Collaborative Mentoring: Helping Students at Risk

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Thanks

♦ To the faculty who worked with me on this project
  ♦ Lillia Loriz, PhD, GNP,BC
  ♦ Cynthia Cummings, EdD, RN
  ♦ William D. Ahrens, MSN, RN

♦ To all of the students who participated
STUDENT ENROLLMENT

- Undergraduate 13,693
- Graduate 1,726
- Post-baccalaureate and non degree 938

TOTAL ENROLLEMENT - 16,357
School of Nursing

➢ Bachelor of Science in Nursing
  • Regular Prelicensure – admit 90/year
  • Accelerated Prelicensure – admit 27/year
  • RN to BSN – admit ≈ 60/year

➢ Master of Science in Nursing
  • Clinical Nurse Specialist – admissions vary
  • Nurse Anesthesia – admit 25/year
  • Primary Care Nurse Practitioner – admit ≈ 25/year

➢ Doctor of Nursing Practice – admit ≈ 10/year
SON Philosophy

♦ Collaborative partnerships
  ● Persons and nurses
  ● Nurses and health care team
  ● Nurses and agencies
  ● Students and faculty
What is Mentoring?

Mentoring is a partnership based on respect and focused on promoting professional and personal development.

Mentoring may involve:

- Advising
- Guiding
- Counseling
- Role modeling
Evidence of Mentoring Program Influence on Student Outcomes

- Facilitate professional integration
- Promote skill acquisition
- Improve time management
- Enhance real world expectations
- Increase student responsibility for learning
- Development of professional values
- Enhanced self-esteem
- Decreased anxiety and stress
Attrition

♦ Attrition may be one of two types
  ● Stop-out: students admitted to the nursing program in one cohort who graduate with another cohort
    ➢ Personal reasons
    ➢ Academic reasons
  ● Drop-out: students admitted to the nursing program who do not graduate with a nursing degree
    ➢ Personal reasons
    ➢ Academic reasons
Purpose

♦ Assist students to identify and explore specific university and community resources based on the assessment data and student preferences

♦ Identify students at-risk for academic or NCLEX-RN failure

♦ Provide students an opportunity for a mentoring relationship
So … How does it work?

- The Mentoring Program was designed to accommodate learners with all kinds of learning styles, preferences, and needs.
- Students may self-select to enter the Mentoring Program at any time during their matriculation through the nursing program.
- They are referred directly to the Mentoring Program at any point they are identified as at-risk of failure.
UNF SON Mentors

♦ Faculty mentors
  ● Full-time SON faculty members

♦ Peer mentors
  ● Full-time SON nursing students who are in a different cohort from the student seeking a mentor

♦ Community mentors
  ● Registered nurses not officially affiliated with the SON
    ➢ UNF SON alumni
    ➢ Friends of UNF SON
Processes … Self-referral

♦ Students are informed of the Mentoring Program on admission to the program
  ● Students choose to participate or not
  ● Students choose the type of mentor
♦ Students may request a mentor at any time in the program
Processes … Faculty-referral

Faculty refer students to the Mentoring Team if:

- Identified student stress
- Grade < 80 at mid-term
- Unsatisfactory or Needs Improvement on clinical evaluation at mid-term

A member of the Mentoring team counsels the student and encourages a mentor relationship

- Student may choose to have or not to have a mentor
How the UNF Mentoring Relationship Works

- That is between the Mentor and the Mentee
  - How they meet
  - How often they meet
  - Where they meet

- Every Mentor-Mentee relationship is different
The Study
Purpose

◊ The purpose of the study was to examine the impact of a collaborative mentoring program on the academic progression of students identified as at-risk for academic or NCLEX-RN failure.

◊ Longitudinal survey design

This study was reviewed by the UNF IRB and deemed Exempt
Study Enrollment

♦ At new student orientations 2011-2014)
  ● Introduction to mentoring program
  ● Introduction to the study
  ● Students had the option to
    ➢ Enroll in the Mentoring Program but not the study
    ➢ Enroll in the study but not the Mentoring Program
    ➢ Enroll in both the study and the Mentoring Program
    ➢ Enroll in neither the study nor the Mentoring Program
Data Collection

Those choosing to participate in the study

- Completed initial database
  - Demographic characteristics
  - Learning style
  - Nursing professional values
  - Orientation to nursing
  - Attitudes towards nursing

- Initially on paper – then online
Data Collection

♦ On enrollment, data were gathered from the SON admission database
  ● Nursing pre-requisite GPA
  ● TEAS scores
Outcome Data

♦ Student
  ● Nursing GPA
  ● Exit HESI score
  ● CAT HESI score
  ● NCLEX-RN

♦ SON
  ● Stop-outs
  ● Drop-outs
# Study Participants

<table>
<thead>
<tr>
<th>Students</th>
<th># Admitted</th>
<th>Enrolled in Study</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>#</td>
<td>%</td>
</tr>
<tr>
<td>Regular Prelicensure</td>
<td>360</td>
<td>294</td>
<td>81.67%*</td>
</tr>
<tr>
<td>Accelerated Prelicensure</td>
<td>81</td>
<td>80</td>
<td>98.77%</td>
</tr>
<tr>
<td>TOTAL</td>
<td>441</td>
<td>374</td>
<td>84.81%*</td>
</tr>
</tbody>
</table>

* In one admission cycle of RPLs there were only 7 students who enrolled in the study out of 45 who were admitted in that cohort. After taking out that cohort
  - RPL enrollment was 91.11%
  - Overall enrollment was 92.67%
## Requested Mentor

<table>
<thead>
<tr>
<th>Students</th>
<th>Enrolled in Study</th>
<th>Requested Mentor</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>RPL</td>
<td>294</td>
<td>73</td>
<td>24.83</td>
</tr>
<tr>
<td>APL</td>
<td>80</td>
<td>18</td>
<td>22.50</td>
</tr>
<tr>
<td>TOTAL</td>
<td>374</td>
<td>91</td>
<td>24.33</td>
</tr>
</tbody>
</table>
# Sample Description: Entry

<table>
<thead>
<tr>
<th></th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>Std. Dev.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Age</strong></td>
<td>19</td>
<td>64</td>
<td>26.03</td>
<td>7.52</td>
</tr>
<tr>
<td><strong>Pre-req. GPA</strong></td>
<td>3.1</td>
<td>4.0</td>
<td>3.79</td>
<td>0.20</td>
</tr>
<tr>
<td><strong>Hours/week worked</strong></td>
<td>0</td>
<td>40</td>
<td>9.5</td>
<td>10.70</td>
</tr>
<tr>
<td><strong>Perceived support</strong></td>
<td>1</td>
<td>4</td>
<td>1.84</td>
<td>0.85</td>
</tr>
<tr>
<td><strong>TEAS Scores</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Math</td>
<td>50.0</td>
<td>100.0</td>
<td>90.36</td>
<td>7.52</td>
</tr>
<tr>
<td>Reading</td>
<td>64.3</td>
<td>100.0</td>
<td>87.94</td>
<td>6.51</td>
</tr>
<tr>
<td>English</td>
<td>53.3</td>
<td>100.0</td>
<td>81.81</td>
<td>9.13</td>
</tr>
<tr>
<td>Science</td>
<td>41.7</td>
<td>100.0</td>
<td>79.21</td>
<td>9.26</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>68.7</td>
<td>98.0</td>
<td>84.61</td>
<td>5.50</td>
</tr>
</tbody>
</table>
## Sample Description

<table>
<thead>
<tr>
<th>Category</th>
<th>N</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Gender</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>314</td>
<td>83.96</td>
</tr>
<tr>
<td>Male</td>
<td>60</td>
<td>16.04</td>
</tr>
<tr>
<td><strong>Race/Ethnicity</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>White or Caucasian</td>
<td>289</td>
<td>77.27</td>
</tr>
<tr>
<td>Hispanic or Latino</td>
<td>26</td>
<td>6.95</td>
</tr>
<tr>
<td>Black or African American</td>
<td>20</td>
<td>5.35</td>
</tr>
<tr>
<td>Asian</td>
<td>20</td>
<td>5.35</td>
</tr>
<tr>
<td>American Indian or Native Alaskan</td>
<td>3</td>
<td>0.80</td>
</tr>
<tr>
<td>Native Hawaiian or other Pacific Islander</td>
<td>3</td>
<td>0.80</td>
</tr>
<tr>
<td>Other (including more than 1 race selected)</td>
<td>13</td>
<td>3.48</td>
</tr>
<tr>
<td><strong>Primary Language – English</strong></td>
<td>346</td>
<td>92.5</td>
</tr>
<tr>
<td>Living Situation</td>
<td>N</td>
<td>%</td>
</tr>
<tr>
<td>----------------------------------------------</td>
<td>-----</td>
<td>------</td>
</tr>
<tr>
<td>Own home or apartment</td>
<td>244</td>
<td>65.24</td>
</tr>
<tr>
<td>Parents’ or other relative’s home</td>
<td>98</td>
<td>26.20</td>
</tr>
<tr>
<td>Dormitory</td>
<td>19</td>
<td>5.08</td>
</tr>
<tr>
<td>Friend’s home or apartment</td>
<td>13</td>
<td>3.48</td>
</tr>
<tr>
<td>Primary Support Persons</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Parent</td>
<td>163</td>
<td>43.58</td>
</tr>
<tr>
<td>Spouse</td>
<td>143</td>
<td>38.24</td>
</tr>
<tr>
<td>Relative</td>
<td>52</td>
<td>13.90</td>
</tr>
<tr>
<td>Friend</td>
<td>16</td>
<td>4.28</td>
</tr>
</tbody>
</table>
Professional Characteristics

♦ Index of Learning Styles (ILS)
  • 44-item dichotomous scale measuring the way a person gathers and processes information; $\alpha = .72$ (Felder & Spurlin, 2005)
    ➢ Balanced on the active-reflective and sequential-global
    ➢ Tend toward intuitive and verbal learning

♦ Nursing Professional Values Scale (NPVS-R)
  • 26-item Likert scale measuring values in the ANA Code for Nursing; $\alpha = .92$ (Weis & Schank, 2009)
    ➢ Moderate
Professional Characteristics

♦ Nursing Image Questionnaire (NIQ)
  ● 30-item Likert scale measuring attitude toward nursing; $\alpha = .8$ (Toth, Dobratz, & Boni, 1998)
    ➢ Moderate

♦ Nursing Orientation Tool (NOT)
  ● 17-item Likert scale measuring a student’s definition of her/his future profession; $\alpha = .75$ (Vanhonen & Janhonen, 2000)
    ➢ Moderate on nursing is a means for achieving personal goals dimension
    ➢ Moderately low on the caring and expertise dimensions
## Student Outcomes

<table>
<thead>
<tr>
<th></th>
<th>Minimum</th>
<th>Maximum</th>
<th>Average</th>
<th>Std. Dev.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nursing GPA</td>
<td>1.76</td>
<td>4.0</td>
<td>3.45</td>
<td>0.32</td>
</tr>
<tr>
<td>Exit HESI*</td>
<td>460</td>
<td>1185</td>
<td>878.18</td>
<td>128.43</td>
</tr>
<tr>
<td>CAT HESI</td>
<td>10.03</td>
<td>19.57</td>
<td>16.10</td>
<td>1.83</td>
</tr>
<tr>
<td><strong>Acceptable (16.61-30)</strong></td>
<td></td>
<td></td>
<td>127</td>
<td>(39.32%)</td>
</tr>
<tr>
<td><strong>Minimally Acceptable (11.51-16.60)</strong></td>
<td></td>
<td></td>
<td>187</td>
<td>(57.89%)</td>
</tr>
<tr>
<td><strong>Needs Further Preparation (&lt; 11.51)</strong></td>
<td></td>
<td></td>
<td>9</td>
<td>(2.79%)</td>
</tr>
</tbody>
</table>

*School cutoff for remediation is 850
## SON Outcomes: Attrition

<table>
<thead>
<tr>
<th>Stop-Out</th>
<th>N</th>
<th>%</th>
<th>Drop-out</th>
<th>N</th>
<th>%</th>
<th>Attrition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grades*</td>
<td>19</td>
<td>48.72%</td>
<td>Grades</td>
<td>5</td>
<td>12.82%</td>
<td>6.95%</td>
</tr>
<tr>
<td>Male*</td>
<td>9</td>
<td>23.07%</td>
<td>Male</td>
<td>2</td>
<td>5.13%</td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>10</td>
<td>25.65%</td>
<td>Female</td>
<td>3</td>
<td>7.69%</td>
<td></td>
</tr>
<tr>
<td>Personal</td>
<td>4</td>
<td>10.26%</td>
<td>Personal</td>
<td>11</td>
<td>28.21%</td>
<td>4.01%</td>
</tr>
<tr>
<td>Male</td>
<td>0</td>
<td>0.00%</td>
<td>Male</td>
<td>4</td>
<td>10.26%</td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>4</td>
<td>10.26%</td>
<td>Female</td>
<td>7</td>
<td>17.95%</td>
<td></td>
</tr>
<tr>
<td>TOTAL</td>
<td>23</td>
<td>58.97%</td>
<td>TOTAL</td>
<td>16</td>
<td>41.03%</td>
<td>10.96%</td>
</tr>
</tbody>
</table>

* AI = 4 males

2 students dropped out after the first week
4 students dropped out after the first semester
# SON Outcomes: NCLEX

<table>
<thead>
<tr>
<th>Students Taking NCLEX-RN</th>
<th>NCLEX-RN First-time Pass</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>358</td>
<td>332</td>
<td>92.73</td>
</tr>
</tbody>
</table>
## Outcomes and Mentoring

<table>
<thead>
<tr>
<th>Outcome</th>
<th>N</th>
<th>% Total</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stop-Out</td>
<td>23</td>
<td>6.15%</td>
<td></td>
</tr>
<tr>
<td>Mentored</td>
<td>10</td>
<td>2.68%</td>
<td>% Stop-Out 43.48</td>
</tr>
<tr>
<td>Drop-Out</td>
<td>18</td>
<td>4.28%</td>
<td></td>
</tr>
<tr>
<td>Mentored</td>
<td>0</td>
<td>0.00%</td>
<td></td>
</tr>
<tr>
<td>Graduated</td>
<td>358</td>
<td>95.72%</td>
<td>% Graduated 20.95</td>
</tr>
<tr>
<td>Mentored</td>
<td>75</td>
<td></td>
<td>% Graduated 20.95</td>
</tr>
<tr>
<td>NCLEX Fail</td>
<td>26</td>
<td></td>
<td>% Graduated 7.26</td>
</tr>
<tr>
<td>Mentored</td>
<td>5</td>
<td></td>
<td>% Failed 19.23</td>
</tr>
</tbody>
</table>
Findings

♦ Low use of the mentoring program
  ● < 25%

♦ Students who dropped out or left for personal reasons (N=15)
  ● 3 (20%) had a mentor

♦ Students who dropped out or left for academic failure (N=24)
  ● 12 (50%) had a mentor
Findings

♦ Relationship between mentoring and attrition
  ● NS

♦ Relationship between mentoring and NCLEX-RN pass rates
  ● NS

♦ Correlates of attrition
  ● NS except for TEAS science score

♦ Correlates of NCLEX-RN pass
  ● NS except for TEAS science score
Conclusions: Mentoring

♦ Students and mentors both believed the mentor relationship was mutually beneficial.

♦ TEAS science scores as a possible predictor needs to be further investigated.

♦ >40% of those with grade-related stop-out or drop-out had a mentor.
  ♦ It may be that these students were able to self-identify themselves as at risk early-on.
Other Conclusions

♦ Overall attrition remains low (11%)
  ● 61.54% due to grades
  ● 38.46% due to personal issues

♦ NCLEX-RN pass rates remain high (93%)

♦ Potential gender issues
  ● 16.04% of overall student body is male
  ● 38.46% of the attrition is male
Questions?