The Impact of Lecture Capture in the Undergraduate Classroom: Nursing Student Voices

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Purpose:

This presentation focuses on the descriptive data from a descriptive correlational study that explored undergraduate student perceptions, attendance, and learning outcomes when live classroom lectures in an Adult Medical-Surgical nursing course were recorded for later viewing using Tegrity lecture capture technology (Nelson, Clutter, & Ho, 2018). The descriptive data represents the voice of the student-seeing the world from their perspective.

Methods:

The descriptive research component consisted of five open-ended questions and 23 likert scale questions focused on the technology and perceived impact on usage, learning, attendance, and future recommendations. The survey was completed on PsychData with completion of the questionnaire constituting informed consent.

The research question was:

What are the perceptions of Baccalaureate nursing students who viewed lectures via Tegrity in a Junior II Medical-Surgical Nursing Course?

The survey was developed by the researchers and pilot tested with 4 undergraduate nursing students who were in the third semester. These students had taken the medical-surgical course in the prior semester and had experienced use of lecture capture in that course. Additionally, an expert in survey research techniques reviewed the questions prior to use.

A convenience sample of 139 second semester baccalaureate nursing students enrolled in Spring 2017, Fall 2017, and Spring 2018 were recruited to complete the survey.

Content analysis of open-ended questions was completed independently by each team member. Major categories and themes were quickly identified. The team met to compare analysis, make changes, and come to consensus. Descriptive statistics were used to analyze the Likert scale questions.

Results:

The availability of online Tegrity recordings as an additional study tool resulted in a ‘re-norming’ of study habits. While participants reported using Tegrity to ‘prepare for exams’, a major focus was on ‘clarifying’ misunderstandings, missed content, and on ‘reinforcing’ content through repetition. Other key concepts included ‘portability’ and the ability to study at their ‘own pace’. General perceptions of Tegrity were positive and the guaranteed availability served as ‘stress reliever’. The recorded lectures functioned a ‘safety-net’ for missed classes and for times when students ‘lost focus’ or ‘zoned out’ during class. Generally the ‘technology’ was easy to use and reliable. In terms of ‘future use’, 97.1% agreed or strongly agreed that use should continue in the current course and be expanded to other courses.

Conclusion:
In the quantitative portion of the study there was no significant correlation between final course grade and Tegrity usage ($r = .081$, $p = 0.325$) (Nelson, Clutter, & Ho, 2018). This contrasted with student perceptions, with 78% reporting a moderate to extremely high impact on improving the final course grade. Fears about a negative attendance impact also were not substantiated in correlations ($r = -0.086$, $p = .293$) or in student reports in this sample. Students in this study viewed lecture capture as a tool to augment their learning, not replace classroom attendance. Lecture capture technology is commonplace in universities across the world (Karnad, 2013) and when used in concert with other active learning strategies can be an effective tool to support student learning.

**Title:**
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**Keywords:**
Classroom, Nursing students and lecture capture

**References:**


**Abstract Summary:**

If we record they will not come! Voices of fear from faculty about the use of lecture capture to record live lectures for later student viewing. Contrasting voices heard in descriptive research from 139 second semester baccalaureate nursing students in a medical-surgical course. Come and hear the student voices.

**Content Outline:**

1. Introduction
   1. Lecture capture defined-Tegrity software system used
   2. Study Background-overcome faculty fears
   3. Study Purpose-reporting on descriptive portion of descriptive correlational research
2. Descriptive Design
   1. Setting and sample
University, Medical-Surgical Course
Convenience sample- Baccalaureate Nursing students
Sample characteristics

2. Research Question: Descriptive/exploratory
What are the perceptions of Baccalaureate nursing students who viewed lectures via Tegrity in a Junior II Medical-Surgical Nursing Course?

3. Data Collection
Instrument development: by researchers, pilot tested, validated by expert.
Instrument description: five open-ended and 19 likert scale questions.

3. Data Analysis
1. Content analysis open ended questions, themes identified and revised until consensus
2. Descriptive statistics using SPSS for Likert scale questions

4. Findings/Discussion:
1. Themes and exemplars for the following questions:
   ▪ How did having recordings available impact your study habits?
   ▪ How did having recordings available for all lectures facilitate your learning?
   ▪ How did you feel about using classroom lectures on Tegrity?
   ▪ What has been your experience of viewing recordings of classroom lectures on Tegrity?
   ▪ Any other comments you would like to make?
2. Descriptive statistics for Likert scale questions-a sampling:
   ▪ What was the impact, if any, on your normal level of lecture attendance given the availability of lecture recordings for later review?
   ▪ How much impact do you feel the Tegrity lectures had on improving your final course grade?

5. Conclusion and Implications for Practice
1. Lecture capture availability increasing and technology improving.
2. Positive students’ perspective must be heard.
3. Potential to increase effectiveness of lecture modality
4. A tool used to augment other learning strategies
5. Future research needed to maximize effective use of technology
   ▪ Different populations
   ▪ Different generations
   ▪ Undergraduate versus graduate

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