

# The Use of Asynchronous Audio Feedback with Online RN-BSN Students

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# Introduction

- ▶ Why audio feedback?



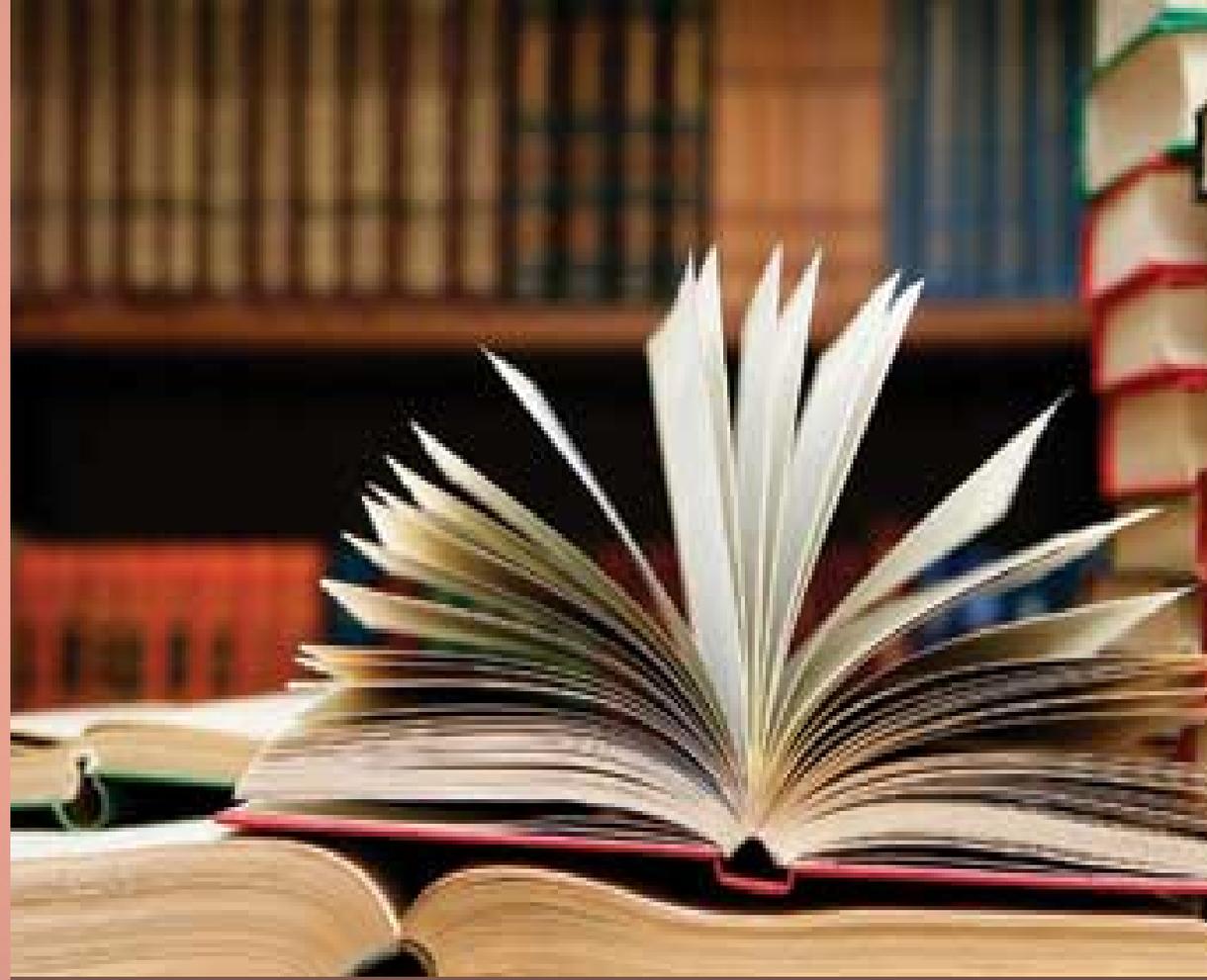
# Introduction (cont'd)

- ▶ Learning Management Systems Today



# Introduction (cont'd)

- ▶ What's in the Literature?

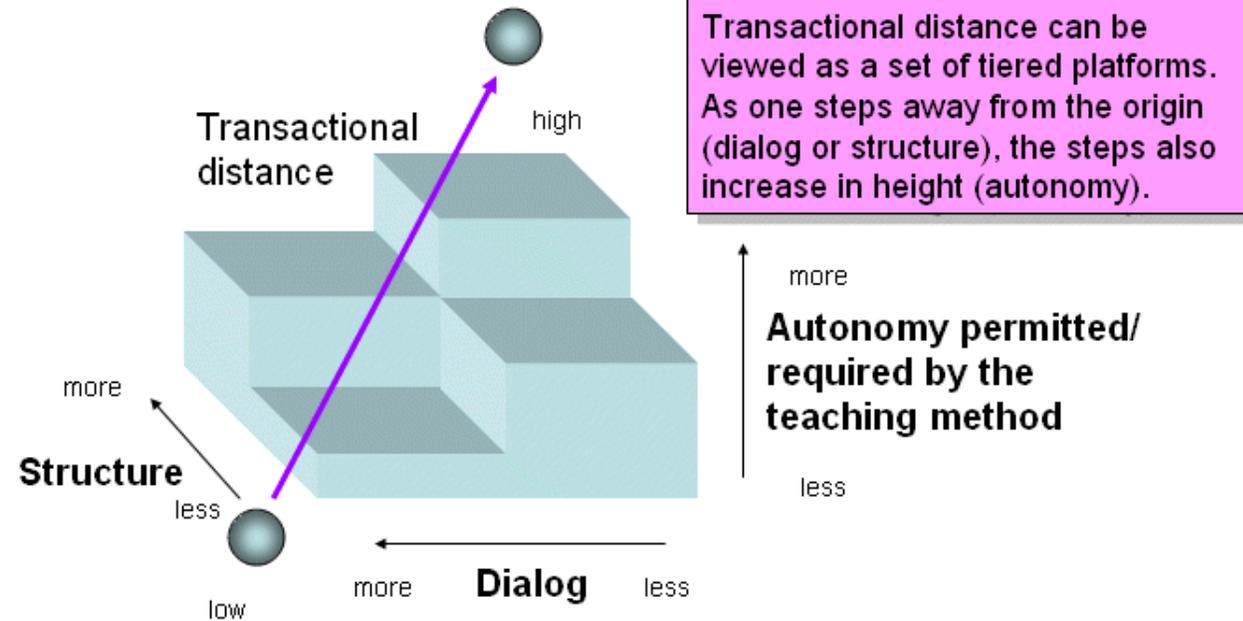


# Purpose/Aim of the Research

- ▶ Adding audio feedback to online discussion boards in an online asynchronous RN-BSN program improves students' perceptions of social, cognitive, and teaching presences, and thus, positively effects students' academic satisfaction, achievement, and retention.

# Theory of Transactional Distance

## A 3D Model of transactional distance



(Moore,1990).

# Theoretical Framework



(2001 Creative Common  
license)

# Comparison of Theory and Framework

- ▶ **Theory of Transactional Distance**

- ▶ **Community of inquiry (COI)**

- ▶ Student- Teacher

- ▶ Teaching Presence

- ▶ Student- Content

- ▶ Cognitive Presence

- ▶ Student- Student

- ▶ Social Presence

# Research Question 1

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RQ1- What effect does audio-text feedback vs text-only feedback in online discussion boards have on social, cognitive, and teaching presence of students enrolled in an RN- BSN program?

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H<sub>a1</sub> Audio-text feedback vs text-only feedback in online discussion boards **increases the perceived social, cognitive, and teaching presence** of students enrolled in an RN- BSN program.

# Research Question 2



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RQ2- What effect does audio-text vs text-only feedback in online discussion boards have on student satisfaction and retention of students in an RN- BSN program?

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H<sub>a2</sub> - Audio-text vs text-only feedback in online discussion boards **increases student satisfaction and retention** in an RN- BSN program.

# Research Question 3

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RQ 3- What effect does audio-text vs text-only feedback in online discussion boards have on academic achievement of students in an RN- BSN program?

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H<sub>a3</sub> - Audio-text vs text-only feedback in online discussion boards **increases academic achievement** of students in an RN- BSN program.

# Method/ Instrumentation

- ▶ A quasi-experimental posttest web survey design with a comparison group.
- ▶ Exempt IRB Status.
- ▶ Survey is based on the COI framework.

# Target Population

- ▶ Online RN-BSN students enrolled at a state university.
- ▶ Non Randomized into eight sections of RN-BSN courses taught Spring semester through course registration.
  - ▶ 4 sections of students ( N= 102)) each received audio and text feedback in their discussion board.
  - ▶ 4 sections of students (N= 100) received text-only feedback in their discussion board.

# Results

- ▶ Results from this quantitative, quasi-experimental study were analyzed using multiple regression.
- ▶ The sample size was large enough to achieve a moderate effect size (N=139).
- ▶ The data were normally distributed.
- ▶ The data also met all five standards for multiple regression linearity.

# Findings RQ 1

- ▶ RQ1- What effect does audio-text feedback vs text-only feedback in online discussion boards have on social, cognitive, and teaching presence of students enrolled in an RN- BSN program?
- ▶  $H_{a1}$  Audio-text feedback vs text-only feedback in online discussion boards **increases the perceived social, cognitive, and teaching presence** of students enrolled in an RN- BSN program.
- ▶ The multiple regression for text-only feedback was significant and positively correlated with teaching presence
- ▶ Nonsignificant for social and cognitive presence.

# Findings RQ 2

- ▶ RQ2- What effect does audio-text vs text-only feedback in online discussion boards have on student satisfaction and retention of students in an RN- BSN program?
- ▶  $H_{a2}$  . Audio-text vs text-only feedback in online discussion boards **increases student satisfaction and retention** in an RN- BSN program.
- ▶ The multiple regression for text-only feedback was significant and positively correlated with satisfaction and retention.

# Findings RQ 3

- ▶ RQ 3- What effect does audio-text vs text-only feedback in online discussion boards have on academic achievement of students in an RN- BSN program?
- ▶  $H_{a3}$  . Audio-text vs text-only feedback in online discussion boards **increases academic achievement** of students in an RN- BSN program.
- ▶ The multiple regression for text -only feedback was significant and positively correlated with academic achievement.

# Outcomes

- ▶ Although both positive and negative significant effects occurred, the data did not fully support any of the three alternative hypotheses.
- ▶ correlational statistics indicated a positive indicator for using audio within the online course in general for introductions and feedback on assignments but not in discussion boards.

# Application to Nursing Education

- ▶ teaching presence is an important aspect of online learning, as students want:
  - ▶ Available faculty that are willing to provide timely feedback.
  - ▶ Faculty to listen to concerns,
  - ▶ Someone who guides them through learning tasks (Richardson, Besser, Koehler, Lim, & Strait, 2016).

# Application to Nursing Practice

- ▶ Audio Introductions.
- ▶ Audio assignment feedback.
- ▶ Audio/Video Conferencing.
- ▶ Audio narrated PowerPoint presentations.

# Audio Software

- ▶ Adobe SPARK- <https://spark.adobe.com/home/>
- ▶ SWAY- <https://sway.com/>
- ▶ Voice Thread- <https://voicethread.com/>
- ▶ Zoom- <https://zoom.us/>
- ▶ Knovio- <https://www.knovio.com/support/learn/>

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