

Improving Learning Outcomes with Podcasting

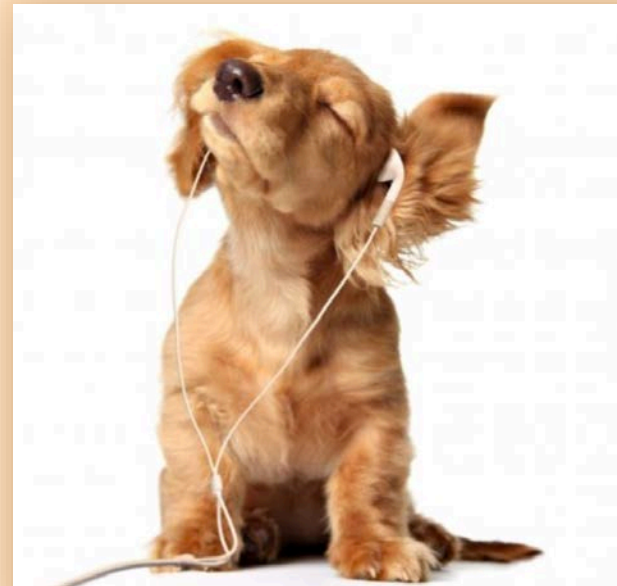
The Effect of Supplemental Podcasts as a Learning Strategy



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Disclosure

- No conflict of interest to declare.
- No affiliations with or involvement in any organization or entity with any financial interest



OBJECTIVES

BY THE END OF THE SESSION, THE PARTICIPANT WILL BE ABLE TO:

- Identify three pedagogical benefits from integrating podcasts into learning strategies.
- Describe characteristics associated with adult learners in accelerated programs.
- Apply theoretical foundations and research evidence to teaching with podcasting.



Podcast Benefits

- A single instructor with minimal institutional support can easily implement the use of these new technologies in their teaching
- Educational podcasts can be distributed on course management systems, instructor websites, and public video websites such as YouTube.



www.blackboard.com/index.html

iTunes

<https://www.apple.com/itunes/>



<https://itunes.apple.com/us/app/podcasts/id525463029?mt=8>

Pedagogical Benefits



- Podcasts allow students to interact with c convenience and may enhance learning.
- Instructors may benefit from recording repetitive explanations, descriptions, illustrations and connection of concepts.
- The pause and rewind podcast features may aid students with attention deficits.

Pedagogical Benefits

- Spoken word can influence a learner's cognition (adding clarity and meaning) and motivation (by conveying directly a sense of the person creating those words).
- Podcasts can increase student satisfaction and instructor evaluations.



"I just wanna let you know that my grade will reflect poorly on your upcoming evaluation ..."

<http://mathcurmudgeon.blogspot.com/2012/10/>



<https://www.hcwbenefits.com/how-to-develop-your-employees-by-providing-feedback/>

Learner Centered

- Understanding the needs of the learners is a key educational principle.
- The usual profile of ABSN student includes active involvement in family life, which requires balancing time.
- Stress and rigor of enrollment in a compressed curriculum.



Evidence Based

- “Providing learning materials in as many formats as possible, to suit individual students’ learning styles” (Walmsley et al., 2009, p. 159).
- The addition of podcasting provides recursion of key concepts, promoting reflection and understanding of the content.
- Utilize the devices and technologies that surround our students, “in an attempt to empower and enrich their learning, wherever and whoever they are” (Stead, 2005, p.3).

Evidence Based



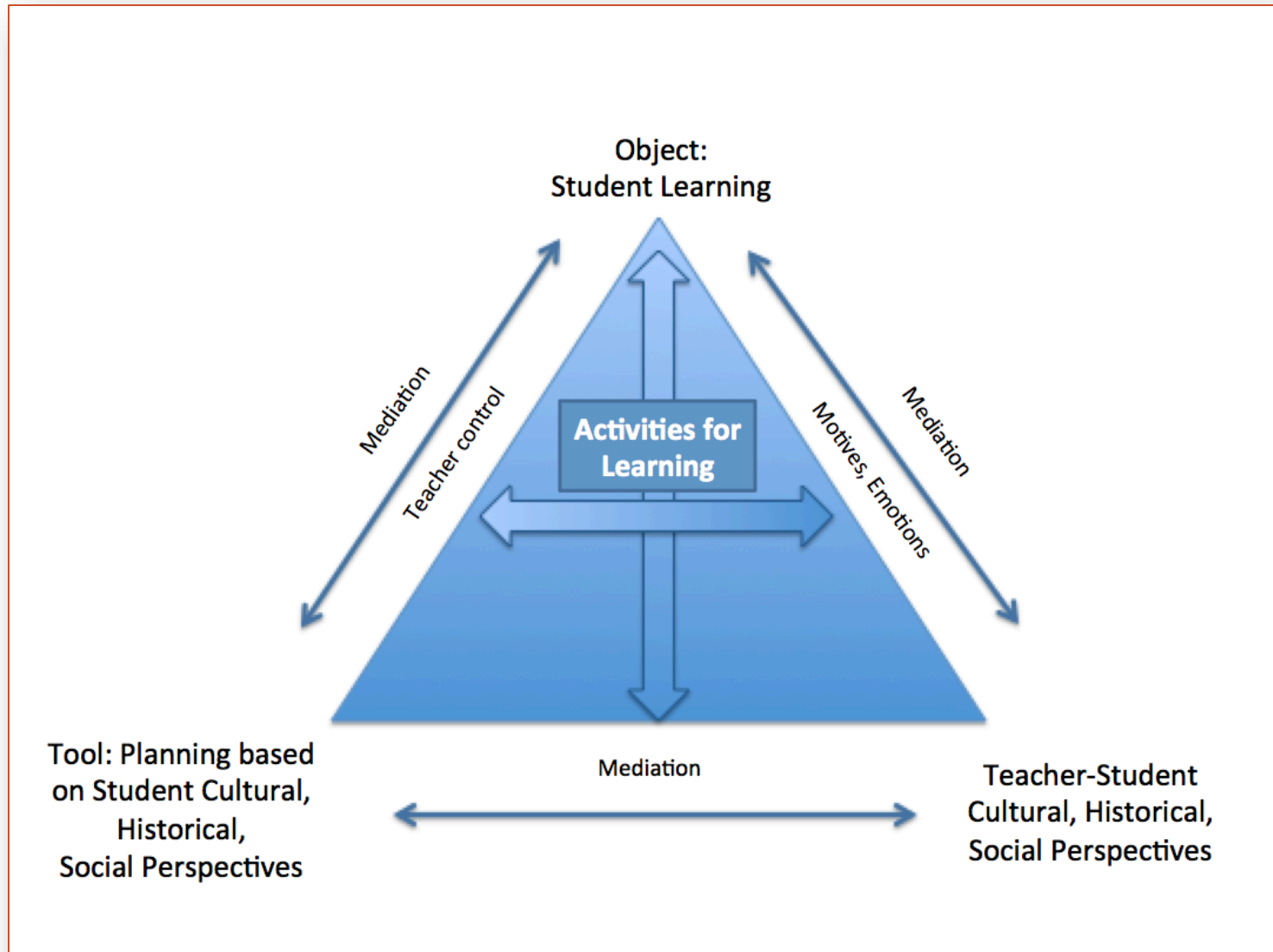
Evidence Based Education

<https://evidencebased.education>

- “Providing learning materials in as many formats as possible, to suit individual students’ learning styles” (Walmsley et al., 2009, p. 159).
- Providing assistive learning opportunities can be advantageous (Cebeci & Tekdal, 2006).
- The addition of podcasting provides recursion of key concepts, **promoting reflection** and understanding of the content.
- Utilize the devices and technologies that surround our students, “in an attempt to empower and enrich their learning, wherever and whoever they are” (Stead, 2005, p.3).
- Takes “the learning to the learners when they have time to learn” (Stoten, 2007, p. 57).

Vygotsky's Cultural-Historical Activity Theory (CHAT)

Theory Based



Applications

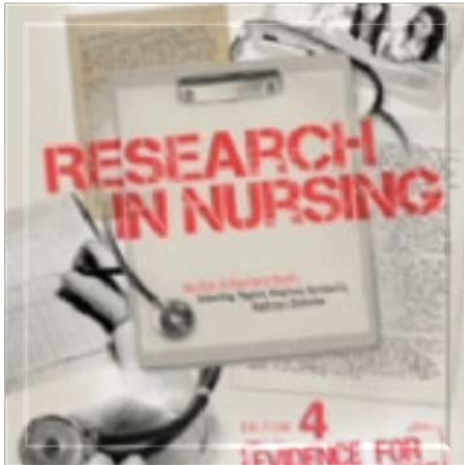
Supplemental Podcasts

- Preview lectures (Precast) or review past lectures (Postcast).
- Podcasts can supplement course curriculum with recorded demonstrations, illustrations, guest lectures, problem solving, interviews, and **exam reviews**.
- Aid student learning and provide support in relation to the core learning materials
- Audio recordings of the **teacher reviewing learning outcomes** and adding clarification

Participants

- ABSN students enrolled in required Research Course
- Students taking Maternal-Newborn during same module, scheduled for ATI.

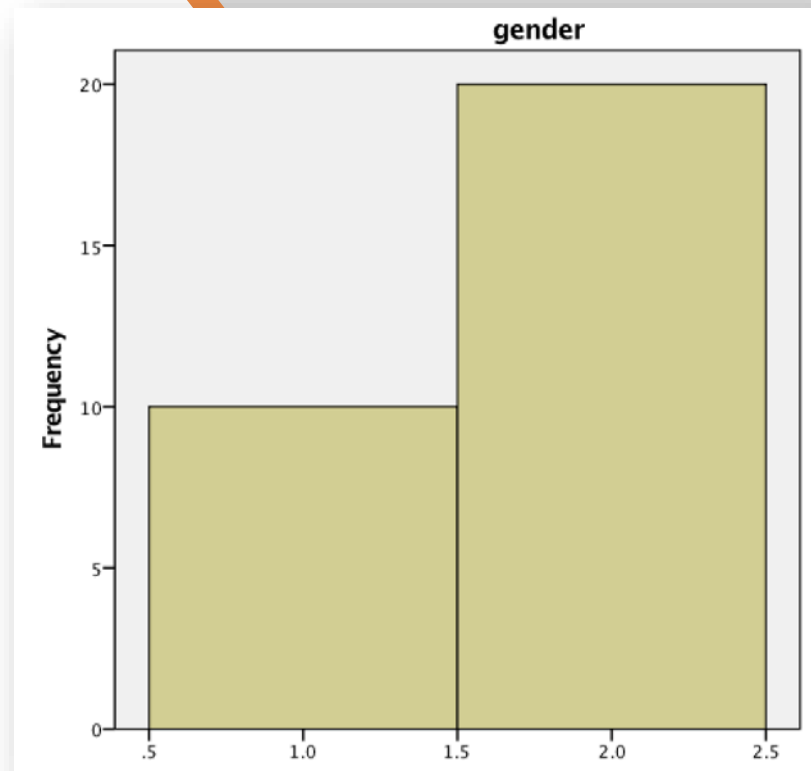
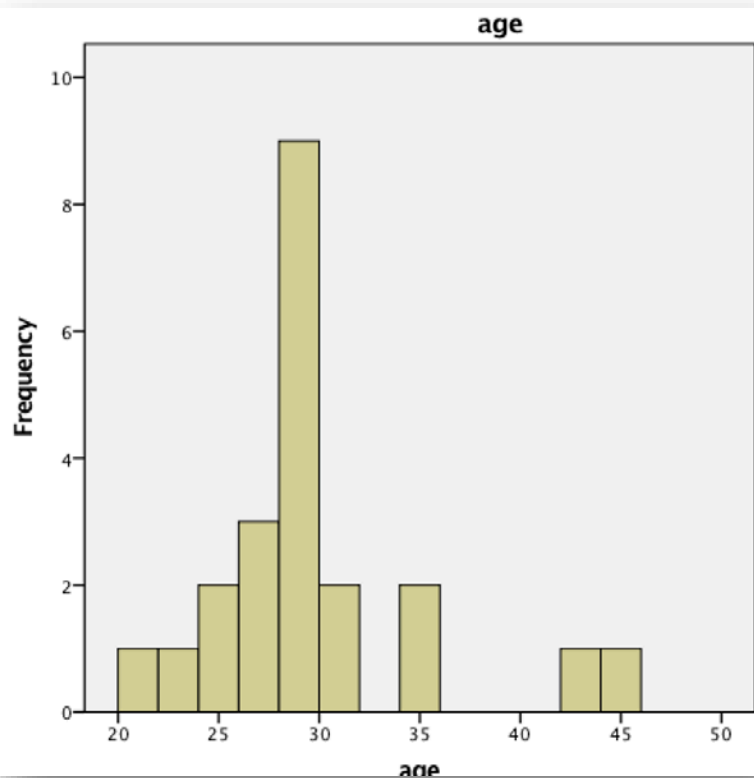
Take part in research while studying research.



ATI
REVIEW

Demographics

N = 30



Between-Subjects Factors

		Value Label	N
listened for ATI	1.00	yes	18
	2.00	no	12

Findings

Descriptives

ATI								
	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
yes	18	73.5056	7.81623	1.84230	69.6186	77.3925	60.00	85.00
no	12	65.2000	7.41510	2.14055	60.4887	69.9113	53.30	78.30
Total	30	70.1833	8.59046	1.56840	66.9756	73.3911	53.30	85.00

- Grouping was self-selected by personal choice of whether to listen to podcast provided.

ANOVA

Tests of Between-Subjects Effects

Dependent Variable: ATI

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	496.672 ^a	1	496.672	8.462	.007
Intercept	138522.464	1	138522.464	2360.111	.000
listATI	496.672	1	496.672	8.462	.007
Error	1643.409	28	58.693		
Total	149911.090	30			
Corrected Total	2140.082	29			

The analysis of variance was statistically significant at the $p \leq .05$ level, $F(1, 29) = 8.462$, $p = 0.007$.

A Cohen's d was calculated for effect size, resulting in $d = 1.09$, demonstrating a large effect size, inferring study relevance.

The statistical literature reports many educational researchers identify effect sizes around 0.20 to 0.25 as important related to academic achievement.

(Duriak, 2009; Valentine & Cooper, 2003).

Survey

Statement	SD	D	N	A	SA
I would rather read the textbook than listen to a Podcast.	9 50%	4 22%	2 11%	3 17%	0 0%
I would rather study my notes than listen to the Podcast.	5 28%	4 22%	7 39%	2 11%	0 0%
I did not have time to listen to the Podcasts.	8 44%	6 33%	3 17%	0 0%	1 6%
The Podcasts increased my understanding of the course concepts.	0 0%	3 17%	1 6%	7 39%	7 39%
I felt listening to the podcasts was tedious and boring.	8 44%	5 28%	4 22%	1 6%	0 0%
Listening to the Podcasts was a waste of time.	7 39%	5 28%	6 33%	0 0%	0 0%
I wish other courses had Podcasts available.	0 0%	0 0%	1 6%	4 22%	13 72%
Listening to the Podcasts did not increase my learning of the concepts.	12 67%	3 17%	3 17%	0 0%	0 0%
Listening to the podcasts was time well spent.	0 0%	2 11%	6 33%	8 44%	2 11%
I enjoyed listening to the Podcasts.	0 0%	0 0%	4 22%	9 50%	5 28%

Survey Tool Results N = 18

Note: SD = Strongly Disagree; D = Disagree; N = Neutral; A = Agree; SA = Strongly Agree;
~~M~~ = Mean.

Podcasts Concerns

- Effort and resources that are needed to produce podcasts.
 - Increase in teacher or instructor workload for those who create the podcasts
 - The level of effort and resources to produce podcasts will vary depending upon the podcast format.
- “...many professors remain wary of the technology... that it will lead to empty classrooms or a crutch for late-sleeping students”(Gattis)
 - Attendance will largely depend on how podcasts are used.
 - Several papers document the initial experiences with podcasting show little effect upon attendance

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