THE IMPACT OF
HUMANITIES-BASED
TEACHING AND
LEARNING
STRATEGIES ON
CRITICAL THINKING
AND CLINICAL
REASONING
DEVELOPMENT
AMONG BSN
STUDENTS

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Introduction

- Overview of Study
- Humanities, Critical Thinking & Critical Reasoning
- Implementation of Teaching & Learning Strategies
  - Poem, Paintings, & Book
- Study Results and Implications
Purpose

- The **purpose of this quantitative study** was to examine the use of humanities-based teaching/learning strategies, on critical thinking and clinical reasoning skills using a pretest and posttest quasi-experimental design.
Method: Quasi-experimental

– Sample
  – Multi-site convenience nonprobability sample of 18 students enrolled in a maternal/newborn undergraduate nursing course

– Research Design
  – Quasi-experimental one group, non-randomized pretest-posttest design
Method (cont’d)

– Data Collection/Instrumentation
  – Critical Thinking Skills Test (CCTST) & Self-Assessment Clinical Reflection and Reasoning (SACRR) Tool

– Data Analysis
  – CCTST- two-tailed, paired t-test
  – SACCR- Wilcoxon Signed Rank Test
Humanities

- Art, poetry, music, film, dance, and short stories (AACN, 2008).
Critical Thinking vs Clinical Reasoning

- Critical thinking focuses on the cognitive process individuals’ engage in en route to decision-making, whereas clinical reasoning also includes metacognition or reflection (Kuiper & Pesut, 2004; Simmons, 2010).
Implementation of Teaching/Learning Strategies

Educational Interventions

- Poem
- Art
- Short story
Notes from the Delivery Room

by Lune Fawcett

Strapped down, 
victim in an old comic book, 
I have been here before, 
this place where pain wrinkles 
of the walls 
like too bright light.
Bear down a doctor says, 
foreman to sweating laborer, 
but this work, this forcing 
of one life from another 
is something that I signed for 
at a moment when I would have signed anything.

Babies should grow in fields; 
common as beets or turnips 
they should be picked and held 
root end up, soil spilling 
from between their toes— 
and how much easier it would be later, 
returning them to earth.

Bear up ... bear down ... the audience 
grows restive, and I'm a new magician 
who can't produce the rabbit 
from my swollen hat.
She's crowning, someone says, 
but there is no one royal here, 
just me, quite barefoot, 
greeting my barefoot child.
Poem

Read the poem to yourselves. Paraphrase it and answer the following questions:

– What is the mood of this poem? How can you describe the tone?

– What does this poem make you think about?

– If you had the opportunity to ask the speaker of the poem three questions, what would you ask? Explain, how your questions will assist you in caring for this patient.
Paintings

Madonna Grecca by Bellini

Postpartum Depression by Deniz Ayaz

Tomorrow's Child by Maxine Noel
Paintings

• What is your interpretation of the painting?
• How would you describe this painting to a person who could not see it?
• What title would you give this painting? What made you decide on that title?
• Pretend you are inside this painting. What does it feel like?
• What questions would you ask the subject(s) in the painting that will help you provide holistic nursing care?
Waiting with Gabriel

a story of cherishing a baby’s brief life
Guided Questions

Chapter 1 The News

At a routine OB checkup, Amy received the news that her baby has hypoplastic left heart syndrome (HLHS). As nurses, there will be many times when bad news must be delivered to the patient and family. Think about the scope of practice of the ultrasound technician and the physician.

- Discuss how the responses from the US technician and physician aligned with their perspective roles.
- In your opinion, were their responses therapeutic? How would you have responded to Amy’s questions about the findings of the ultrasound and if her baby was going to live?
- What nursing diagnoses would you identify in this chapter?
- In this chapter, Amy provides insight about what a parent may think about when given such devastating news: “How would our baby die? Would he gasp for breath? Would he die in his sleep? Would he suffer?” Given this valuable information, how does this influence your discussion about death with the patient and family?
Results: Critical Thinking Skills

- A two-tailed, paired samples $t$-test was not significantly different ($p > .05$) indicating that the humanities-based teaching learning strategies did not improve the development of critical thinking skills.
Results: Critical Thinking Skills

Collapsing the Data:
College A (N = 9)

![Bar chart showing pretest and posttest means for College A in various critical thinking skills categories.]
Results: Clinical Reasoning Skills

- A Wilcoxon Signed Ranks test was statistically significant \((p < .05)\) indicating that the humanities-based teaching/learning strategies fostered the growth of clinical reasoning.
### Results: Clinical Reasoning Skills

*Self-Assessment of Clinical Reflection and Reasoning (SACCR)*

<table>
<thead>
<tr>
<th>SACRR Items</th>
<th>Z score</th>
<th>P value</th>
</tr>
</thead>
<tbody>
<tr>
<td>2. I ask myself and others questions as a way of learning</td>
<td>-2.646</td>
<td>.008*</td>
</tr>
<tr>
<td>3. I don’t make judgments until I have sufficient data</td>
<td>-2.310</td>
<td>.021*</td>
</tr>
<tr>
<td>6. I think in terms of comparing and contrasting information about a client’s problems and proposed solutions to them</td>
<td>-2.111</td>
<td>.035*</td>
</tr>
<tr>
<td>10. I try to understand clinical problems by using a variety of frames of reference</td>
<td>-2.121</td>
<td>.034*</td>
</tr>
<tr>
<td>12. When planning intervention strategies, I ask “What if” for a variety of options</td>
<td>-2.309</td>
<td>.021*</td>
</tr>
<tr>
<td>25. I make decisions about practice based on my experience</td>
<td>-2.111</td>
<td>.035*</td>
</tr>
<tr>
<td>Total</td>
<td>-2.048</td>
<td>.041*</td>
</tr>
</tbody>
</table>
Anecdotal Feedback

A student wrote the following email regarding the book assignment:

– I just finished the book and boy did I cry Niagara Falls. I originally questioned why you would have us read such a sad book, but now I realize it. It was a beautiful presentation of one of the saddest moments anyone could live through. This book has opened my eyes to the unfortunate and unfathomable experience that I might come across as I wish to pursue a career in this field. Thank you for having us read this book. Even if I couldn't stop crying and asking, "why"?
Anecdotal Feedback (con’t)

- One student expressed that the emotional and physical challenges faced by the author; when she was told that her baby would not survive long after birth, brought back feelings of his wife’s sickness during pregnancy.

- He discussed how the staff on the labor and delivery floor readily assisted his wife in her emotional turmoil, but did not assess or address his psychosocial and spiritual needs.
Conclusions

The results of the current study indicate that humanities-based teaching/learning strategies significantly impact BSN students’ clinical reasoning skills.

College A did show some growth in the critical thinking scores. Although the results did not reach the level of statistical significance, the mean overall composite scores and mean scores on several subscales indicated trends in the predicted direction of the hypothesis.
Thank you for your help and support.

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