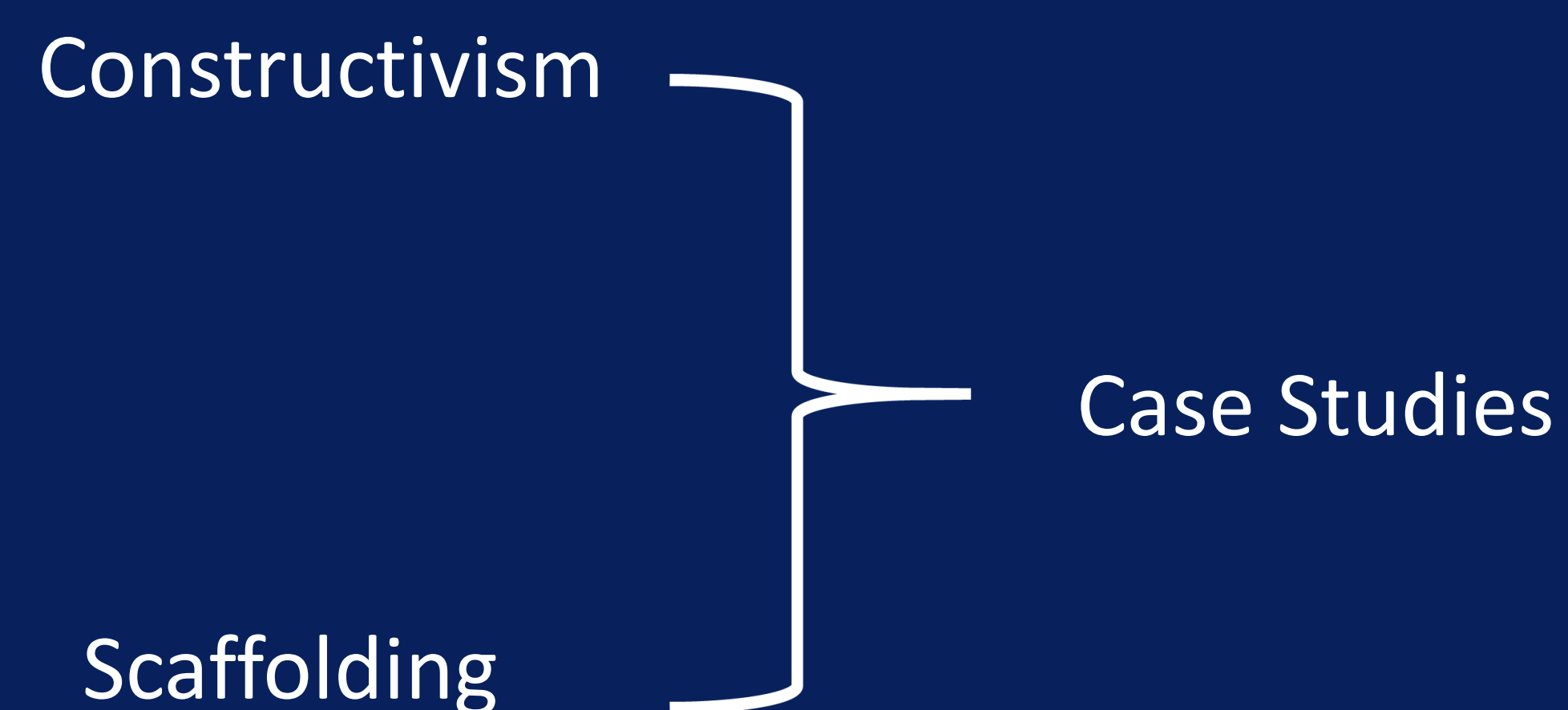


# Cognitive Load, Scaffolding, and Pharmacology Case Studies

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## Background

- Medication administration is important in clinical practice.
- Pharmacological/Parenteral Therapies category is 13-19% of NCLEX test plan.
- Class content carries high cognitive load for students.
- Current curriculum includes separate pharmacology course in junior semester.
- Students have difficulty retaining material for later courses.



## Methods

Two-part case studies were developed using Next-Gen terminology correlating the material covered in pharmacology and advanced medical-surgical courses.

Case studies included frequently prescribed medications and client's names related to the specific medications (S.T. Atin, Moxie Cillin).

Case studies prompted junior level students to employ clinical judgment with medications.

Senior level students were expected to apply previous knowledge of medications to adverse reactions and complex problems.

Case studies were used during class and students collaborated in groups allowing the sociocultural aspect of scaffolding.



Nora Flam



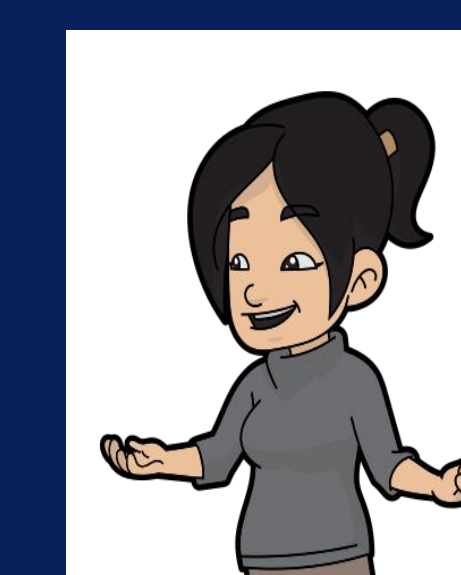
Anna Gees



Red Rubin



S.T. Atin



Moxie Cillin

## Limitations

Senior level Fall 23 students did not have the benefit of case studies during their pharmacology course and completed 2-part case studies during their advanced medical-surgical course.

Limited class time requires prioritizing case studies.

## Conclusions

By experiencing an innovative case study approach and scaffolding of pharmacology content, students are actively engaged in the learning process, moving complex material into long-term memory.

## Purpose

- Improve academic nursing
- Enhance the curriculum in a BSN program
- Scaffold challenging content across two courses – Pharmacology and Advanced Medical-Surgical Nursing
- Engage students through active learning

## Results

- Case studies were developed summer 2023, piloted fall 2023.
- Pharmacology students completed the first part of the case studies fall 2023, and will complete the second part in fall 2024.
- Current senior level students completed 2-part case studies in class.
- Student feedback positive related to connecting complex material.

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