

Impacts of Audio Podcasts as a Micro Learning tool on coeducation

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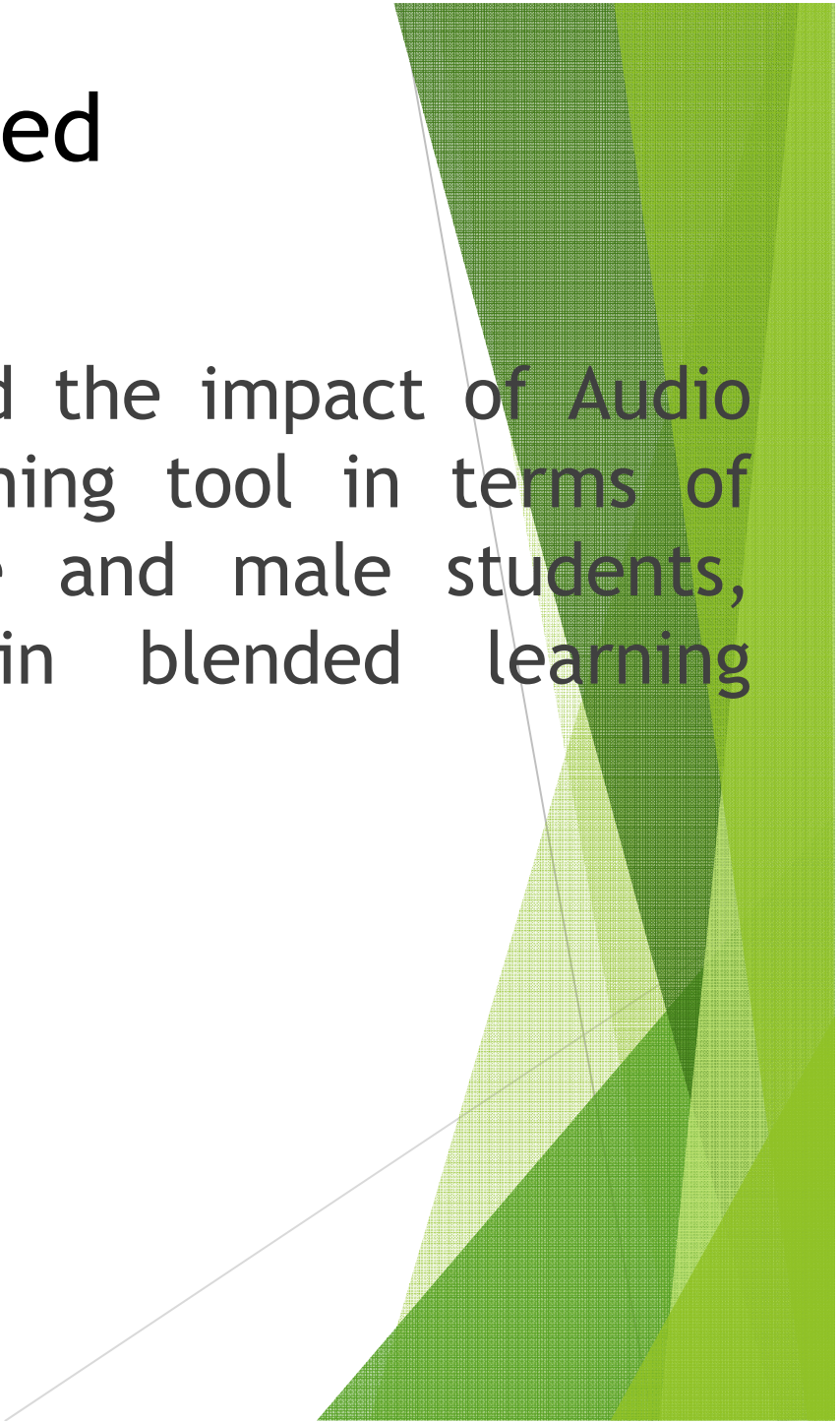
Introduction

Teachers and learners meet face to face for a certain period of lecture time, ranging from one, two, or more hours, and sometimes, it's hard to convey the required delivery of knowledge and in-depth course contents during these lengthy lectures, as learners become tired and bored, and capacity of brain stops getting further knowledge.

This affects the process of learner's concept generation, and overall impacts the learning outcomes.

Introduction...continued

This research has discovered the impact of Audio Podcasting as a Micro learning tool in terms of gender diversity on female and male students, studied a course with in blended learning environment.



What is Micro Learning?

Learning through small units and short-term-based-activities is called Micro learning (Hug, 2005). These bite-size small units are easily digestible (Fernandez, 2014).

What is Audio Podcast?

Audio Podcast is a digital audio file that has recorded information, and the audio clip can listen thorough any portable electronic gadget, at any feasible place and time.

Audio podcast is an excellent electronic tool to deliver the information (Rech, 2007).

Purpose of the study

The purpose of this study was to investigate the students' attitude based on gender differences (Group 'A'-Male students, & Group 'B'-Female students), through providing the Audio Podcasts as a Micro Learning tool, as an additional learning support, to be used after face to face meetings, and to measure its impact on the participants:

- ❑ on the students' *exam results*
- ❑ Students *attitudes* toward e-tool (Friendly, Comfortable, Essential)
- ❑ help of tool in *understanding and learning* the course material
- ❑ Students' *likings toward the mode of instruction*

Methodology

Mode of Instruction was: Face to Face Instruction + Audio Podcast listening as blended learning (as an additional support after lectures).

- ❑ Audio Podcasts of less than four (4) minutes were recorded using Audacity, a free, open source software for recording the digital audio.
- ❑ Moodle (A Course Management System) was used to develop the course webpage, and the Audio Podcasts were uploaded to this webpage.
- ❑ Total number of students was 52 and divided in two groups:
 - Group A - Male students: 26 Participants
 - Group B - Female students: 26 Participants
- ❑ Students of both group (Male and Female) had downloaded used the Audio Podcasts for listening, and they were specially informed to listen these Audio Podcasts, within different interval of times.
- ❑ All the students had very little IT background, in the beginning.

- ❑ A Questionnaire was designed based on 5-point Likert Scale, to collect the responses of the students.

Phases

There were following two phases for the collection of data collection from two groups:

- Before and
- After

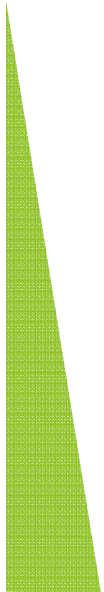
Following are the major domains, used for the study:

- Attitude toward Micro Learning (Friendly, Comfortable, Essential) using Audio Podcast
- Understanding, & Learning, toward Micro Learning using Audio Podcasts, & its Help in Exam perpetration
- Liking of students (Mode of Instruction)

Statistical Analysis

Plain statistical analysis using groups Means (Average) were used for the purpose of comparison between two groups of Male and Female students.

Results



ASSESSMENT OF EXAM RESULTS (Group 'B' vs Group

<i>Table 1: Comparison of Exam Results – Group Means (Group 'A'-Male Vs Group 'B'-Female)</i>	
<i>Exam Results (Total Marks of the Exam Module: 15)</i>	
<u>Group A (Males):</u> students supported with Audio Podcast as a Micro Learning tool	<u>Group B (Females):</u> students supported with Audio Podcast as a Micro Learning tool
Group Mean – Group 'A'	Group Mean - (Group 'B')
9.25	10.57
Mean difference = results of Group 'B' – results of Group 'A' = 10.57 – 9.25 = 1.32 Conversion of Mean difference in Percentage=> 1.32 (out of 15) = 8.8%	

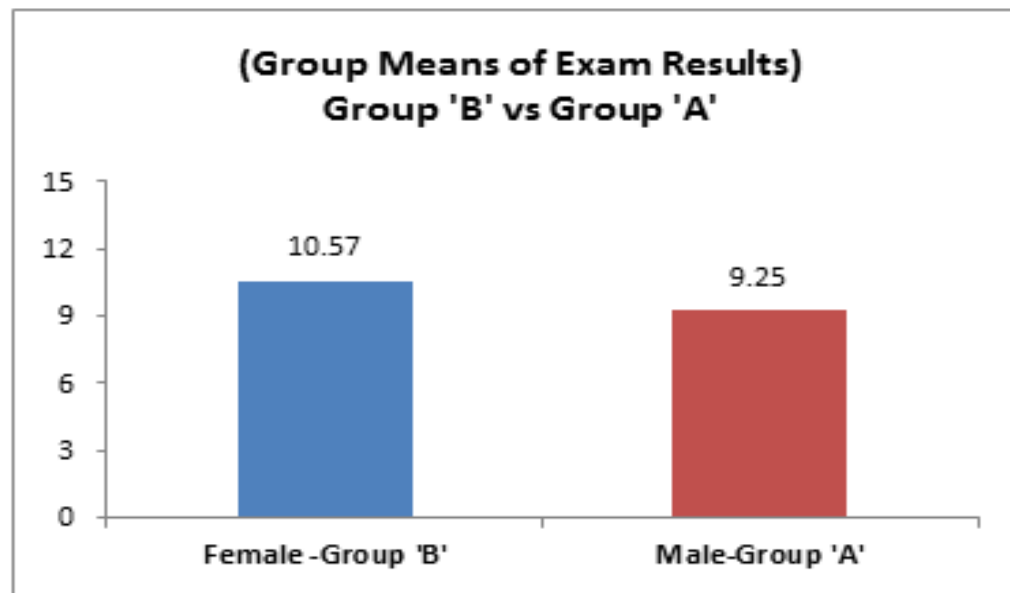


Fig. 1. Group Means of Exam Results – Group 'B' Vs Group 'A'

ATTITUDES TOWARDS MICRO LEARNING USING AUDIO PODCASTS

Table2: Attitude toward Moodle

Dependent Variables	Gender	Groups Means		Size of Change
		Before	After	After-Before
Friendly	Female	2.46	4.38	1.92
	Male	2.96	3.85	0.89
Comfortable	Female	2.27	4.46	2.19
	Male	2.92	3.69	0.77
Essential	Female	1.96	4.23	2.27
	Male	1.92	4.12	2.2

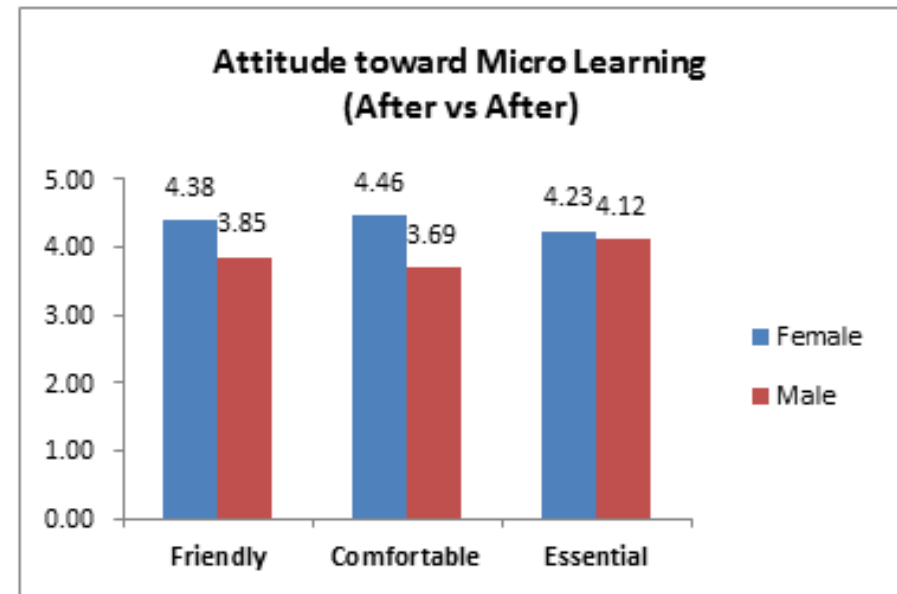
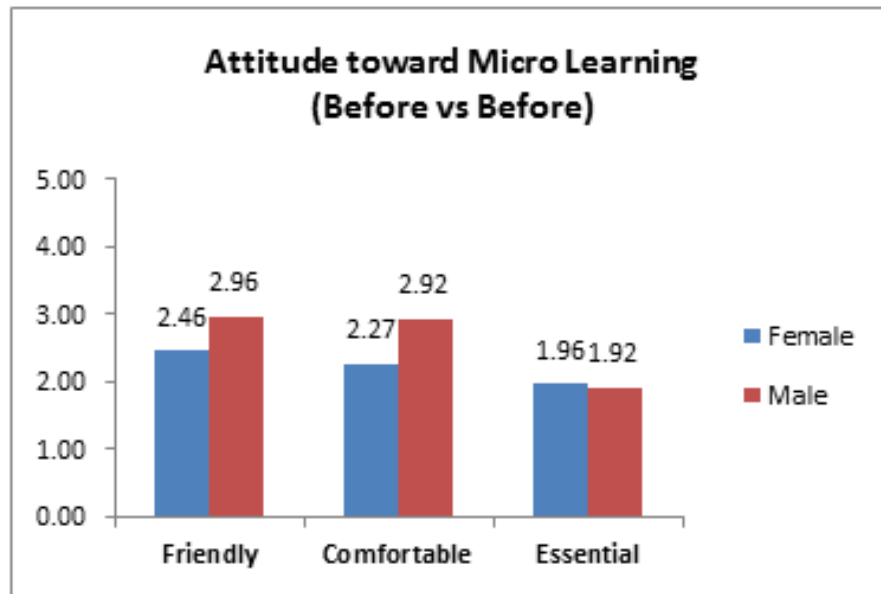


Fig. 2. Attitudes toward the use of Audio Podcasts as a Micro Learning tool

HELP OF AUDIO PODCAST IN UNDERSTANDING AND LEARNING THE COURSE MATERIAL

Table3: Help of Micro Learning

Dependent Variables	Gender	Groups Means		Size of Change
		Before	After	After-Before
Understanding	Female	1.92	4.27	2.35
	Male	2.31	3.85	1.54
Learning	Female	1.96	4.04	2.08
	Male	2.46	3.85	1.39
Helped in Exams Preparation	Female	2.27	3.85	1.58
	Male	2.27	3.81	1.54

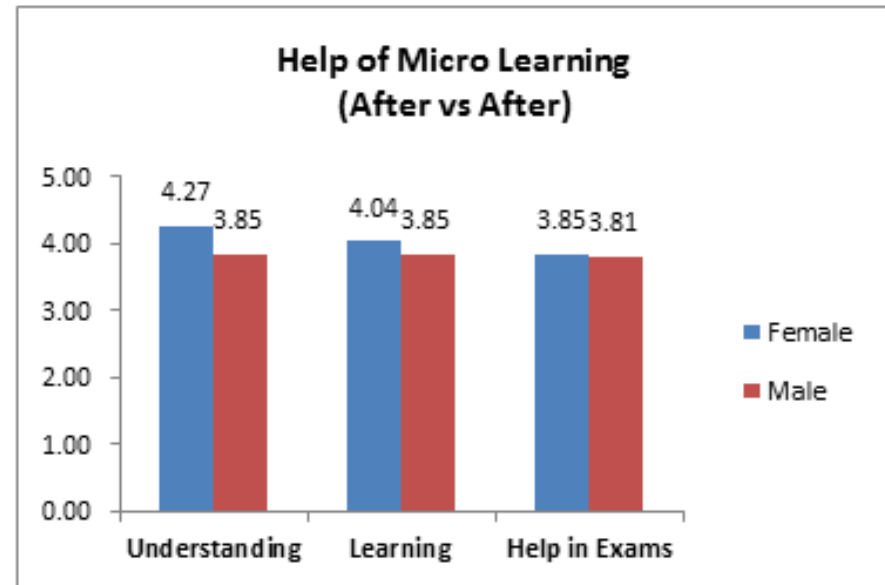
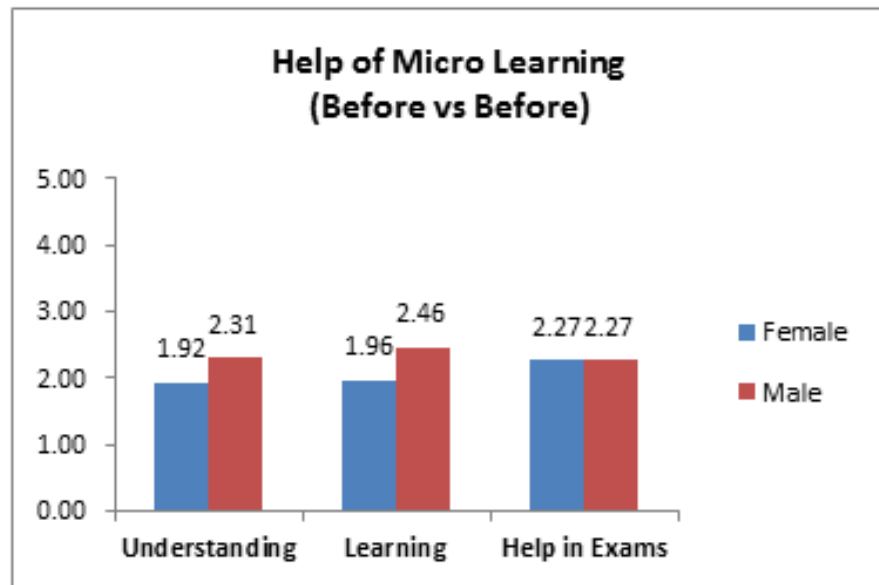


Fig. 3. Understanding and Learning using Audio Podcasts as a Micro Learning tool

LIKINGS OF STUDENTS (METHOD OF INSTRUCTION)

Table4: Students Likings – Method of Instruction

Dependent Variable	Gender	Group Means		Size of Change
		Before	After	After-Before
Instruction through instructor & supported with Audio Podcast	Female	1.92	4.27	2.35
	Male	1.62	4.58	2.96

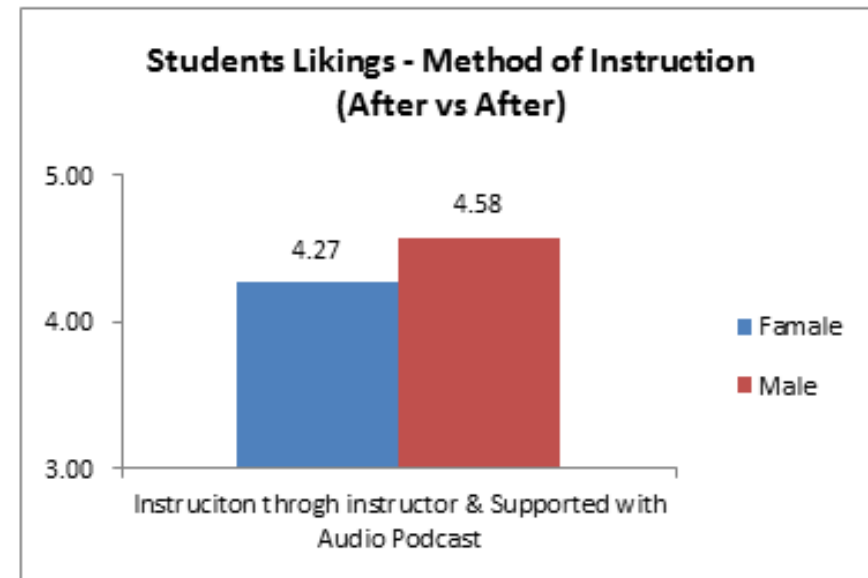
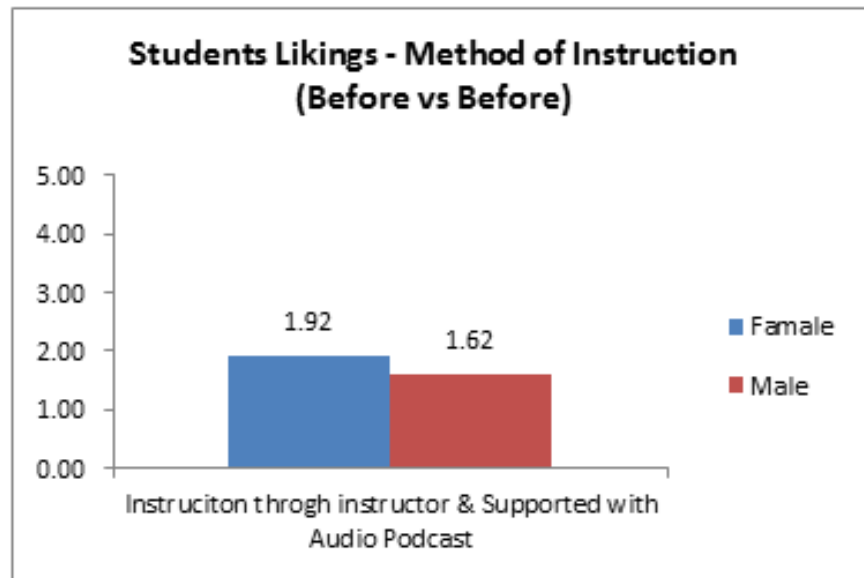


Fig. 4. Students Likings – Method of Instruction using Audio Podcasts as a Micro Learning tool

Conclusion:

Research has proved that the use of Audio Podcasts as Micro learning tool in coeducation leaves optimistic results on male and female students, and female students have performed well with an elevated exam results.

Both Male and Female groups have rated Audio Podcast tool as:

- User Friendly
- Comfortable

Verified as an important part of the course for

- Understanding and
- Learning the course materials,
- Helpful for the exam preparation
- Micro Learning (Blended Mode) as most preferred mode

And

The Audio Podcast as a Micro Learning Tool had helped in raising the female students' exam results to 8.8%.

Dear instructors, don't wait any longer, and start adding the Audio Podcast as a Micro Learning tool, to instruct your courses. This tool can be a value-added solution to solve the issues concerning the creation of in-depth concepts, the enrichment of learners understanding, production of overall better results and to produce better learning outcomes.

The image features a white background with abstract green geometric shapes. On the right side, there is a large, complex shape composed of several overlapping triangles and polygons in various shades of green, including a textured green and a solid bright green. On the left side, there is a smaller, solid green triangle. In the center, the words "THANK YOU" are written in a bold, green, sans-serif font. The text has a slight 3D effect with a darker green outline and a reflection below it. The reflection is a lighter, semi-transparent version of the text, creating a sense of depth.

THANK YOU