

亞東技術學院
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結案報告

成人護理學實習

「護理情境模擬教案設計」

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亞東技術學院結案報告(1052)(教材編纂及教具製作)

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摘要

本教材編纂之目的地為進行護理系二年制日間部成人護理學實習之情境模擬教案設計。以 Jeffries (2008)所提出情境模擬教學概念架構為學理基礎，設計擬真情境模擬教案，將所設計之教案作為成人護理學實習前準備之教材，提升學生核心能力，並於課程前後針對學生進行核心能力自評檢測。85 位學生於課程前後各核心能力自評分數皆有顯著的進步，進步率皆達 10% 以上，其中又以批判性思考核心能力進步率最高，達 37.1%，顯示情境模擬教學之成效。

關鍵詞：護理情境模擬

前言

在以實務為主的健康照護專業，教學方法著重於能培養學生臨床的知識與技能。護理學生需要學習如何將課室的教學與臨床實務做連結，然而人類情境模擬的教學策略，在護理教育的過程中，就能達到這目標，目前也廣為列為全世界護理教學課程運用。有別於傳統以老師為主，制式刻板的教材，結構性的教學方法。現今學生的學習與生活都充斥著數位化環境，護理教育者須思考如何利用情境模擬教案的設計，達預期的學習目標。

第一章 研發理念

護理情境模擬是一種教學的方法，可以在一個安全的環境下複製臨床實務的情境，提供學生養成教育的學習。學者提出情境模擬的定義為；複製臨床實務重要的情境，使得學生在情境模擬的練習下能了解並能處理，以備將來能應對臨床真實的情境。情境模擬教育藉由複製臨床實務情境，鞏固學習成效並發展學生專業能力。學者也建議情境模擬是護理教育有效的教學策略，基於以下幾個面向：(1)經由知識及技術的重複練習，精進熟練度；(2)教學者可依學生的需求，量身訂做教學教案；(3)情境學習可充分與實務連結；(4)在學習過程中可納入情緒及情感部分；(5)情境模擬的過程中學生學習如何去分析及判斷各類資料，發展臨床推論之核心能力。

第二章 學理基礎

情境學習(situated learning)將學習至於真實或模擬情境之中，透過學習者與情境的互動，使學生習得的知識能應用在臨床中。情境學習是一種體驗的學習、主動建構知識、合作與社會互動、評量與教學結合的學習。情境學習的優點包含：學生動手實作，能促進對課程的滿意度及學習成就；有效的真實訊息傳遞，能改變學生情意態度；允許在安全，回饋的環境中進行體驗式學習；允許師生反思。

Jeffries(2008)提出情境模擬教學概念架構(如圖 1 所示)，在情境模擬教學的過程中，老師、學生之間藉由主動學習、雙向回饋等進行互動，情境模擬教學的特色為客觀的、擬真性、問題解決導向、學生為中心，期望能提升學生在認知及技能方面之學習成效，批判性思考的能力，學生自信度，及學習的滿意度。

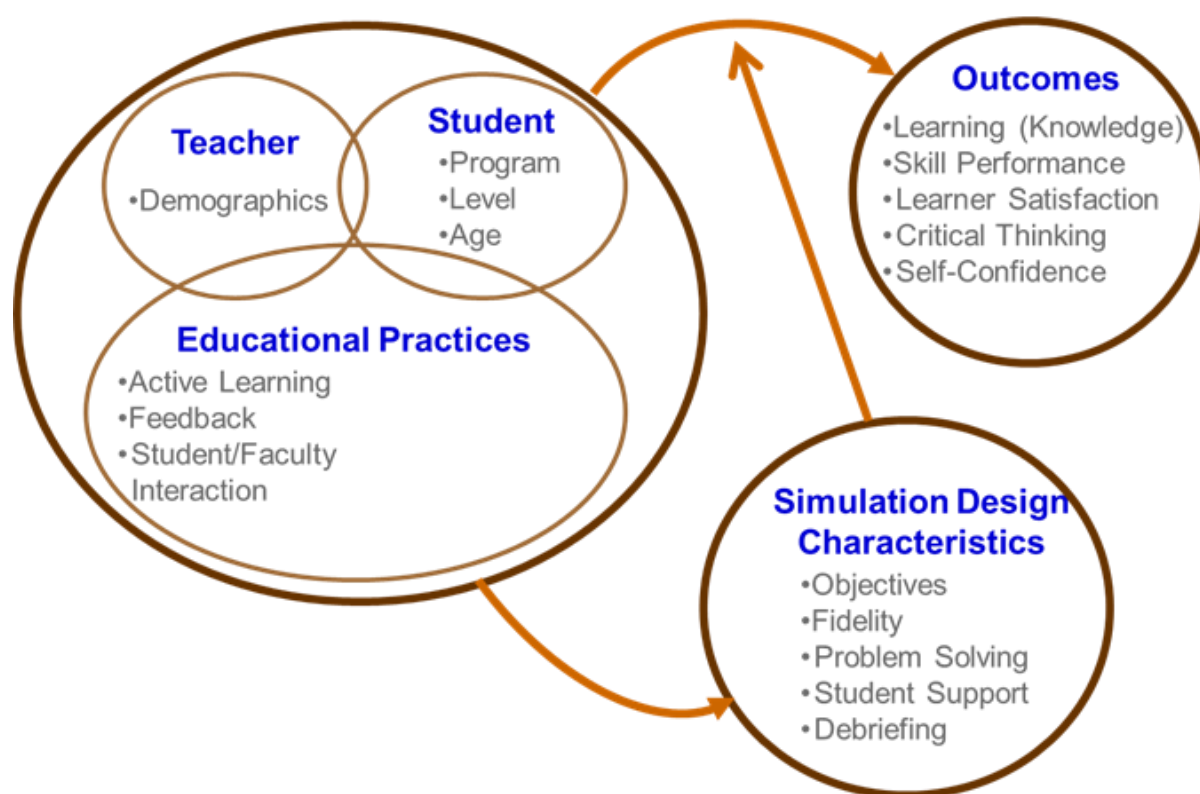


圖 1：情境模擬教學概念架構 (Jeffries, 2008)

第三章 主題內容

(一)、情境模擬教學教案

有別於傳統課程教學大綱或教案，情境模擬教學教案的內容須涵蓋：

- 1、教案大綱：教案名稱、教案目的、教學時間、環境設備、實驗設備、情境案例、先備知識、教學目標。
- 2、情境背景。

- 3、情境設計。
- 4、操作步驟及評分。
- 5、模擬情境腳本。

(二)、教案範例

- 1、Scenario File：CODE BLUE
- 2、Student Level：2rd Semester
- 3、Expected Simulation Run Time：20 minutes
- 4、Guided Reflection Time:：30 minutes
- 5、Specific Objectives：
 - (1) Assemble an organized code blue team response.
 - (2) Perform duties appropriate to the participants' role on the interdisciplinary team.
 - (3) Identify the heart rhythm (VF, VT, Asystole) on monitor.
 - (4) Identify appropriate treatment for the heart rhythm.
 - (5) Initiate proper BLS, as specific in Montgomery College CPR check list for adults.
 - (6) Be able to state defibrillator may be applied as many as three times (200 joules, 200/300 joules, and 360 joules or equivalent) for VF or pulseless VT.
 - (7) Exhibit competent role performance under stressful conditions.
 - (8) Demonstrate therapeutic communication in care of the patient and family.
 - (9) Document the assessment data, patient changes, and intervention completed.
- 6、Psychomotor Skills Required Prior to Simulation：
 - (1) Vital Signs
 - (2) Physical Assessment – cardiac
 - (3) BCLS
 - (4) Administer IV Push medication
 - (5) Communication
 - (6) Interdisciplinary Team Work
- 7、Cognitive Activities Required Prior to Simulation [i.e. independent reading (R), video review (V), computer simulations (CS), lecture (L)]
 - (1) Read Lewis, 8th Ed. Chapters 34, 36, and Appendix A “Cardiopulmonary Resuscitation and Basic Life Support for Health Care Providers”
 - (2) Complete Cardiac Rhythm self-study packet(Course Guide)
 - (3) Study CPR guidelines for adults
 - (4) Receive orientation to Code Team roles
- 8、Scenario：
 - Admission Date：
 - Today's Date：

Brief Description :

Name : DOB :

Gender : Age :

Weight : Height :

Religion : Major Support : Phone :

Allergies :

Immunizations :

Attending Physician/Team :

Past Medical History : CAD 、 HTN 、 CHF

Medications : Lasix 20mgPO QD 、 HCTZ 25mg QD

History of Present illness : Palpitations with anxiety since two days ago

Social History : 40 pack year smoker – none in 20 years, drinks alcohol occasionally. He is retired and lives with his wife in an apartment in a 65+ community.

Primary Medical Diagnosis : Palpitations with Anxiety reaction and shortness of breath.

Surgeries/Procedures & Dates : None

Scenario Overview :

An 80-year-old man with a history of coronary artery disease, hypertension, and CHF was admitted to an inpatient Intermediate Care Unit (Telemetry Unit) for heart palpitation and anxiety. On second hospital day, he had sudden onset of confusion, bradycardia, and hypotension. He lost consciousness, and a "code blue" was called.

9 、 Health problem : Decreased Cardiac Output r/t cardiac rhythm disturbance

10 、 Collaborative Problems : Respond appropriately and carry out roles of Code Blue Team

11 、 Debriefing / Guided Reflection Questions for this Simulation :

(1) How did you feel throughout the simulation experiences?

(2) Describe the objectives you were able to achieve?

(3) Which ones were you unable to achieve (if any)?

(4) Did you have the knowledge and skills to meet objectives?

(5) Were you satisfied with your ability to work through the simulation?

(6) To Observer: Could any person on the Code Team have handled any aspects of the simulation differently?

(7) If you were able to do this again, how could you have handled the situation differently?

(8) What did the group do well?

(9) What did the team feel was the primary nursing diagnosis and/or collaborative problems?

(10) What were the key assessments and interventions?

(11) Is there anything else you would like to discuss?

12 · Scenario Progression Outline :

Timing	Manikin Actions	Expected Interventions	May Use the Following Cues
First 5 minutes	<p>Manniken is not breathing; cardiac monitor shows V-Fib</p>	<ul style="list-style-type: none"> • Students answer code quickly, receive roles, initiate care • First student assesses for pulse, finds none, calls for help, initiates compressions • Second student brings cart, applies monitor pads, places patient on resuscitation board, clears the room of visitors and extra equipment & alternates compression • Third student begins bag-mask ventilations • Fourth student begins documentation, retrieves ordered medications, sets LifePak for defibrillation 	<p>Role member providing cue: Wife: my husband is not responding</p> <p>Tech: Do you need crash cart?</p> <p>Instructor (Resident)</p> <ul style="list-style-type: none"> • What is the Rhythm? (VF) • What is the treatment that is called for? • Prepare for Defibrillation • I'm clear, You're clear, we're all clear
Next 5-10 minutes	<ul style="list-style-type: none"> • Manniken not breathing. • Monitor shows V-fib • (First time scenario is run, shows Asystole after defib.) • (Second time scenario is run, shows sinus rhythm after 2nd defib.) • Supervisor defibrillates when called for • First student: gets set of vital signs • BP is low • IV nurse: Gives Vasopressin IV push as ordered • First RN checks VS and reports normal values. 	<ul style="list-style-type: none"> • Fifth student checks IV and administers Epinephrine when ordered (Vasopressin in second scenario) • Sixth student takes wife aside and consoles her • Seventh student brings chart from desk & reviews orders • Eighth student asks questions as patient's wife 	<p>Role member providing cue: Instructor:</p> <ul style="list-style-type: none"> • Cue: • Give Epinephrine 1 mg IV Push • Repeat Defibrillation • I'm clear, You're clear, we're all clear • (First time scenario is run: "STOP CPR – Patient has DNR order on chart") • (Second time: "Stop CPR – patient has

第四章 方法技巧

護理情境模擬教學有別於傳統教學，其創新作法如下：

- (一)、提供學生比指導更多的經驗學習機會。
- (二)、強化學生手作之學習經驗。
- (三)、師生互動反思，提升教學成效。
- (四)、以能力為基礎，結果為導向的課程目標。
- (五)、以實證基礎的課程設計與教學策略。
- (六)、將臨床實務轉譯為擬真課室教學。
- (七)、產學合作，增加學習科技技術的應用。

第五章 成果貢獻

(一)、質化成果：

- 1、學生經由知識及技術的重複練習，精進熟練度
- 2、學生與實務連結之情境學習可充分
- 3、學生在學習過程中融入情緒及情感成長
- 4、學生過程中學習如何去分析及判斷各類資料
- 5、學生發展臨床推論之核心能力。

(二)、量化成果：

針對 85 位學生進行上課前後於一般臨床護理技能、基礎生物醫學科學、批判性思考能力、溝通與合作及創新等核心能力自評，結果發現學生在各核心能力自評分數皆有顯著的進步，進步率皆達 10% 以上，其中又以批判性思考核心能力進步率最高，達 37.1%，顯示情境模擬教學之成效，並符合 Jeffries (2008)所提出情境模擬教學概念架構中應達到的目標，如下表 1 所示。

表 1 學生上課前後自評核心能力及進步率

項目	平均數		進步率(%)
	課前	課後	
一般臨床護理技能	6.98	8.21	17.6
基礎生物醫學科學	6.70	7.65	14.1
批判性思考能力	6.53	8.95	37.1
溝通與合作	8.23	9.21	11.9
創新能力	6.26	7.02	12.1

成果照片



模擬教學-教師示範



模擬教學-學生操作



模擬測驗(一)



模擬測驗(二)

第六章

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Nursing Simulation Scenario Design

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Abstract

The purpose of the Nursing Simulation Scenario Design was to the two years program students of Nursing Department about adult nursing practice. Based on the conceptual architecture of situational simulation teaching proposed by Jeffries (2008), we designed the scheming scheme of realistic situation and designed the lesson plan as the teaching material prepared before the internship of adult nursing students. The students' core competencies were promoted, Conduct self-evaluation of core competencies. 85 students in the curriculum before and after the core competency self-rating scores have significant progress, the progress rate of more than 10%, which in critical thinking competence has the highest rate of progress, up to 37.1%, showing the effectiveness of situational simulation teaching.

Keyword : Nursing Simulation