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

JULIE LONDON PHD, RN, CNE
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

Transactional distance can be viewed as a set of tiered platforms. As one steps away from the origin (dialog or structure), the steps also increase in height (autonomy).

Autonomy permitted/required by the teaching method

(Moore, 1990).
Theoretical Framework

Community of Inquiry

Social Presence

Cognitive Presence

Teaching Presence

Educational Experience

(2001 Creative Common license)
Comparison of Theory and Framework

- Theory of Transactional Distance
  - Student-Teacher
  - Student-Content
  - Student-Student

- Community of inquiry (COI)
  - Teaching Presence
  - Cognitive Presence
  - Social Presence
Research Question 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.
Research Question 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.
Research Question 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?

Hₐ₃ - 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<sub>a2</sub> - 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?

Hₐ₃ - 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.
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/](https://spark.adobe.com/home/)
- SWAY- [https://sway.com/](https://sway.com/)
- Voice Thread- [https://voicethread.com/](https://voicethread.com/)
- Zoom- [https://zoom.us/](https://zoom.us/)
- Knovio- [https://www.knovio.com/support/learn/](https://www.knovio.com/support/learn/)


