Impact of Interprofessional Education on Nursing Student Outcomes in the Online Environment

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Disclosures

• **Absence of Conflict of Interest Statement**
  The research team have no bias or conflict of interest.

• **Off-label product usage**
  I attest that I will not discuss off-label usage of products.

• **Commercial support**
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Objectives

• Review the purpose of this study
• Discuss the background of interprofessional teams
• Discuss the opportunity for interprofessional teaching teams
• Discuss the theoretical framework of the study
• Review the findings of this study on student success
Purpose of this Study

The purpose of this nursing research study was to investigate the impact of interprofessional collaboration on baccalaureate nursing student outcomes in the online environment.
Introduction

Opportunity
• Students interact interprofessionally
• Integration of expertise
• Best practice

Challenges
• Coordination of efforts
• Limitations to full integration
• Duplicated efforts
Background

Opportunities and Benefits
Regulatory & Accreditation Considerations

American Association of Colleges of Nursing
- Baccalaureate Essentials
- Master’s Essentials
- Doctoral Essentials

National Council of State Boards of Nursing
- Individual states adopting regulations to support IPE
Theoretical Framework

• Social constructivism serves as the underlying framework

• Vygotsky (1978) socio-cultural learning theory
  – Zone of Proximal Development (ZPD)
  – Co-faculty role facilitates accelerated learning across ZPD

• IPE correlates with constructivism theory
  – Student learns through dynamic process with multiple facilitators
  – Allows learners to construct new ideas based upon past and current levels of knowledge
Methodology

• Approvals
  – IRB
  – Chamberlain College of Nursing Undergraduate Curriculum Committee

• Interprofessional team approach
  – Physicians, chiropractic physicians, pharmacists and nursing faculty

• Faculty assignments
  – Nursing faculty and Co-faculty
Research Design

A quantitative descriptive and experimental correlational design formed the basis for this study. This research design examined relationships among variables, described the variables and determined a cause and effect relationship between variables.
Participants

The convenience sample included 838 nursing students, of which 799 completed both online nursing science courses.
Data Analysis

Descriptive and correlational analyses were conducted on the data collected. The t-test and Chi square test were used to assess the correlation between the student evaluations prior to and following implementation of interprofessional collaboration. Levene’s tests for equality of variances were conducted to assess the internal consistency of the measurement scales and all data.
Data Analysis Summary

Results indicated that the overall student satisfaction rating with the pathophysiology online course was significant at the $p < 0.05$ following the implementation of the interprofessional teaching methodology.
Table 1
Quantitative Data Analysis

Student evaluation questions used for this analysis are listed below:

<table>
<thead>
<tr>
<th>Questions</th>
<th>Scale</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. What is your overall satisfaction with this course? – Course overall satisfaction (OS)</td>
<td>1 = Not at all satisfied</td>
</tr>
<tr>
<td>2 = Dissatisfied</td>
<td>3 = Satisfied</td>
</tr>
<tr>
<td>4 = Extremely Satisfied</td>
<td></td>
</tr>
<tr>
<td>1. What is your overall satisfaction with this instructor? – Instructor overall satisfaction (OS)</td>
<td></td>
</tr>
<tr>
<td>1. What is your overall satisfaction with your experience with the online classroom for this course? – Environment overall satisfaction (OS)</td>
<td></td>
</tr>
</tbody>
</table>
Table 2
Quantitative Data Analysis Report for Student Responses Categorized into Pre and Post Experimental Groups

<table>
<thead>
<tr>
<th>Groups</th>
<th>Mean of CourseOS</th>
<th>Mean of InstructorOS</th>
<th>Mean of EnvironmentOS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre</td>
<td>2.77</td>
<td>3.19</td>
<td>2.65</td>
</tr>
<tr>
<td>Post</td>
<td>3.23</td>
<td>3.35</td>
<td>3.16</td>
</tr>
</tbody>
</table>
Data Analysis Summary (cont’d)

Student enrollment prior to and after implementation of collaborative teaching was calculated. Prior to implementation of collaborative teaching, the total enrollment in pathophysiology was 194. After the institution of collaborative teaching, the total student enrollment in pathophysiology was 605.
Implications for Nursing Practice

• IPE shifts education to an interprofessional **collaborative** teaching model

• Generates knowledge from interaction with **variety of educators** across variety of **complementing disciplines**
  – Common goal of improved student outcomes

• Reciprocal mutual relationships which **fosters accountability** within respective professions

• IPE assist in **removing boundaries** within healthcare
  – Avoids mono-disciplinary view
Implications for Nursing Practice, (cont’d)

• **Shared vision** between disciplines

• Within workforce, nurses *do not* function independently

• Nursing curriculum serves as the socialization into values and characteristics of chosen profession (nursing)

• Graduates better prepared to support colleagues across multiple disciplines
References


References


Questions?

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