Engaging MS Students as Nurse Educators: Flipping the Online Classroom

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Learning Objectives

• Analyze the use of Hessler’s Intentional Instruction Model in the flipped classroom.

• Examine a teaching learning activity of case study development for MS students in an Advanced Pharmacology course.
Theoretical Framework

Hessler’s Intentional Instruction Model (2015) was used to flip the nursing classroom by:

- utilizing learning objectives
- partnering with students
- using off load content
- in-class activities, and evaluation
Utilizing Learning Objectives

• Planning for student learning flows from:
  • course activities to module objectives
  • module to course objectives
  • course objectives to program outcomes

• Guide students in learning specific content (Frederick, 1990)
Partnering With Students

- Foster buy-in and accept change in their educational experience (Hessler, 2017)
- Creates decision making for students (Hessler, 2017)
- Separate space for individual group discussion and work
Partnering With Students cont’d

• Provide directions to create the case study
• Used scaffolding method to introduce each component individually
• Facilitator as consultant for student questions
Off-Load Content

• Preparation of assignment before class
  • Gain deeper understanding and application of material
  • Active participants in problem solving and completing the assignment
  • When using groups it encourages communication between team members
In-Class Activities

- Should closely mirror what is done in practice
  - Case Studies
- Students present group activity
- Activities will help further develop communication skills between students
- Students answer questions and present solutions
Evaluation

• Off-load content
  • Group work
• In-class activities
  • Evaluate group effectiveness as facilitators and peers participation
  • Peers evaluate case study and facilitators’ role
• Encourages students to evaluate their own effectiveness
  • Reflective journal
Course Information

- NUR 50700: Advanced Pharmacological Nursing Practice
- Online
- Graduate Nursing Course
- 3 Course Credits
- 15 weeks
Course Objectives

Upon successful course completion, the student will be able to:

• Apply knowledge of pharmacotherapy to teaching methods and strategies for further development of the nurse educator role.

• Integrate knowledge of pharmacotherapeutics and pharmacogenomics to improve health outcomes and nursing education.
Course Objectives cont’d

• Examine cultural, age and ethnopharmacological issues across the lifespan.
• Consider ethical issues related to drug selection and use.
• Critically analyze current research in pharmacotherapy and its translation into evidence-based standards of care.
## Course Grade Breakdown

<table>
<thead>
<tr>
<th>Component</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Discussion Participation</td>
<td>20%</td>
</tr>
<tr>
<td>Individual Educational Project</td>
<td>25%</td>
</tr>
<tr>
<td>Group Case Study Project</td>
<td>55%</td>
</tr>
<tr>
<td>- Case Study</td>
<td>30%</td>
</tr>
<tr>
<td>- Peer “Student” Evaluation</td>
<td>10%</td>
</tr>
<tr>
<td>- Reflective Journal</td>
<td>15%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>
Group Case Study Overview

- Lesson Book
  - Provides Directions
  - Groups
  - Topics
  - Case Study
  - Discussions
  - Evaluations
  - Reflective Journal
  - Assignment Submission

**TABLE OF CONTENTS**

1. Overview
2. Groups
3. Topics
4. Case Study
5. Facilitated Discussion
6. Evaluation of Peers
7. Reflective Journal
8. Submission of Case Study

**3 Topics**

The group will select a body system of interest (one system per group) that will be the basis of the case study.

**Before selecting a topic, choose a leader in your group to be the designated individual to select a topic below. Only the group leader should be selecting a topic.**

Systems to choose from:
- Autonomic Nervous System
- Central Nervous System
- Cardiovascular and Renal Systems
- Respiratory System
Purpose of Case Study Assignment

• Student assumes Educator Role
  • Change in classroom dynamics
  • Flipped classroom (Hessler, 2015)
  • Active participant in learning process

• Directed learning
  • Lesson Book
  • Directions provided throughout modules
  • Faculty gives feedback throughout course
Purpose of Case Study Assignment cont’d

• Groups
  • Faculty randomly assign students to groups
• Group rules established
  • Collaboration
  • Develop crucial social/communication skills (Hessler, 2015; Ulrich & Glendon, 2005)
Components of Case Study Assignment

- Topic
  - Group decision (Ulrich & Glendon, 2005)
  - Choose body system of interest
  - Coordinated through LMS
  - Asynchronous team discussion area
  - Synchronous team discussion chat room
Components of Case Study Assignment cont’d

• Biographical Data
  • Age, sex, culture (genetics/genomics), socioeconomic status, educational level
• Relevant illness
  • Pathophysiology
• Context
  • Present environment, past history, available resources
  • Pharmacological interventions
• Content
  • Laboratory results
  • Education required
  • Discharge planning

(Ulrich & Glendon, 2005)
Components of Case Study Assignment cont’d

- Learning Objectives/Outcomes
- Blooms Taxonomy
- Target audience of MSN students
Components of Case Study Assignment cont’d

• Group Discussions
  • Assume role of group facilitator
  • Present case study scenario
  • Facilitates discussion
  • Provide students with directions for success
  • Assignments presented for 1 week

Your group will be assigned to a Discussion Forum for one week during Modules 6 or 7. Each group will have one week dedicated to their Case Study for the discussion with their peers. Your case study will be based on the topic your group choose in Module 2.

**Directions for Group Facilitated Discussion**

- When posting Case Study to assigned week in Mod 6 or 7 include:
  1. Title of Topic
  2. Learning objectives for the learning activity
  3. Case Study overview/scenario
  4. 4-5 pertinent questions that tie to the objectives and promote learning

**Group Facilitator’s Responsibilities:**

1. Act as facilitator, monitor the discussions, and pose pertinent questions to guide learning.
Components of Case Study Assignment cont’d

- Purpose of Discussion Assignment (In-class activity) (Hessler, 2015)
  - Focused questions
    - Tied to learning objectives
    - Incorporates Nursing Process
    - Guides learning
    - Encourages problem solving
    - Stimulates critical thinking
    - Evaluates evidence-based literature findings
    - Shares knowledge gained from experience
Components of Case Study Assignment cont’d

- Role of the Student Participant
  - Participate in discussion
  - Graded by group facilitators
- Student participants provide feedback for
  - Group facilitators
  - Case study
  - Flipped classroom

Directions for Participants

- As you enter into the discussions, please make notes of your evaluation of your peer facilitators. You will be asked to share this evaluation information through questions found in the Reflective Journal.
- You will be evaluated by the group facilitators for that week. Please see the following Case Study: Peer Evaluation Rubric for more information about how you will be evaluated for your participation.
  - Once the group facilitators complete the rubric, you will receive an e-mail to your external email address only. The message is sent from the course using Quickmail, but once the message is sent, it lives outside of Moodle rooms. In other words, quickmail messages cannot be received or replied to from within Moodle rooms.
Components of the Assignment cont’d

- Evaluation of Participant’s Work
- Completed by group facilitators
- Critiques participation
  - Group consensus
- “Rubric for Case Study Discussion”
  - Consistent assessment
- Exercise provides grading practice
- Participant’s receive results
Reflective Journal Prompts

• Evaluation of Flipped Classroom
  • Facilitator/Participant role
• Case Study
  • Learning objectives
• Group Work
  • Pros /cons
• Future learning needs
  • Strengths /weaknesses
Group Assignment Grading

- Submission of Case Study Assignment
  - Individually submitted
  - Graded by course faculty
- Group Assignment Rubric
- Group participation
- Reflective Journal

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Meets Criteria</th>
<th>Does Not Meet Criteria</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Body System and Illness Considerations</strong></td>
<td>Body system and pertinent illness considerations are appropriate to the unfolding case scenario.</td>
<td>Body system and pertinent illness considerations are not appropriate to the unfolding case scenario.</td>
</tr>
<tr>
<td><strong>Pharmacotherapeutics</strong></td>
<td>Relevant pharmacotherapeutic considerations are incorporated into the unfolding case scenario.</td>
<td>Relevant pharmacotherapeutic consideration are not incorporated into the unfolding case scenario.</td>
</tr>
<tr>
<td><strong>Cultural, Ethnic, and Lifespan Considerations</strong></td>
<td>Relevant cultural, ethnic, and lifespan considerations are incorporated into the scenario.</td>
<td>Relevant cultural, ethic, and lifespan considerations are not incorporated into the scenario.</td>
</tr>
<tr>
<td><strong>Genetic and Ethical Components</strong></td>
<td>Relevant genetic and ethical components are incorporated into the scenario.</td>
<td>Relevant genetic and ethical components are not incorporated into the scenario.</td>
</tr>
<tr>
<td><strong>Learning Objectives</strong></td>
<td>Learning Objectives are measurable and incorporate Bloom's Taxonomy.</td>
<td>Learning Objectives are not measurable and do not incorporate Bloom's Taxonomy.</td>
</tr>
<tr>
<td><strong>Unfolding Case Study</strong></td>
<td>Scenario is written in an organized format.</td>
<td>Scenario is not written in an organized format.</td>
</tr>
<tr>
<td><strong>Discussion Questions</strong></td>
<td>Pertinent questions, related to the learning objectives, guide the discussion.</td>
<td>Questions were not related to the learning objectives and did not guide the discussion.</td>
</tr>
<tr>
<td><strong>Evaluator Summary</strong></td>
<td>Student's participation is evaluated incorporating components of the Rubric for Case Study.</td>
<td>Student's participation is not evaluated incorporating components of the Rubric for Case Study.</td>
</tr>
</tbody>
</table>
### Feedback of Roles Within Flipped Classroom

<table>
<thead>
<tr>
<th>Nurse Educator Role</th>
<th>Participant Role</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Importance of staying current with pharmacology changes</td>
<td>• Helps students identify how to:</td>
</tr>
<tr>
<td>• Difficulty critiquing peers’ work</td>
<td>• Apply interventions</td>
</tr>
<tr>
<td>• Assuming role of educator/facilitator is complex</td>
<td>• Cite evidence based research</td>
</tr>
<tr>
<td></td>
<td>• Evaluate peer as facilitator</td>
</tr>
</tbody>
</table>
Feedback for Use of Case Study Within Flipped Classroom

<table>
<thead>
<tr>
<th>Case Study</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Exemplar teaching strategy</td>
</tr>
<tr>
<td>• Incorporates real life situations</td>
</tr>
<tr>
<td>• Effective framework for pharmacology content</td>
</tr>
<tr>
<td>• Bridges the gap between theory and practice (Ulrich &amp; Glendon, 2005)</td>
</tr>
</tbody>
</table>
### Feedback for Flipped Classroom

<table>
<thead>
<tr>
<th>Group Facilitators</th>
<th>Group Work</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Confirmed all points were clear</td>
<td>• Challenging in online environment</td>
</tr>
<tr>
<td>• Challenged students to search for answers</td>
<td>• Delayed participation and feedback was problem</td>
</tr>
<tr>
<td>• Lack of follow-up questions led to halt in the flow of learning</td>
<td>• Difficult to organize group work equally</td>
</tr>
</tbody>
</table>
Future Improvements of Flipped Classroom

- Implement a team contract in the beginning so that work is shared with more structure.
- Avoid appointing one facilitator. All students in the group should act as a facilitator in their own discussions so all the work did not fall on one person.
References


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