The Impact of Collaborative Testing on Learning and Program Outcomes

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Purpose
- To identify the impact collaborative testing had on retaining nursing students in an educational program.
- To determine if nursing students retained due to collaborative testing points were successful on the National Council Licensure Exam for Registered Nurses (NCLEX-RN) on the first attempt.

Research Questions
- Do students who passed an individual nursing course due to collaborative testing points have the same or similar graduation rate as nursing students who passed an individual nursing course without collaborative testing points?
- Do students who passed an individual nursing course due to collaborative testing points have the same or similar first time NCLEX-RN pass rate as nursing students who passed all courses without collaborative testing points?

Sample
- Retrospective analysis of Associate Degree nursing students’ grades in collaborative testing courses, NCLEX-RN data and graduation status at an urban Southeastern private college

Methods
- Retrospective Analysis
- Group collaborative testing was offered following independent test completion.
- Each collaborative testing group took the same test in half the designated time given for individual tests and had to agree on the final answer selected for the collaborative test.
- Groups who scored an “A” on the collaborative test had two points added to their individual test grade.
- Groups who scored a “B” on the collaborative test had one point added to their individual test grade.
- Groups who scored a “C” or less on the collaborative test received no additional points.

Analysis
- Chi-Square analysis
- Final grades were calculated with and without the addition of collaborative testing points.
- Students who were successful in a nursing course due to collaborative testing points were tracked to determine if the student successfully graduated from the program.
- Status of success on the NCLEX-RN exam on the first attempt was compared to those who were successful in all courses without the additional points.

Results

Table 1: Student Program Outcomes

<table>
<thead>
<tr>
<th></th>
<th>On time Graduation Rate</th>
<th>NCLEX-RN 1st time Pass Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Year 2010 n=119</td>
<td>81%</td>
<td>97%</td>
</tr>
<tr>
<td>Year 2011 n=114</td>
<td>85%</td>
<td>97%</td>
</tr>
<tr>
<td>Students retained due to collaborative testing n=16</td>
<td>81%</td>
<td>93%</td>
</tr>
</tbody>
</table>

Table 2: Comparison of NCLEX Outcomes

<table>
<thead>
<tr>
<th>Passed a course Due to Collaborative Testing</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Passed NCLEX on 1st attempt</td>
<td>13</td>
<td>210</td>
</tr>
<tr>
<td>Chi Square = 0.603 (p value &gt; 0.10)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 3: Comparison of Graduation Rate

<table>
<thead>
<tr>
<th>Passed a course Due to Collaborative Testing</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>On time Graduation</td>
<td>13</td>
<td>215</td>
</tr>
<tr>
<td>Chi Square = 0.277 (p value &gt; 0.50)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Conclusions
- There was not a statistically significant difference between graduation rates and NCLEX pass rates of students who passed a course due to collaborative testing points and other students who did not pass the course due to collaborative testing.
- This study found collaborative testing to be an effective learning strategy to promote nursing student learning needs and did not adversely impact the nursing program outcomes.

Limitations
- This strategy was implemented as a teaching strategy without the original intent to determine the direct impact of collaborative testing on student learning, group decision making, or program outcomes.
- The retrospective analysis design was limited to a two year time frame.
- Only one program was examined and the study design lacks an experimental control group.
- Only 16 students were identified as passing a course due to collaborative testing points.

Note: The text includes tables and data that are not fully transcribed in the natural text format.