

# Teaching Innovations to Cultivate Evidence-Based Practice in Undergraduate Nursing Students

Vipavee Thongpriwan, PhD, RN | University of Wisconsin-Milwaukee



Figure 1: Our Classroom

## Background

- Scholarship of Evidence-Based Practice (EBP) is essential in baccalaureate nursing education.<sup>1</sup>
- Have nursing students at UWM College of Nursing mastered EBP?
- Studies show that growth Mindset, Active Learning, and Student-Faculty Interactions contribute positive learning outcomes in science courses.<sup>2,3</sup>
- Could these concepts influence nursing students' EBP knowledge and skills?

## Aims

- Describe active learning strategies implemented in a large class
- Describe students' EBP competency (i.e., knowledge and skills)
- Explore how growth mindset, engagement in active learning, and student-faculty Interactions influence students' EBP competency

## Discussion

- PICO, Critical Analysis, and Group Learning are top 3 active learning strategies for helping students understand course material.
- Growth mindset* and *identification of active learning* are positively associated with students' *attitudes towards EBP*.
- Students' *commitment to active learning* is positively associated with their skills of *retrieving and reviewing evidence*.
- Engagement in active learning* and *strong student-faculty interaction* are positively associated with *sharing and applying evidence* and *the overall EBP knowledge and skills*.

## Conclusion

To equip nursing students with knowledge and skills of EBP, faculty should

- Use active learning strategies
- Reinforce student commitment to and engagement in active learning
- Foster growth mindset among students
- Create positive student-faculty interaction

## Methods

**Design:** Single group, descriptive cross-sectional design

**Setting:** Large, urban midwestern university

**Participants:** 84 of 106 students completed the survey

**Teaching Innovations:** 3-credit, Evidence Based Nursing Practice course. Teaching strategies used: retrieval practice, small teaching, collaborative learning, and active learning

**Measurements:** Demographics; Growth Mindset<sup>2,3</sup>; Engagement in Active Learning<sup>2,3</sup>; Effectiveness of Active Learning Strategies; Student-Evidence Based Practice Questionnaire (S-EBPQ).<sup>4</sup>

### Data Collection and Analysis:

- Qualtrics online survey
- Descriptive analysis
- Multiple Regression with Stepwise Model Selection

## Results

Table 1: Demographics

Characteristic	n	%
Age ≤ 24 Years	55	66.27
Female	72	85.71
Non-Hispanic White	66	78.57
Previous Research Course	13	15.48
Full-Time Student	84	100.00
Employment Status		
Full-Time (40 Hours or more)	5	5.95
Part-Time	71	84.52
Previous College Degree	17	20.24

Table 2: Factors Affecting Students' EBP Competency

Effects	Evidence-Based Practice Competency														
	Practice			Attitude			Retrieving & Reviewing Evidence			Sharing & Applying Evidence			Overall EBP Competency		
	EST	SE	P	EST	SE	P	EST	SE	P	EST	SE	P	EST	SE	P
Intercept	1.30	0.57	0.026	3.41	0.50	<.001	4.00	0.34	<.0001	4.27	0.63	<.001	2.99	0.34	<.001
Female										-0.59	0.27	0.033			
Growth Mindset				0.20	0.08	0.022									
Active Learning: Engagement	0.26	0.05	<.001							0.13	0.04	0.001	0.18	0.03	<.001
Active Learning: Identification				0.16	0.03	<.001									
Active Learning: Commitment							0.12	0.03	0.001						
Faculty Interaction	0.39	0.17	0.021							0.32	0.12	0.009	0.23	0.10	0.022
<b>R-Square</b>	<b>0.34</b>			<b>0.26</b>			<b>0.14</b>			<b>0.29</b>			<b>0.39</b>		

Figure 4: Effectiveness of Active Learning in Helping to Understand Content

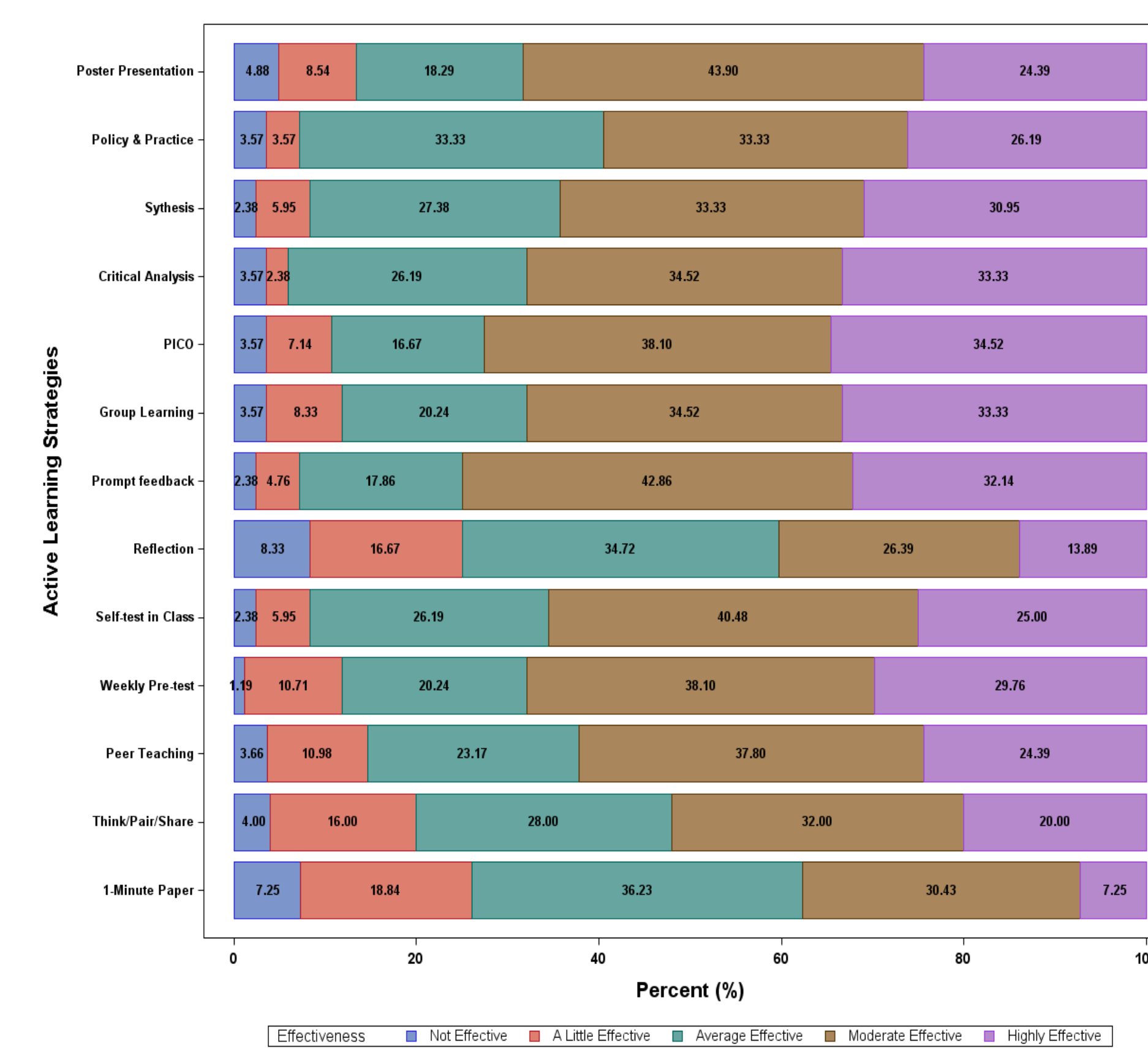


Figure 2: EBP Competency

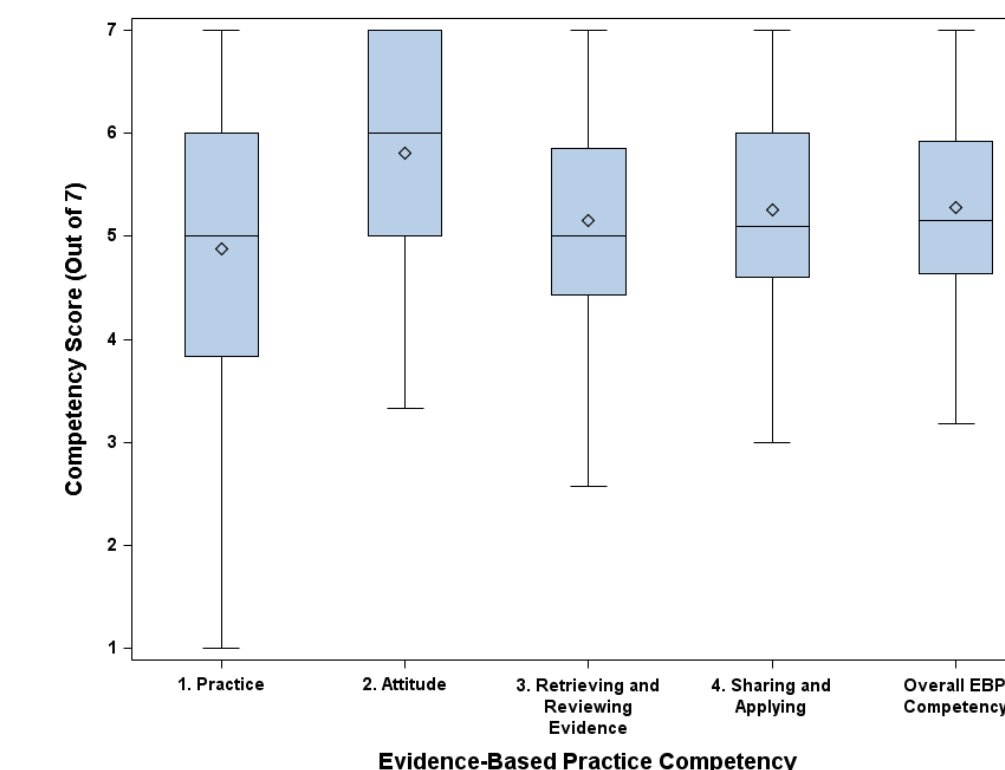


Figure 3: Active Learning

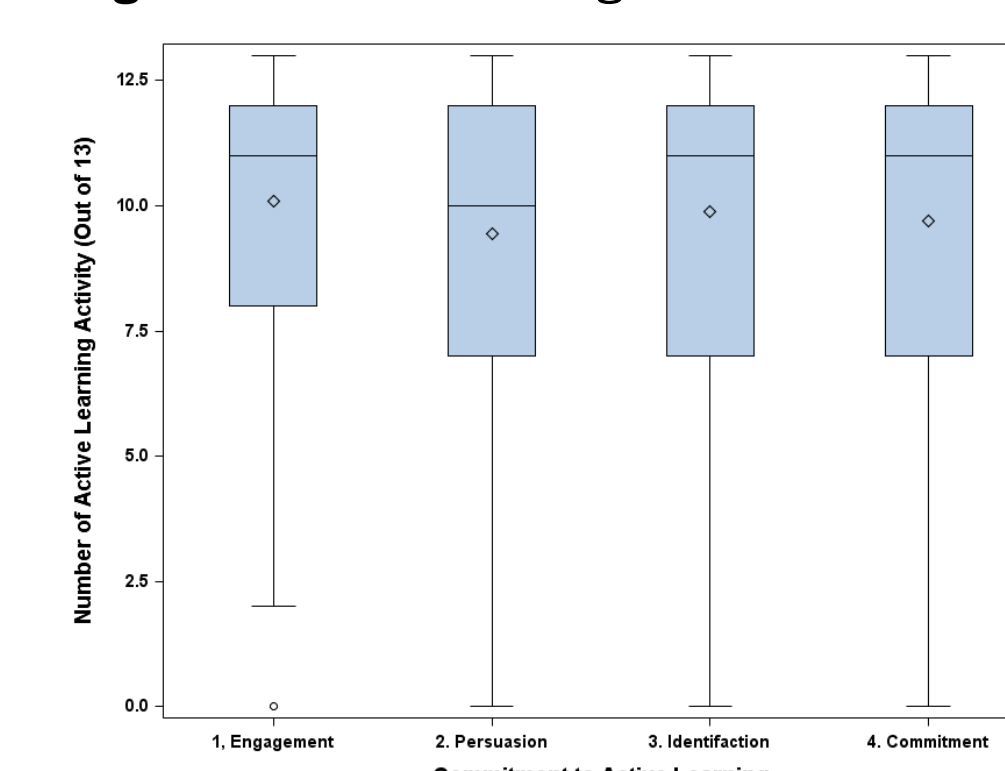
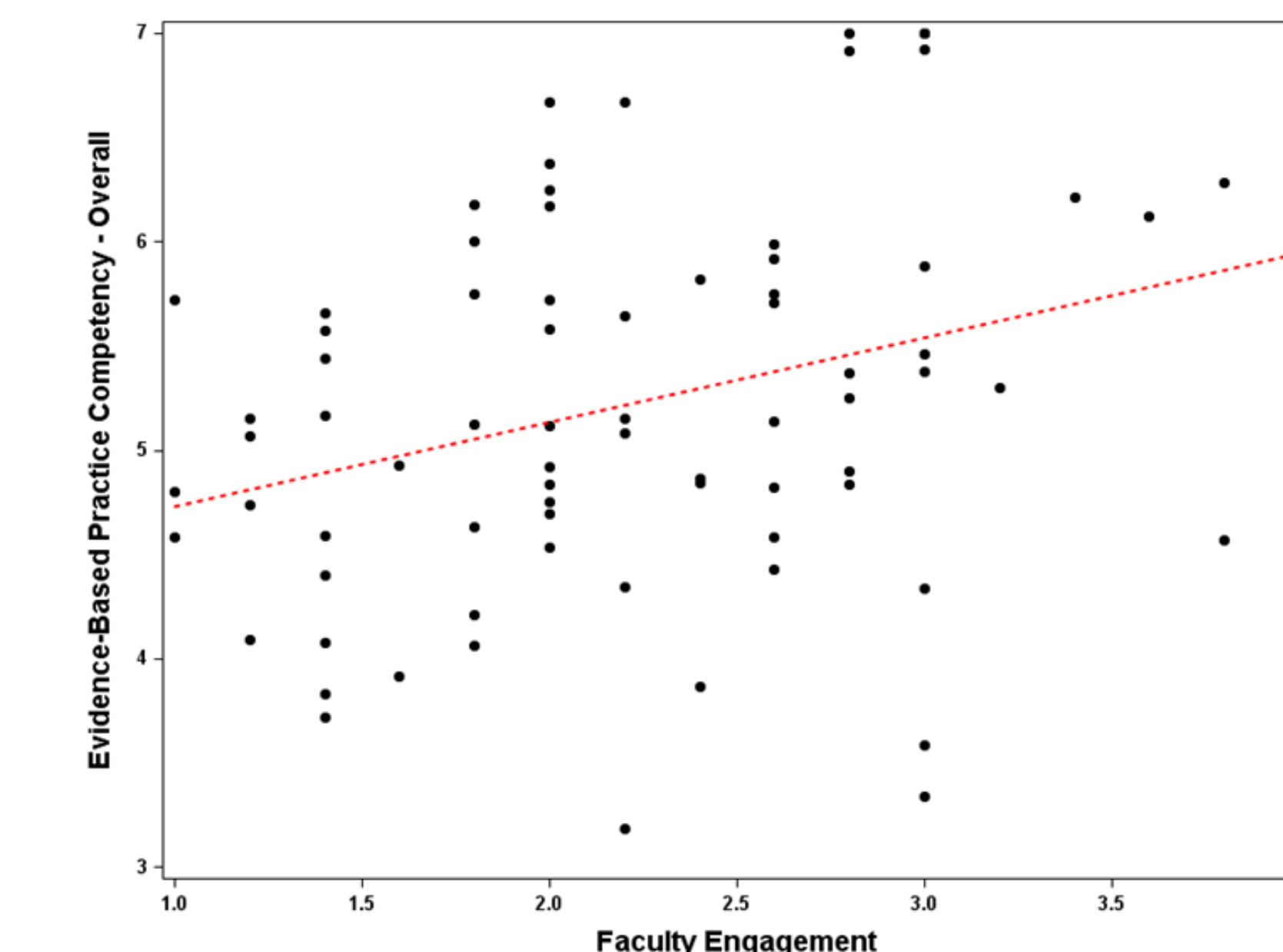


Figure 5: Relationship of EBP Competency and Student-Faculty Interaction



**For More Information**

Vipavee Thongpriwan, PhD, RN  
thongpri@uwm.edu

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