

# Dedicated Education Units and Traditional Units: A Comparison of Learning Outcomes

Deborah A. Raines, PhD, EdS, RN, ANEF, FAAN

Buffalo, NY

[deborah.raines.phd@gmail.com](mailto:deborah.raines.phd@gmail.com)

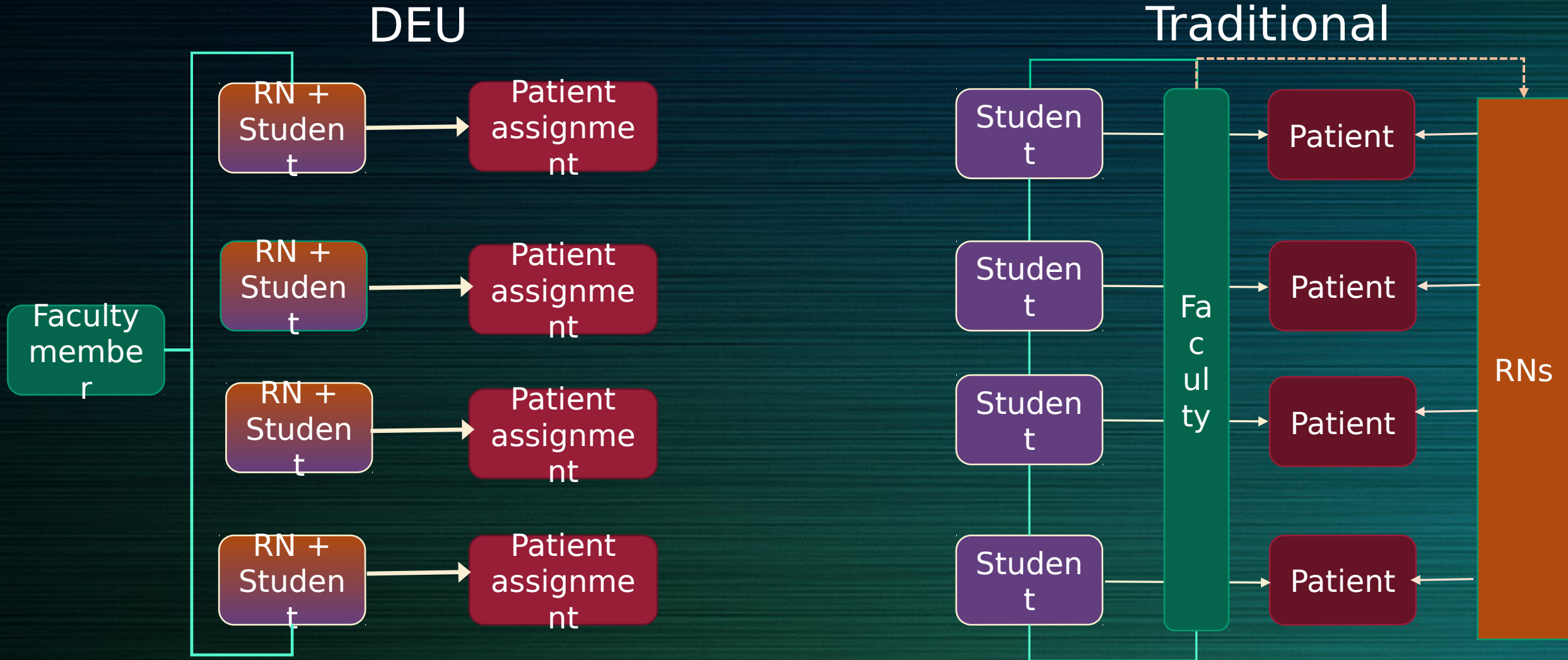
No conflicts of interest to disclose  
This study was approved by the IRB

# The **BIG** Questions

- What is the focus of clinical learning...  
knowledge, skills, attitude?
- What is a quality clinical learning experience for undergraduate nursing students?
- How is learning measured?
- How do we *better* prepare nurses to deliver high-quality care?
- Does the DEU increase student learning?



# Definitions



## Nurse as teacher

- Caring for a patient while caring for an assignment of patients
- What is the goal for the day
- Hand-on learning, engaged and active



*“Not the same old way with a shift in responsibility but something new and different”*

## Study Purpose:

- to evaluate student confidence in performing nursing role responsibilities
  - to measure student self-perceived learning of specific nursing skills
- ...during a clinical learning experience.

- Quasi-experimental study using a pre-test/post-test survey design.
- Students randomly assigned to a clinical setting.
- Students completed a survey to measure level of role and skill performance before and after the clinical rotation.
- A total of 96 students, 48 in a DEU and 48 in a traditional unit, completed both surveys.
- The survey - Casey-Fink Nursing Student Transition Survey and 15 Likert scale items focused on self-perceived comfort in performing specific nursing skills and procedures
- Two items collected data on the participant's prior work experience in health care and their desire to work in this setting after graduation.

# Skill Performance Items

Basic adult skills	<ol style="list-style-type: none"><li>1. AM care (beds, baths, dressing)</li><li>2. Ambulating/transferring</li><li>3. Oral medication administration/adult</li><li>4. Injections/adult</li><li>5. Blood glucose monitoring/adult</li></ol>
Course specific skills	<ol style="list-style-type: none"><li>6. IV medications</li><li>7. Foley catheter insertion</li><li>8. Sterile dressing change</li></ol>
Maternal-Newborn Nursing Care	<ol style="list-style-type: none"><li>9. Apply fetal monitor</li><li>10. Blood glucose monitoring/neonate</li><li>11. Injections/neonate</li><li>12. Oral medications/neonate</li><li>13. Complete newborn assessment</li><li>14. Complete postpartum assessment</li><li>15. Assist during a birth (pushing, positioning, EFM management)</li></ol>



# Results:

Skill performance scale: 1-very uncomfortable performing by myself to 5-very comfortable performing by myself

Before clinical: *Basic adult skills:*

Range 1 □ 5

Mean: 2.3 (traditional), 2.4 (DEU)

Not performed:

oral med admin, injections, BG monitoring

**No difference between groups**

After clinical: *Basic Adult skills:*

**DEU:** Range 2 □ 5

**Traditional:** Range 1 □ 5

Not performed:

oral med admin, injections, BG monitoring

**Traditional group only.**

# Results:

Skill performance scale: 1-very uncomfortable performing by myself to 5-very comfortable performing by myself

Before clinical:      *Course Specific skills:*  
Range 1 □ 3  
Not performed: by over 90% of students  
**No difference between groups**

After clinical:      *Course Specific skills: (IV & catheter insertion)*  
**DEU:**      Range 3 □ 5  
**Traditional:**      Range 1 □ 4  
Not performed:  
**Traditional group:** Catheter: 90%  
   IV: 75%  
**DEU group:**      Catheter: 50%  
   IV: 0%

# Results:

Skill performance scale: 1-very uncomfortable performing by myself to 5-very comfortable performing by myself

Before clinical: *Maternal-Newborn care skills:*  
Range 1 □ 2  
Not performed: by over 97% of students  
**No difference between groups**

After clinical: *Maternal-Newborn care skills:*  
DEU: Range 2 □ 5  
Traditional: Range 1 □ 3  
Not performed:  
Traditional group: fetal monitor\* 98%  
Neo meds/inj\* 100%  
Assist births\* 98% DEU  
group: none

# Results:

Before clinical: Confidence nursing role responsibilities  
**No difference between groups**

After clinical: Confidence nursing role responsibilities

**DEU:** Greatest change in:

- Organization/priority setting
- Communicating with physicians/midwives
- Thinking vs doing

# Findings:

## Students in the DEU:

- performed a greater number of skills,
- reported a higher level of comfort/confidence in skill performance
- demonstrated a greater magnitude of change in nursing role responsibilities



# Next Steps:

## Benchmarking Project

- Does a DEU experience impact the transition from student to RN?

Cost



Retention

Thank you for your time...



...questions?

[deborah.raines.phd@gmail.com](mailto:deborah.raines.phd@gmail.com)