnant patient in the clinical setting
- Explored multi-cultural lives of the pregnant women and choices they made via scenarios and how their patients' choices would impact their pregnancies
- Practiced and applied information regarding care of the virtual pregnancy

The fetal kick count became an interactive learning moment. The "kick" was simulated by a specific bodily activity. Students applied a "kick" to the app's tracker every time the kick occurred in a 24-hour period. The app alerted the user to evidence-based obstetrical teaching that should occur if ten kicks were not elicited over a two-hour time period. Teaching included engagement in activities such as walking, drinking a large glass of water or eating a small snack and notifying the healthcare provider if less than ten kicks occurred after one hour of the activity. With active involvement by using the smart device (laptop/smart phone), an increase in student responsiveness and engagement was observed.

Results

Despite limitations that included technology glitches for some of the interactive activities, the case study approach offered a positive, creative, interactive and exciting opportunity for students to practice what they learned from their textbooks and apply it to their virtual patients and their virtual pregnancy. Students were engaged in a progression within the course via the case studies. The use of the tools on the pregnancy app fostered real-life experiences for a virtual pregnancy through safe experimentation and participation. Text messages provided for continued learning outside the classroom environment.

Discussion

The inclusion of a pregnancy app and progressive course case studies provided students with an interactive and fun way to learn their maternal child concepts. To continuously improve teaching strategies, student learning outcomes and professional growth, faculty should consider using contemporary tools that utilize technological application to actively engage the digital learner of today.

References

Flood J.L. & Commendador, K. (2015). Avatar case studies: A learning activity to bridge the gap between classroom and clinical practice in nursing education. Nurse Educator, PubMed ID: 26132174.

Montenery, S. M., Walker, M., Sorensen, E., Thompson, R., Kirklin, D., White, R., & Ross, C. (2013). Millennial generation student nurses' perceptions of the impact of multiple technologies on learning. Nursing Education Perspectives, 34(6), 405-409. doi:10.5480/10-451.

Popil I. (2011). Promotion of critical thinking by using case studies as teaching method. Nurse Education Today, 31(2). p.204-7.

Yu, W. W., Lin, C. C., Ho, M., & Wang, J. (2015). Technology facilitated PBL pedagogy and its impact on nursing students' academic achievement and critical thinking dispositions. Turkish Online Journal of Educational Technology - TOJET, 14(1), 97-107.

©2017 Chamberlain University LLC. All rights reserved.

P-36010								FINAL CHECKLIST		
STTI 2017_Giancaterino_POS_12-170270									INITIALS	INITIALS
Date 08/07/17 Printed At 1009							M177	Chamberlain Address		
Time 5:00 PM Round 1			J%					Chamberlain Phone 888.556.8CCN (8226)		
								Chamberlain URL		
Job info		-		4			HAMBEDLAIN	3-Year BSN Copy		
Element Poster		Pages Folded		1 pg			TIAMDENLAIN	Full Accreditation		
Live 94" x		VDP	3126	П		U	N I V E R S I T Y	Institutional Accred.		
Trim 94" x Bleed 0.5"	46"	Notes		Uploaded	d to			Program Accred. BSN		
bleed 0.5		LCP 08/07/17						Program Accred. MSN		
Approvals		1				Pu	b Info	Program Accred. DNP		
	APPROVED	APPROVED W/ CHANGES	DENIED	DATE	INITIALS		Pub:	State Approval (SCHEV)		
Stephanie Gallo						PRINT	Issue:	TN State Disclosure (THEC)		
-						<u>R</u>	Contact:	IL Board of Higher Ed (IBHE		
								Program Availability		
	П	П	П				Title:	Consumer Disclosure URL		
						Į	Location:	Legal Line		
						90 HO0		Inventory Code		
	П	П	П				Post Date:	Production Code		
		J					Quantity:	Heat Map Check		
3005 Highland Parkway Downers Grove, IL 60515 P: 630.512.8914 F: 630.512.8888								Other:		