# Pre- and Post-Learning Survey results from pedagogical scaffolding of lactation education

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# Introduction

Breastfeeding is a fundamental component of health promotion and health professionals (HP) need adequate preparation, knowledge and skills to support breastfeeding families.

Global literature regarding the curricular approach or established best practices for HP education in lactation is inconclusive and lacking rigor.

# Purpose

Aim: To engage learners at different nursing programs in a range of learning strategies for core lactation content.

# Methods

Design: Quasi-experimental descriptive study

Sample: Teams: Nursing programs from Canadian and U.S. Schools

- Foundational lactation curriculum was implemented using five online open-education modules
- Scaffolded learning opportunities were identified. Learner outcomes and perceptions of mediums for identification of the most-effective method for knowledge translation were compared.

Participants: Site Champions were recruited from three countries

- Canada: UBC-V, UBC-O, North Island College
- USA: Montana State University, Villanova University
- Brazil: Federal University of Goiana

# Survey Testing

### **Theoretical Frameworks**

- Kolb's Theory of Experiential Learning
- Peplau Relational practice & communication
- HSSOBP simulation development, design, and evaluation

### Options to participate:

- Pre- & Post-Learning Surveys
- Identify & Prioritize learning experiences
- Compare across sites: learner's knowledge, attitudes, self-confidence and perception of skills.

### OERs as foundational resources (link)

- I. Intro: Physiology of Lactation
- 2. Cesarean Section in Hospital
- 3. Effective Breastfeedina
- 4. Prenatal Anticipatory Guidance
- 5. Midwifery Clinic, Low Milk Supply

### Please tell us about your healthcare education regarding infant feeding/lactation

#### IP Lactation Multi-Site Learning Evaluation Are you a health or social care student?

We invite you to take a pre-learn survey (10 min) related to your knowledge about infant feeding prior to a class/course on the topic. When the class/course is complete, take the post-learn survey (20-30 min) to tell us the types of learning and its affect on your ability to assist parents with infant feeding. You can also just do the Post-learn survey if you have already covered this information in your program. Interacting with the post on social media may associate you publicly with the study.

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# Results

Table 1. Teaching strategies in which students were exposed related to infant feeding/lactation

#### Exposed Teaching Strategy Frequency/Percent

Clinical practice 28 / 53.8% 23 / 44.2% Didactic Open Education Resources 15 / 28.8% Live simulation 5 / 9.6% Virtual gaming 1 / 1.9%

Most students (53.8%) reported being exposed to clinical practice, followed by didactic instruction (44.2%) and open educational resources (28.8%). Live simulation (9.6%) and virtual gaming (1.9%) were less frequently reported strategies. [responses for a check all that apply question]

## Table 2. Teaching strategy considered most effective by students

# Most Effective Teaching Strategy Frequency/Percent

35 / 67.3% Clinical practice 13 / 25.0% Didactic Open Education Resources 3 / 5.8% Live simulation 1 / 1.9%

Clinical practice was identified as the most effective teaching strategy by 67.3% of students, followed by didactic instruction (25%). Open educational resources (5.8%) and live simulation (1.9%) were less frequently considered the most effective methods.

### **Partners**

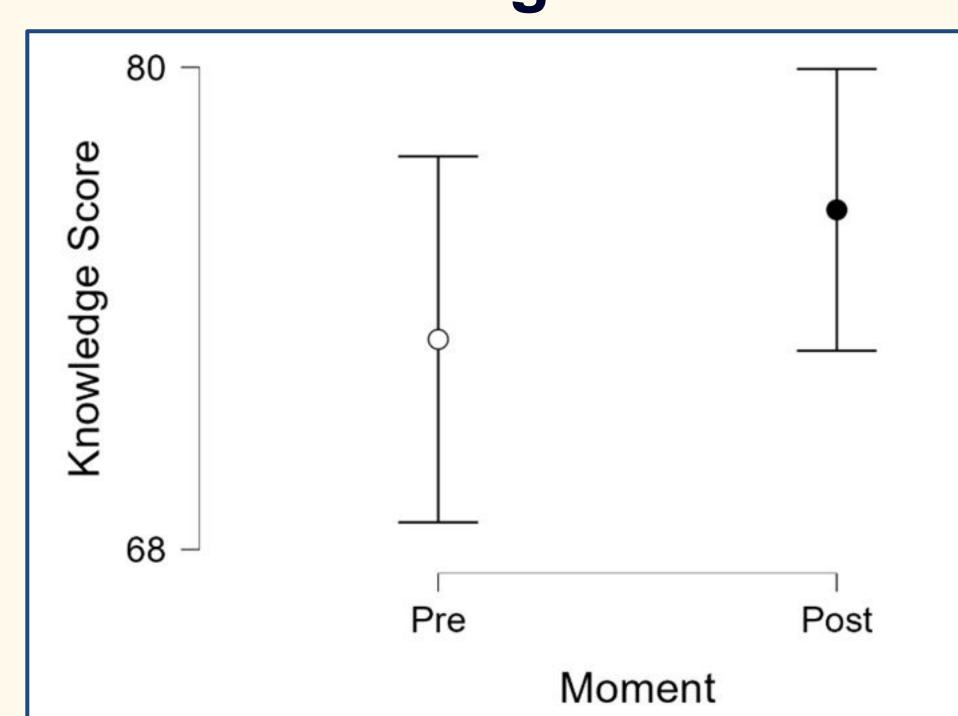








### Pre- Post-Knowledge Score Results



The analysis of knowledge scores before and after the intervention revealed a mean increase from 73.23 (SD = 16.02) to 76.45 (SD = 12.20). Not statistically significant, as indicated by both the Student's t-test ( $\rho$  = 0.264) and the Mann-Whitney U test ( $\rho$  = 0.405).

# Conclusions

Incorporation of open-educational resources were found to be useful as pre-briefing for simulation and clinical experience in lactation management. A pre- and post-learning survey from multiple sites supplies more robust information about most-effective mediums for learning. Scaffolding pedagogy may provide an effective approach to infant feeding education for pre-licensure and practicing clinicians.

### References



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