

# Should We Prelab? Exploring a Time Honored Tradition in Nursing Education From the Faculty Perspective

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### Learning Objectives

- Explore the role of pre clinical preparation (prelab)
- Discuss faculty perception of the prelab practice at the University of San Francisco
- Discover strategies for enhancing prelab to support clinical education

### Introduction to Clinical Education

- Learning laboratory
- Connects theory to practice.
- The clinical setting affords integration of:
  - Theory
  - Practice
  - Meaningful learning
- Improved decision making in the clinical setting

### What is Prelab?

- Patient Assignment
- Data Collection
- Research
- Planning Care
- Paperwork



### Key Alternatives In Prelab

- Patient Assignment
- Timing
- Instructor Presence
- Paperwork

### Why do we Care?

- EB teaching pedagogy
- No research on the practice
- Limited clinical sites
- No emphasis on student learning outcomes

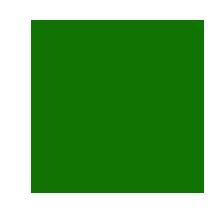
### Study Purpose

#### To identify:

- Faculty perceptions of prelab benefits and challenges
- Opportunities to improve preclinical education at the University of San Francisco
- Future research needs relating to preclinical education



- Should we Prelab?
- 2. What is the impact of Prelab on student learning?
- 3. What are the potential benefits of Prelab?
- 4. What are the potential detriments to Prelab?
- 5. Are there major differences in perceptions across key faculty dimensions?
- 6. How do these results differ from the opinion of students?





### Method

- Online survey
- Multiple choice and open-ended
- Emailed to 54 students
- 34 surveys returned
- 63% response rate

### Results



Table 1. Mean Comparison t Test for Select Outcomes Across Faculty and Students a,b

	St	Student		ulty	t-stat
How often are these statements accurate? c					
On the day of clinical, (students are/I am) prepared to care for (their/my) patients	3.44	(0.55)	3.50	(0.58)	0.49
On the day of clinical, (students/I) get good night's rest the night before clinical	2.45	(0.91)	3.21	(0.50)	$7.00^{g}$
On the day of clinical, (students/I) provide safe care	3.85	(0.35)	3.86	(0.36)	0.05
How much do you agree with the following statements? <sup>d</sup> Faculty: Prelab enhances student safety					
Student: Prelab makes me a safer practitioner Faculty: Prelab enhances students' critical thinking during clinical	3.56	(0.91)	4.04	(1.04)	$2.32^{\rm f}$
Student: Prelab enhances my critical thinking during clinical	3.62	(0.98)	3.89	(1.05)	1.29
Faculty: Students who Prelab complete more thorough paperwork Student: Prelab helps me to better complete my clinical paperwork Faculty: Students who Prelab develop enhanced informatics skills	3.41	(1.03)	3.74	(1.02)	1.61
Student: Students who prelab develop enhanced informatics skills	3.27	(1.05)	3.63	(0.97)	1.84 <sup>e</sup>
Faculty: Prelab decreases student anxiety in the clinical setting Student: Prelab decreases my anxiety in the clinical setting	3.25	(1.01)	3.89	(1.03)	3.11 <sup>g</sup>
Faculty: Prelab helps students identify and collect relevant patient information Student: Prelab improves my ability to select and collect relevant patient information Faculty: Prelab helps students develop and implement the nursing care plan	3.73	(0.95)	4.11	(0.83)	$2.27^{\rm f}$
Student: Prelab helps me develop and implement my nursing care plan	3.50	(1.00)	3.82	(0.96)	1.62
Faculty: Prelab increases student familiarity with equipment Student: Prelab increases my familiarity with equipment	2.63	(0.87)	2.70	(1.17)	0.30
Faculty: Prelab enhances student acquisition of psychomotor skills Student: Prelab enhances my ability to perform psychomotor skills	2.80	(0.93)	3.00	(1.06)	0.93
Faculty/student: Prelab improves the quality of post conference discussion	3.65	(1.00)	3.30	(1.20)	-1.48

a. Wording of some questions slightly different depending on whether question asked of students or faculty.

b. Degrees of freedom for mean comparison test from Welch's formula.

c. Responses range from 1 (never), 2 (rarely), 3 (sometimes/occasionally), and 4 (very often)

d. Responses range from 1 (strongly disagree), 2 (disagree), 3 (neutral), 4 (agree), and 5 (strongly agree)

e. p < 0.10

f. p < 0.05

g. p < 0.01

Table 2. Mean Comparison t Test for Outcomes by Teaching Status <sup>a</sup>

Part tin faculty		Full time faculty,	
Items	Mean (SD)	Mean (SD)	t-stat
How often are these statements accurate? <sup>b</sup>			
On the day of clinical, students are prepared to care for their patients	3.43 (0.60	3.71 (0.49)	-1.27
On the day of clinical, students get good night's rest the night before clinical	3.14 (0.48	3.43 (0.54)	-1.26
On the day of clinical, students provide safe care	3.81 (0.40	4.00 (0.00)	-2.17 <sup>d</sup>
How much do you agree with the following statements? c			
Prelab enhances student safety	4.14 (0.96	3.71 (1.25)	0.83
Prelab enhances students' critical thinking during clinical	3.95 (1.05	3.71 (1.11)	0.49
Students who Prelab complete more thorough paperwork	3.90 (0.91	3.29 (1.25)	1.19
Students who Prelab develop enhanced informatics skills	3.75 (0.85	3.29 (1.25)	0.91
Prelab increases student anxiety in the clinical setting	4.10 (0.94	3.29 (1.11)	1.73
Prelab helps students identify and collect relevant patient information	4.24 (0.70	3.71 (1.11)	1.17
Prelab helps students develop and implement the nursing care plan	3.95 (0.89	3.43 (1.13)	1.10
Prelab increases student familiarity with equipment	2.55 (1.10	3.14 (1.35)	-1.05
Prelab enhances student acquisition of psychomotor skills	2.95 (0.97	3.14 (1.35)	-0.35
Prelab improves the quality of post conference discussion	3.25 (1.21	3.43 (1.27)	-0.32
Prelab improves the quality of students written work	3.80 (0.83	3.29 (1.25)	1.01
Prelab increases student stress level	2.80 (1.01	3.29 (1.50)	-0.80
Prelab decreases the students ability to get a full nights sleep	3.20 (1.01	3.14 (1.46)	0.10

a. Degrees of freedom for mean comparison test from Welch's formula b. Responses range from 1 (never), 2 (rarely), 3 (sometimes/occasionally), and 4 (very often)

c. Responses range from 1 (strongly disagree), 2 (disagree), 3 (neutral), 4 (agree), and 5 (strongly agree)

d. p < 0.05

Table 3. Mean Comparison t Test for Outcomes by years working in nursing <sup>a</sup>

Item	Worked in nursing for 5 or more years, Mean (SD)		Worked in nursing for less than 5 years, Mean (SD)		t-stat
How often are these statements accurate? b	,			(/	
On the day of clinical, students are prepared to care for their patients	3.52 (	(0.59)	3.40	(0.55)	0.44
On the day of clinical, students get good night's rest the night before clinical	3.22 (	(0.52)	3.20	(0.45)	0.08
On the day of clinical, students provide safe care	3.91 (	(0.29)	3.60	(0.55)	1.24
How much do you agree with the following statements? c					
Prelab enhances student safety	4.04 (	(1.02)	4.00	(1.23)	0.07
Prelab enhances students' critical thinking during clinical	3.86 (	(1.04)	4.00	(1.23)	-0.23
Students who Prelab complete more thorough paperwork	3.55 (	(1.01)	4.60	(0.55)	-3.23 <sup>e</sup>
Students who Prelab develop enhanced informatics skills	3.50 (	(0.96)	4.20	(0.84)	-1.64
Prelab increases student anxiety in the clinical setting	3.83 (	(1.07)	4.20	(0.84)	-0.86
Prelab helps students identify and collect relevant patient information	4.04 (	(0.88)	4.40	(0.55)	-1.17
Prelab helps students develop and implement the nursing care plan	3.77 (	(0.97)	4.00	(1.00)	-0.46
Prelab increases student familiarity with equipment	2.73 (	(1.12)	2.60	(1.52)	0.18
Prelab enhances student acquisition of psychomotor skills	2.86 (	(1.06)	3.60	(0.89)	-1.61
Prelab improves the quality of post conference discussion	3.32 (	(1.13)	3.20	(1.64)	0.15
Prelab improves the quality of students written work	3.50 (	(0.96)	4.40	(0.55)	-2.82 d
Prelab increases student stress level	2.96 (	(1.05)	2.80	(1.64)	0.20
Prelab decreases the students ability to get a full nights sleep	3.32 (	(0.89)	2.60	(1.82)	0.86

a. Degrees of freedom for mean comparison test from Welch's formula

b. Responses range from 1 (never), 2 (rarely), 3 (sometimes/occasionally), and 4 (very often)

c. Responses range from 1 (strongly disagree), 2 (disagree), 3 (neutral), 4 (agree), and 5 (strongly agree)

d. p < 0.05

e. p < 0.01

### RQ #1 Should we Prelab?

- I don't know BUT.....
  - Better Process
  - Less Paperwork
  - Faculty Presence
  - Patient Assignment related to learning outcomes
- Need more research focused on student learning

### RQ #2 What is the impact of Prelab on student learning?

- Stress
- Anxiety
- Sleep
- Patient Safety

### RQ #3 What are the potential benefits of Prelab?

- Safety
- Critical Thinking
- Paperwork
- Informatics Skills
- Participation in Post Conference
- Develop Care Plan
- Familiarity with Paperwork

## RQ #4 What are the potential detriments to Prelab?

- Stress
- Anxiety
- Sleep

# RQ #5 Are there major differences in perceptions across key faculty dimensions?

- General congruence on the majority of factors when comparing:
  - Full time/Adjunct
  - Degree types
  - Length of time in nursing
- Key Finding: Nurses for more than 5 years
  - Less emphasis on clinical paperwork than less seasoned nurses
  - Greater emphasis on post-conference

# RQ #6 How do these results differ from the opinion of Students?

- Students:
  - Prelab influences sleep
  - Prelab increases anxiety
  - Prelab increases stress
- Faculty:
  - Prelab decreases anxiety
  - Prelab enhances critical thinking
  - Enhances informatics skills
  - Collection of patient information

### Future Research Needs

- Connect clinical preparation to student learning outcomes
- Connect student preparation to patient safety

### My Dissertation

- National Survey of Clinical Faculty
- Blinded to evaluate impact of Prelab on students who are High, Medium, Low Performing
- Participants Needed
- Email <u>Iturner@usfca.edu</u>

### Summary



### Questions



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### Disclosure

Authors of this presentation state no conflict of interest in the preparation of this material.

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