



A STUDY OF PERCEPTION OF UNDERGRADUATE STUDENTS ABOUT INTERACTIVE TEACHING LEARNING METHODS

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Abstract

Traditional teaching practice in the current era is found to little outdated and non-interesting. Using the current techniques, the lesson taught to students is not skill oriented, and therefore, although we are producing good number of health workforce, we are unable to meet the needs of the community. Introduction of interactive methods of teaching is directed at the formation of active personal position and improving skills of mutual cognitive activity. The researcher has chosen a topic in this context as she felt it necessary to see how successful the interactive teaching methods in teaching the concept with to learn the perspective of students towards use of interactive teaching methodologies. The research signifies the study was to identify the student's perceptions towards the use of interactive teaching aids in teaching learning process. During the research, the researcher receives an ample of ideas which can be implemented to enhance the enhance the traditional teaching methods which would not only help the students but also the teaching faculties to enhance their skills of the teaching amongst the teachers and the learning capability in students.

Keywords: *ICT, ITL, cognitive.*



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Introduction

Traditional teaching practice in the current era is found too little outdated and non-interesting. Using the current techniques, the lesson taught to students is not skill oriented, and therefore, although we are producing good number of health workforce, we are unable to meet the needs of the community.

One-way communication in lectures does not influence the learners' behavior met in the classroom which in turn fails to create competent and passionate individuals. There is a growing concern among educators that conventional modes of teaching students neither encourage the right qualities in students nor impart a life-long respect for learning. Interactive learning actively engages the students, reinvigorates the classroom for both students and faculty, encourages students to take responsibility for their own learning, and promotes characteristics of effective learning. Interactive teaching methods could be done using large group, small groups, pairs, and individuals.

Methods used in the study are think-pair-share, buzz sessions, case-based learning (CBL), and pass the problem. This study highlights the need and demand of interactive teaching methods in the education. Considering the teaching methods currently used in the schools and colleges are a mixed method which means some use ICT based teaching whereas the others use traditional methods. Use of traditional methods could be due to lack of availability of resources.



As the world has entered into a digital era where everything is digitally done so why not to use the ICT based or interactive methods of teaching.

Introduction of interactive methods of teaching is directed at the formation of active personal position and improving skills of mutual cognitive activity. The interactive methods of teaching lead to formation of certain positive personal traits: adequate self-esteem; optimal level of anxiety; high level of self-independence; developing skills of cooperation; ability to work in team. Interactive learning activity creates conditions for social perception and self-esteem optimization. It helps students to understand and evaluate themselves and their actions correctly as well as personality and actions of their partners when they work in team and regulate their behavior and desires according to partners' demands. The researcher has chosen a topic in this context as she felt it necessary to see how successful the interactive teaching methods in teaching the concept with to learn the perspective of students towards use of interactive teaching methodologies.

Concept of Interactive Teaching methods

Interactive teaching is a means of instructing whereby the teachers actively involve the students in their learning process by way of regular teacher-student interaction, student-student interaction, use of audio-visuals, and hands-on demonstrations. The students are constantly encouraged to be active participants

Understanding and meaning are emphasized, as opposed to mere rote memorization. This facilitates an environment fostering long-term memory retention. Studies have shown that while one-sided lecturing seems to be the easiest form of instruction for teachers, this form of instruction also promotes the least effective means of long-term memory retention with only 5 % being recalled on average after 24 hours. Recollection through verbal processing was a weak 5% average retention from lecture at 5% and 10% from reading. Recollection from a combined verbal and visual processing came in stronger with audio-visual producing 20% average retention after 24 hours; demonstration resulted in 30% recollection; and discussion group produced retention rates of 50%. Doing practices turned out to be the highest memory retention learning activity of all with 75% recollection from "practice by doing" and 90% average recall after 24 hours from teaching others/immediate application of knowledge.

Problem Statement

Teachers can help the students for processing and success or failures which issues to deal with crystal thinking objective of working in teaching corporate technology which can show teaching earning methods to create rich learning experiences for students and rewarding teaching exp for faculty. Teaching methods is to justify the end composition outcomes which can extend the curriculum in the classroom with the new hybrid educator which can capture qualities and quantities of teaching models.

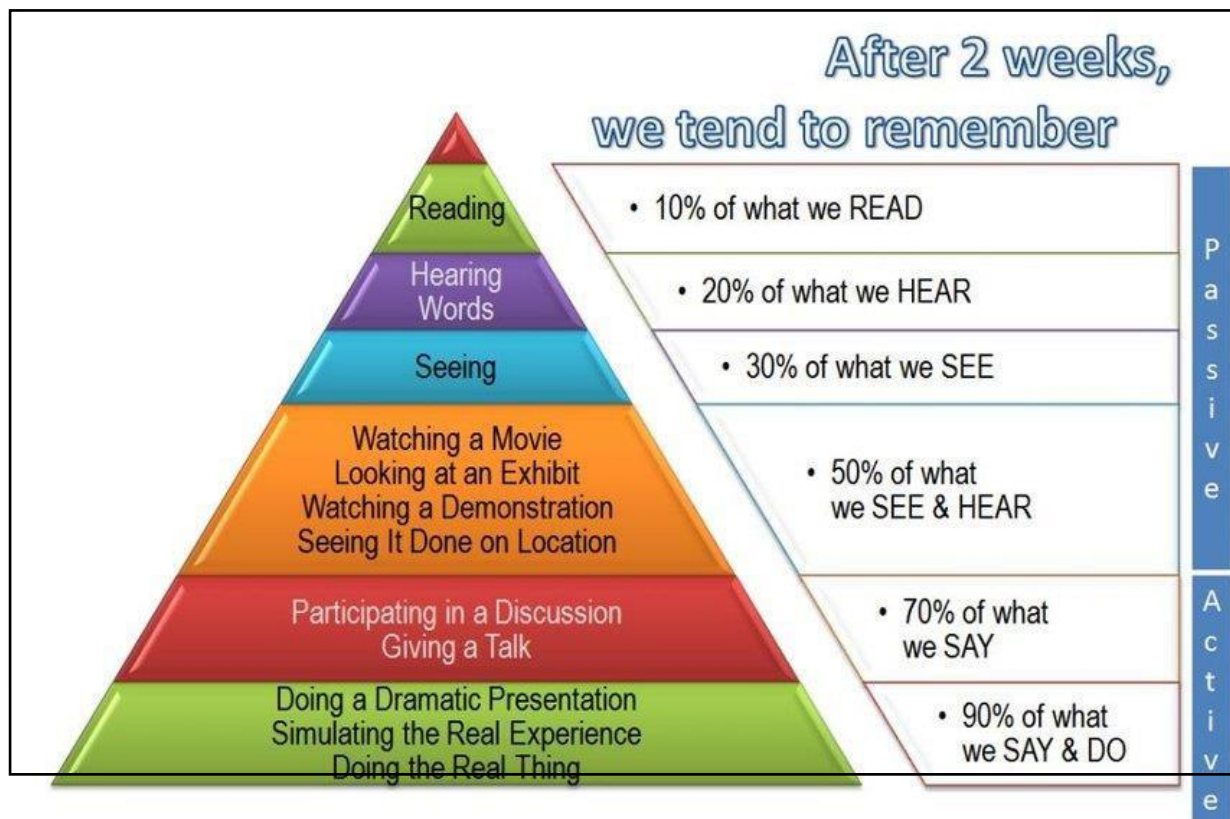
Objectives Of Study

The research mainly focuses on the objectives as defined below:

1. To identify the perception of students towards Interactive teaching methods
2. To compare the learning perception in commerce and Science respectively
3. To compare the gender Objective
4. Students response towards the teaching aids used in colleges.
5. To identify the need of up gradation in teaching aids used in college.

Literature Review:

A new quality of learning and teaching in general, is an absolute priority for education. The teachers are not only sources of information, they are also meant to lead managers and teaching so as to develop the interaction among students and training/development of key social personality traits. The students want to understand natural phenomena, to know scientific truths and to acquire knowledge to be applied in practice and for these reasons they are dissatisfied by the traditional education. The teachers and students, in most universities that have used the traditional lecture in courses, have revealed the limited effectiveness in both teaching and learning. The teacher must use methods to encourage discovery learning, heuristic and research methods. Dynamic and communicative teaching methods, also called interactive teaching methods, constitute the basic elements of a recently developed process to motivate learning, so that the students and future engineers develop a critical position about the taught content. Using interactive techniques and strategies, the students become more engaged in learning; retain more information, thus becoming more satisfied.



Studies conducted in Abroad

1) **Author name:** Dr. Nilgün Tosun, Trakya University, Faculty of Education, CEIT

Title: The Effect of Computer Assisted and Computer Based Teaching Methods on Computer Course Success And Computer Using Attitudes Of Students.

With contemporary teaching perspectives, some differences have occurred in teachers' roles. Teaching principles in which learning is emphasized as a basis considering individuals learning and teaching is emphasized as a basis considering the person teaching have also changed. According to Aşkar and Erden (1996), Keser (1998), the ways of using computers can be given as follows:



- The teacher teaches the subject with traditional method in classroom. Students who miss the lesson by any reason or who are unsuccessful or in need for learning can have an opportunity to learn the subject via computers. Here the computer is private teacher.
- After the teacher teaches the subject with traditional method, evaluation studies are made in the classroom by means of computers.
- After the teacher teaches the subject in the classroom, exercises, applications, and evaluations are carried out by means of computers.
- The subject is taught by computers. The teacher can compensate for learning deficiencies by means of discussion method; and correct the student's mistakes by examining them.
The advantages supplied by this method are as follows.
- It increases efficiency in education and instruction, it makes effectiveness easier in classroom.
- It makes education and instruction enjoyable and attractive.
- It motivates the students to the lesson by the help of sound- pictures and music.
- It makes it easier to repeat complicated problems, concepts and processes many times.
- It contributes to the student's intelligence to develop.
- It gives the students concrete experiences similar to real life.
- It causes the students and researchers to reach rich information sources.
- Mistakes in texts written can be corrected easily, and some additions and omissions can be made easily, too.
- It gives the students courage, ambition and excitement and in this way, it makes development and success of students easier.
- It develops the students' self-confidence.

The following suggestions were developed according to the results obtained from this study:

- This study can be carried out again by using an interactive teaching program, relieving the
- Deficiency of the instructor.
- Traditional teacher-centered teaching method and computer assisted teaching method were compared to each other at different school levels in the previous studies. But computer-based teaching method does not take place in these comparisons.

Studies Conducted In India

- In primary and high school levels, the differences of success and attitude of the methods of computer assisted teaching and computer-based teaching in both computer classes and also other classes should be investigated.
- This study can be developed as a comparison of computer assisted teaching method to internet assisted teaching method.

Author Name: S. Senthamarai , Department of Education, CK College of Education

Title: Interactive teaching strategies

The author has explained the interactive teaching strategies as:



Interactive teaching styles used in the classroom

Great teachers are nimble, observant, and responsive, always keeping an open mind about how to best engage their students and get them excited about learning—and that means considering trying out different interactive teaching styles in the classroom.

Interactive teaching styles are designed around a simple principle: without practical application, students often fail to comprehend the depths of the study material. Interactive teaching is also beneficial for you as the teacher in a number of ways, including:

- **Measurable student accomplishments:** Teachers making use of interactive teaching styles are better equipped to assess how well students master a given subject material.
- **Flexibility in teaching:** Applying training methods that involve two-way communications will enable you to make quick adjustments in processes and approaches.
- **Practice makes perfect:** Interactive instruction enhances the learning process.
- **Student motivation:** Two-way teaching dispels student passivity, and when more students are engaged, you'll have much more fun too.

Insight's Gained from the Review

The insight that were gained through the papers that were reviewed by the researcher are:

- Use of interactive teaching methods increases the two-way communications amongst the teacher and the student.
- It helps in a overall skill development of a student.
- Students gets actively engaged in such activities and are more interested to learn something.
- Increase in the efficiency of teachers.
- Relating the subject topics with the real- life examples.
- Developing confidence in the students and helps in minimizing the stage fear, expressing their views.

Methodology of the Study

The present study aimed to identify the need for updating the teaching methods through the use of interactive teaching methods. For that purpose, the researcher has chosen the descriptive method for the study.

Sampling

Sampling is the process of selecting units (e.g., people, organizations) from a population of interest so that by studying the sample we may fairly generalize our results back to the population from which they were chosen. Then, because some types of sampling rely upon quantitative models, we'll talk about some of the statistical terms used in sampling.

A sample design is a definite plan for obtaining a sample from a given population. It refers to the technique or the procedure the researcher would adopt in selecting items for the sample. Sample design is determined before data are collected. After completion of data collection, the researcher draws inferences and makes generalizations which are valid and can be applied to the whole population.

Types of Sampling

Types of sampling can be broadly classified into two categories-

1. Probability sampling
2. Non- probability sampling

Probability sampling - Probability sampling is a sampling technique where the samples are gathered in a process that



gives all the individuals in the population equal chances of being selected.

Non- probability sampling- Non-probability sampling is a sampling technique where the samples are gathered in a process that does not give all the individuals in the population equal chances of being selected.

Sampling Technique used for Present Study

For the present study, the researcher has used the non-probability type of sampling technique from which the random sampling was chosen for selecting of sample. The researcher has selected the students of different colleges.

Sample, Size and Nature

A sample of 56 students have been chosen from 3 Undergraduate colleges from Kalamboli, Vashi and Kharghar.

Data Collection

For the present study the data collection was undertaken in the following steps by the researcher:

- The researcher has selected the target students for the research.
- The researcher firstly observed the traditional teaching methods.
- The researcher then started implementing several teaching techniques like PPT, Seminars, Motivational Videos, Quizzes, Brainstorming, etc. on monthly basis.
- After the implementation the researcher circulated the questionnaire and collect the data.
- After collection of the data, it was administered and analyzed.

Technique of Data Analysis

The researcher has used graphical analysis technique through Pie diagrams. The analyses of data done through graph techniques to determine the optimal output is called Graphical analysis. One of the powerful tools used for data evaluation are the graphs. The graphs help in making summaries of characteristics of data in effective and efficient manner. Using graphical techniques, the complex equations or tests of statistics and mathematics can be interpreted.

Pie Chart: A pie chart (or a pie graph) is a circular statistical graphical chart, which is divided into slices in order to explain or illustrate numerical proportions. In a pie chart, central angle, area and an arc length of each slice is proportional to the quantity or percentages it represents.

Implementation of Research

The research was implemented by conducting various activities like Brainstorming, Seminar, Group Discussions etc.

- The students of Undergraduate classes were selected from the Kalamboli, Vashi and Kharghar college.
- The objectives for each activity were mentioned by the researcher.
- The researcher was knowing the traditional methods used for teaching.
- A total of 6 activities taken by the teachers were observed by the researcher in different classes of undergraduates
- The researcher provided proper and clear instructions to the students, before implementing each activity, so that the students understood the clear expectations of the researcher and the way the tasks they were required to do.
- The researcher made careful observations after the implementation of the activities
- The total time required to implement all 6 activities was approximately 6 hours.
- After the observation a Google form was circulated to the students through online modes where they were asked 15 questioned based on the teaching methodologies used in their colleges and their views.

Data collected was analyzed by using graphical analysis methods of Pie charts and conclusions were drawn.

5.4 INTERPRETATION OF DATA COLLECTED

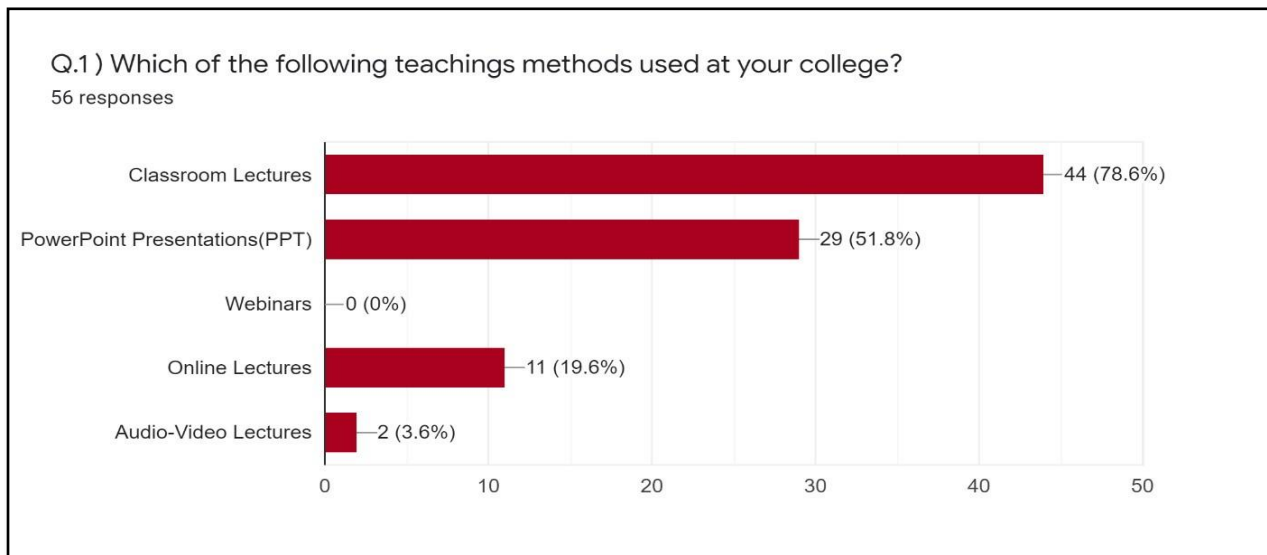


Figure 1

The above graph shows the graphical breakdown of the 56 responses received for the first question based on the teaching methods used in the particular student's college. In which 78% students answered Classroom lectures, 51.8% is for PowerPoint Presentations, 0% for Webinars, 19.6% answered Online Lectures and only 3.6% selected Audio-Video Lectures.

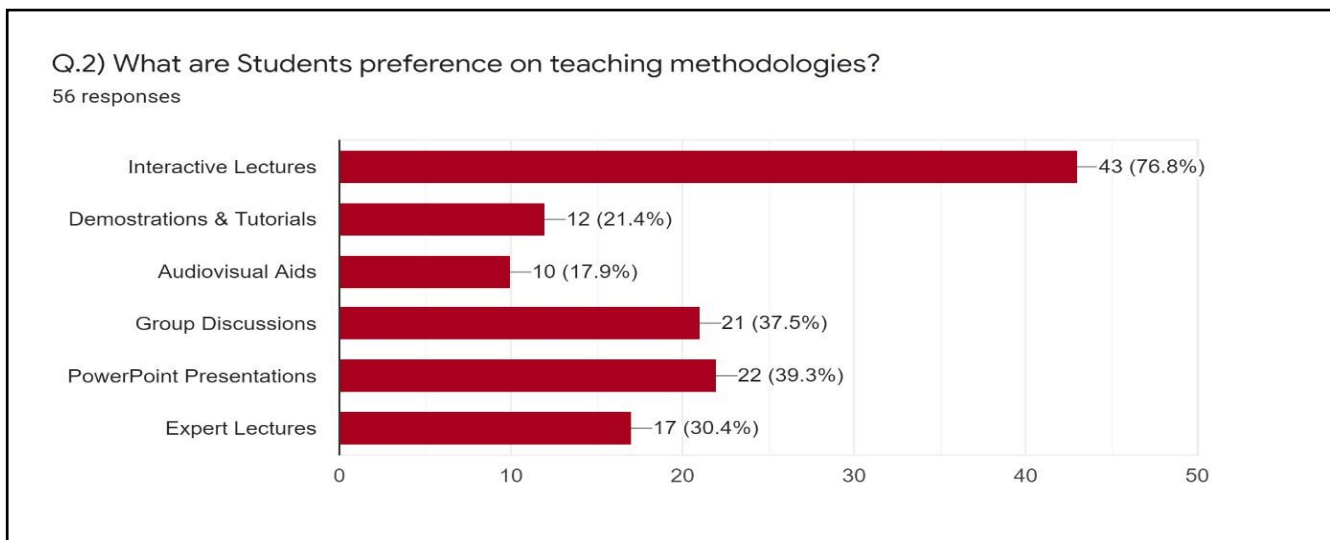


Figure 2

The above graph shows the graphical breakdown of the 56 responses received for the question based on the Students preference on teaching methods that should be used in the colleges. In which 76.8% students answered Interactive lectures, 21.4% is for Demonstrations & Tutorials, 17.9% for Audio-visual Aids, 37.5% answered Group Discussions,

39.3% answered PowerPoint Presentations and 30.4% selected Expert Lectures.

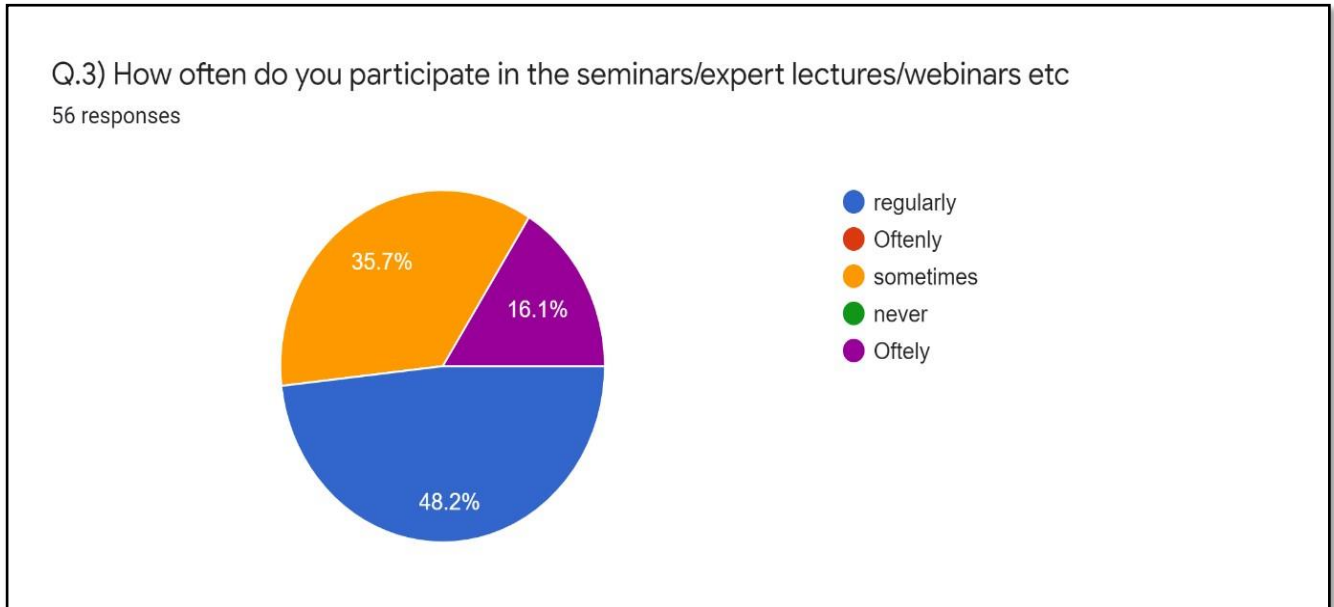


Figure 3

The above graph shows the graphical breakdown of the 56 responses received for the question based on the how often the students participate in the seminars/expert lectures or webinars organized in college. In which 48.2% students are regularly attend, 35.7% students attend sometimes and whereas 16.1% students often attend such sessions.

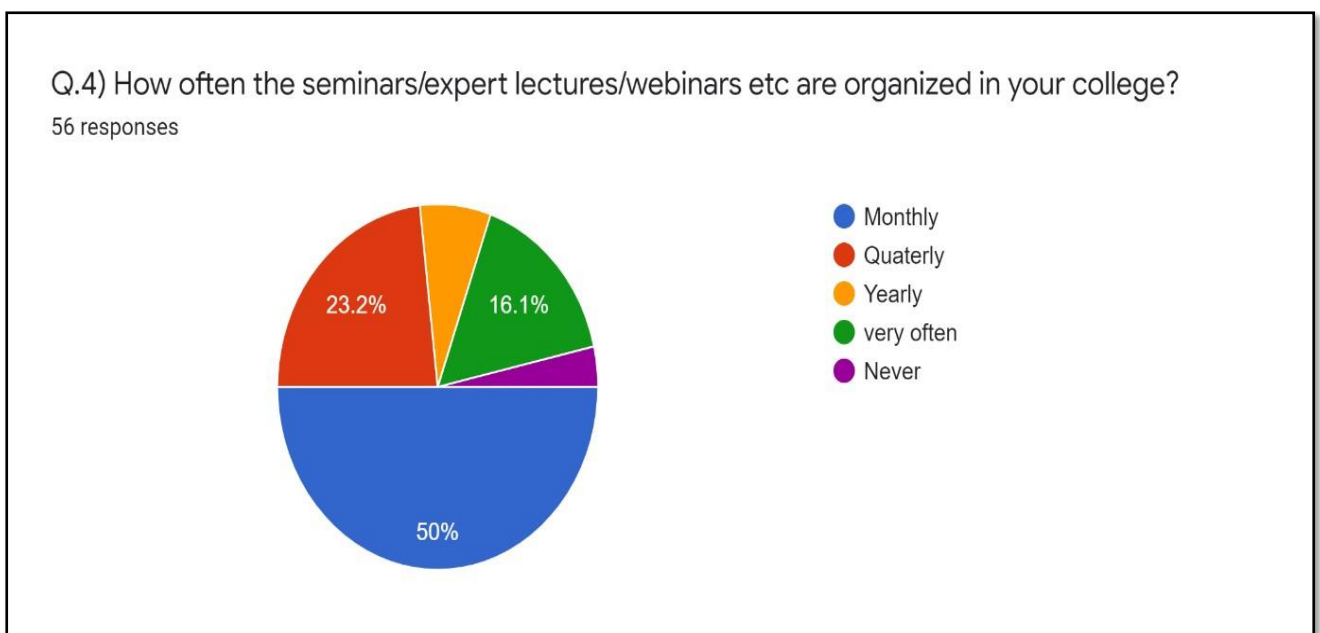


Figure 4

The above graph shows the graphical breakdown of the 56 responses received for the question based on the how often the seminars/expert lectures or webinars organized in college. In which 50% students answered Monthly, 23.2% say

quarterly, 7.1% answered yearly, 16.1 % answered very often and 2% students answered Never.

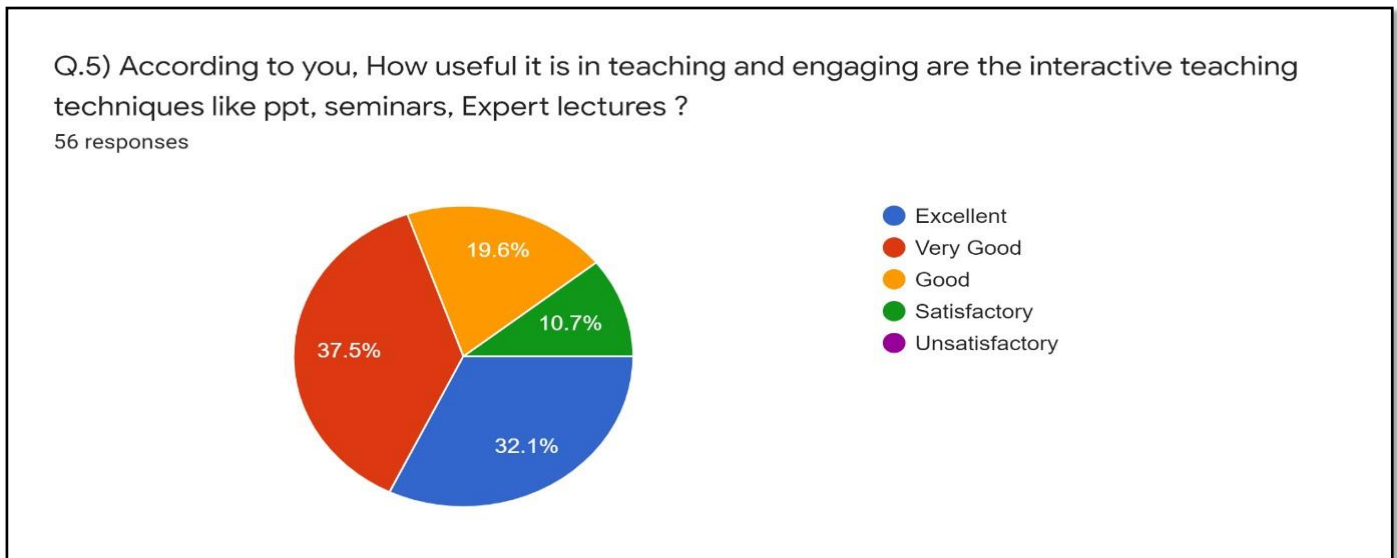


Figure 5

The above graph shows the graphical breakdown of the 56 responses received for the question based on the students perception towards the use of interactive teaching methods. In which 37% students answered Very Good, 32.1% say its excellent, 19.6% Good, and 10% students answered Satisfactory.

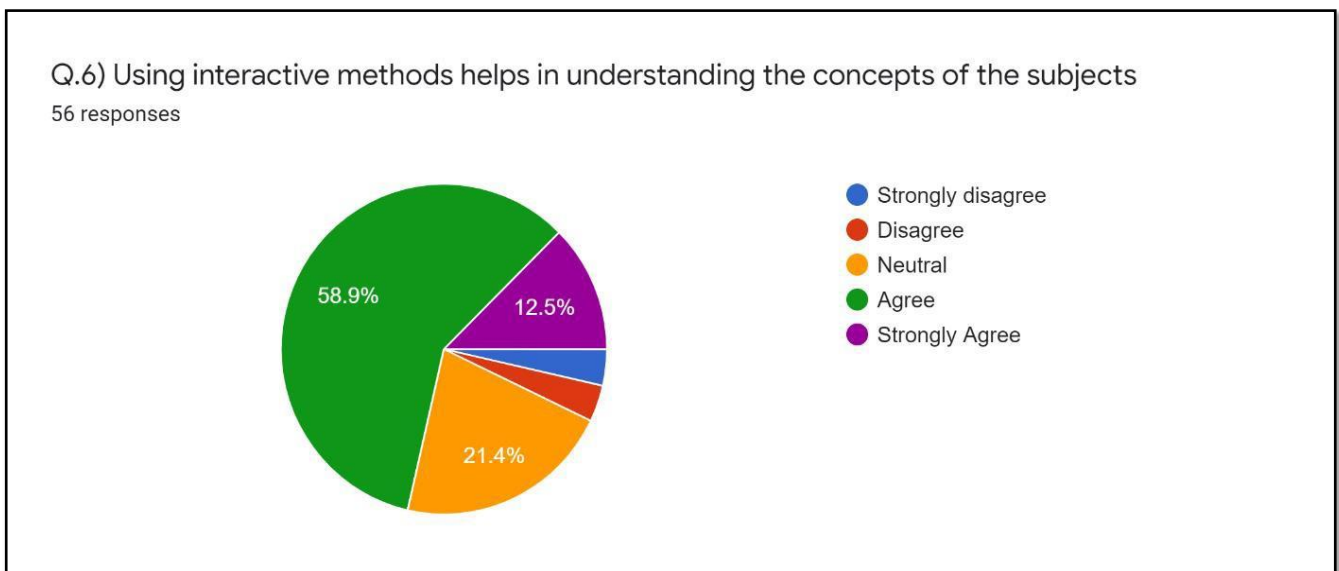


Figure 6:

The above graph shows the graphical breakdown of the 56 responses received for the question based on that Do use of interactive teaching helps in understanding the concepts. organized in college. In which 58.9% students answered that they agree, 21.4% were Neutral, 12.5% Strongly Agreed, 3.6% answered Disagree and 3.6% students answered Strongly Disagree.

Q.7) According to you, Are the subject outcomes met with the help of interactive teaching methodologies?

56 responses

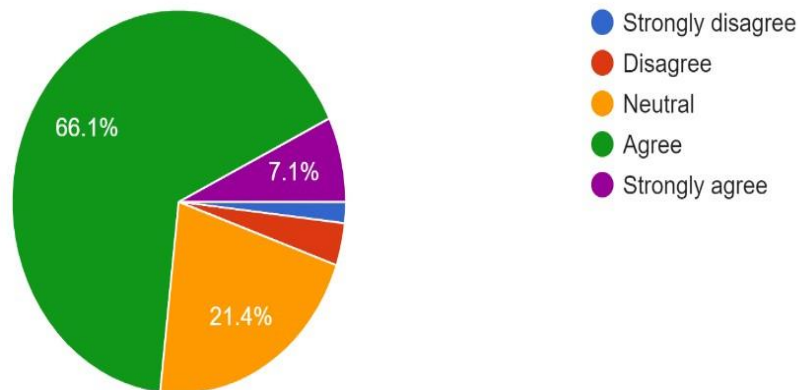


Figure 7

The above graph shows the graphical breakdown of the 56 responses received for the question based on that whether the subject outcomes are met. In which 66.1% students answered that they agree, 21.4% were Neutral, 7.1% Strongly Agreed, 3.6% answered Disagree and 1.8% students answered Strongly Disagree.

Q.8) The colleges should implement more interactive teaching methodologies along-with the classroom teaching?

56 responses

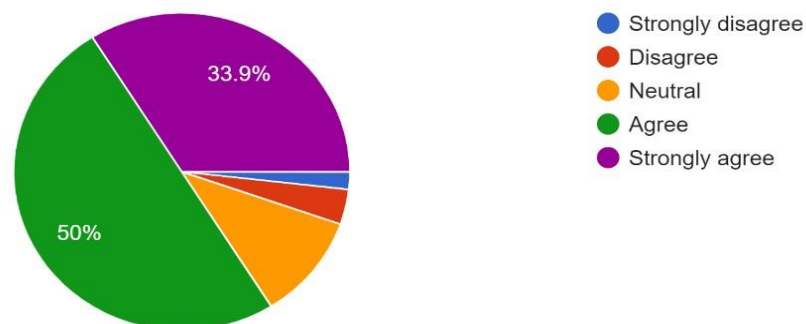
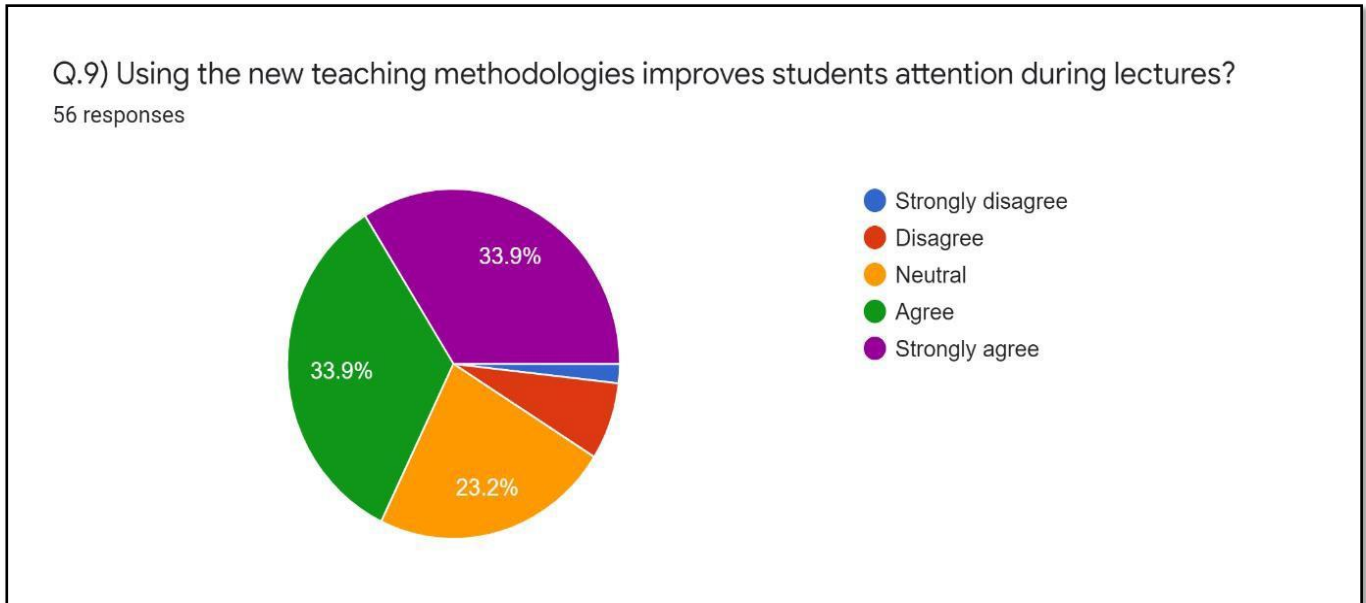
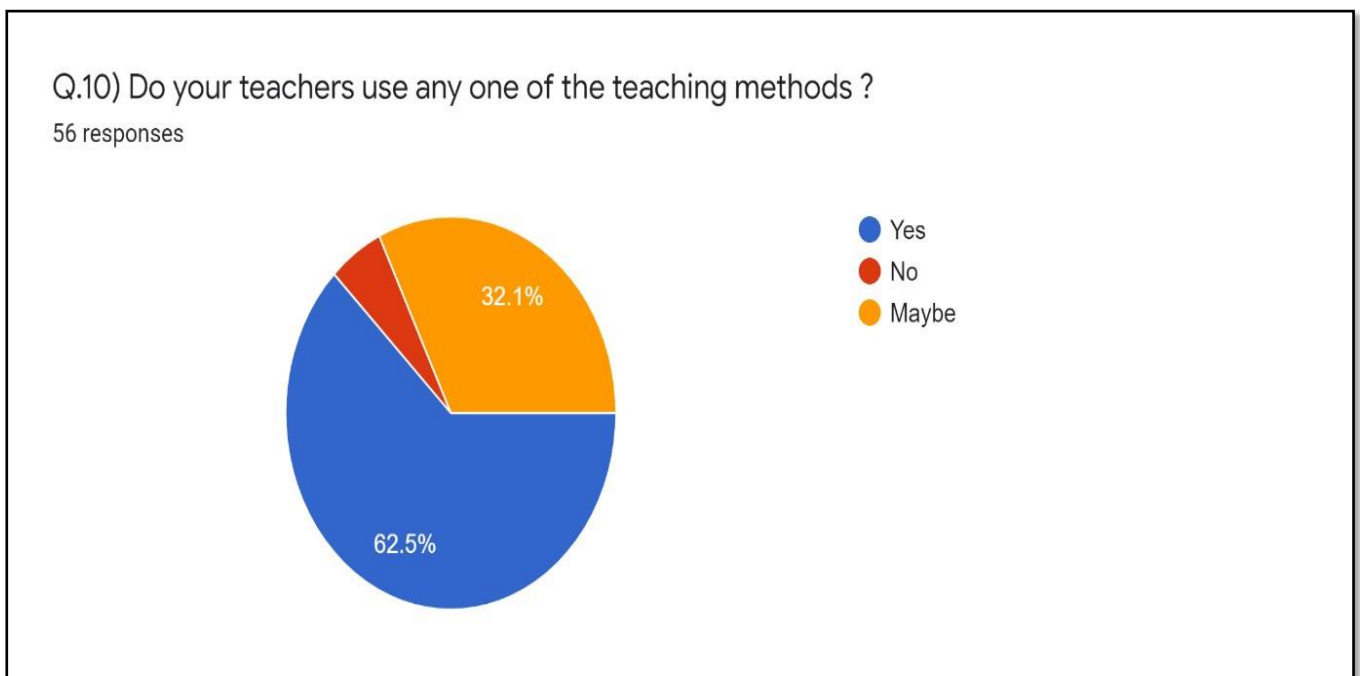


Figure 8

The above graph shows the graphical breakdown of the 56 responses received for the question based on that implementation of the interactive teaching methods. In which 50% students answered that they agree, 33.9% were Strongly Agreed, 10.7% answered Neutral, 3.6% answered Disagree and 1.8% students answered Strongly Disagree.

**Figure 9**

The above graph shows the graphical breakdown of the 56 responses received for the question based on that new teaching methods helps in improving students attention in lectures. In which 33.9% students answered that they agree, 23.2% were Neutral, 33.9% Strongly Agreed, 7.1 % answered disagree and 1.8 % students answered strongly disagree

**Figure 10**

The above graph shows the graphical breakdown of the 56 responses received for the question based on that do the teachers use interactive teaching aids. In which 62.5% students answered yes, 32.1% said No and 5.4% answered Maybe

Q.11) Do you consider using ppt, seminar, workshop, expert lecture etc. during lessons has a positive impact on your studies?

56 responses

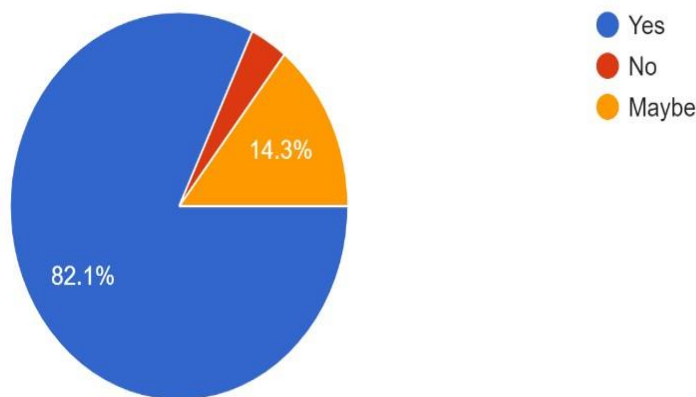


Figure 11

The above graph shows the graphical breakdown of the 56 responses received for the question based on that whether there is any positive outcome of using new teaching methods. In which 82.1% students answered yes, 5.4% said No and 14.3% answered Maybe.

Q.12) Should students actively participate in such innovative teaching methodologies?

56 responses

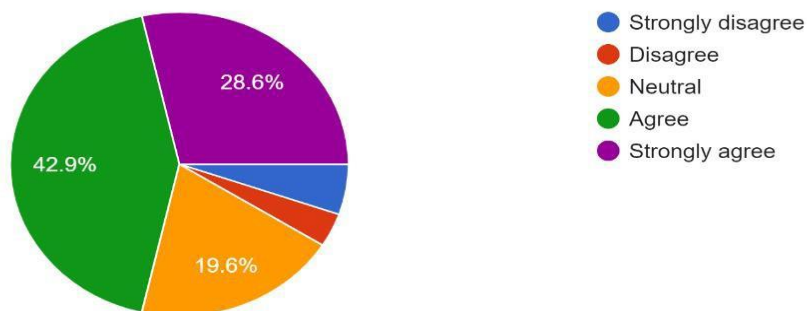


Figure 12

The above graph shows the graphical breakdown of the 56 responses received for the question based on that whether the students should actively participate. In which 42.9% students answered that they agree, 28.6% were Strongly Agree, 19.6% were Neutral, 7.1% Strongly Disagreed, 3.6% answered Disagree and 1.8% students answered Strongly Disagree.

Q.13) Does it helps in covering the syllabus on time?

56 responses

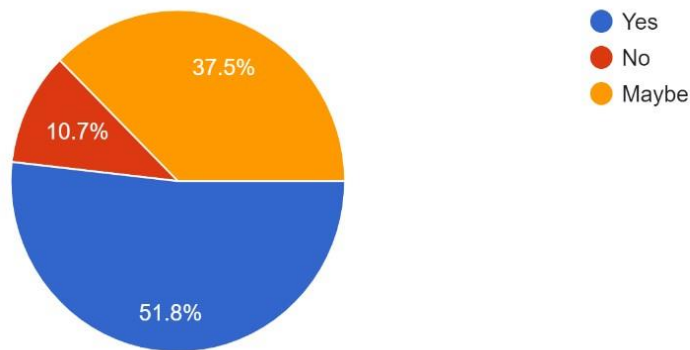


Figure 13

The above graph shows the graphical breakdown of the 56 responses received for the question based on that whether it help in syllabus coverage. In which 62.5% students answered yes, 32.1% said No and 5.4% answered Maybe.

Q.14) Does it helps in building the interest in the subject ?

56 responses

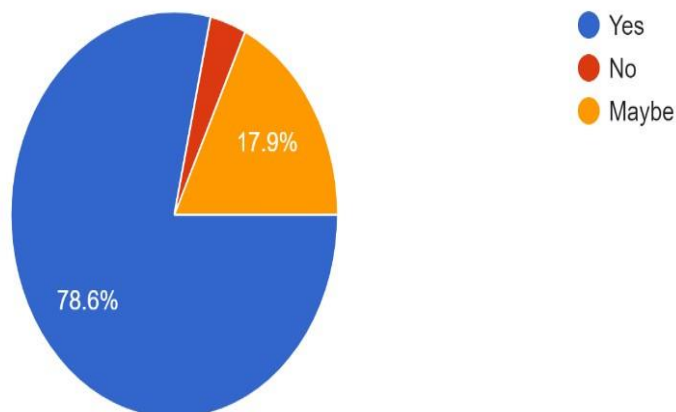


Figure 14

The above graph shows the graphical breakdown of the 56 responses received for the question based on that whether helps in building interest amongst students . In which 62.5% students answered yes, 32.1% said No and 5.4% answered Maybe

Q.15) Suggestions(if any)

20 responses

If possible clg should provide the ppt presentation at exam time to all the students this will help the students by building there confidences and skills .

Technology fields such as computer science and information technology. Teaching should be more practical based rather than theory based. Project based learning should be implemented.

Yes!! Doing excellent job keep it up maam. Any support from my end i will help how much i can and also find different and interesting methods so student can attend the lectures and learn in funny ways.

The learning ability and understanding is good of subjects when all these technology is there in classroom. So it should be there in educational areas.

Use of ppt, seminar helps in enhancing the imagination power of students nd they are able to see it practically how it is use nd all

Figure 15

The above mentioned are the suggestion given by the students in the survey

Findings

The finding of the survey done are:

- Learning can be enhanced through interactive lectures as compared to traditional ones and there was positive perception among students and faculties, so it is strongly recommended to train the faculty members in the various interactive methods but still further research is needed on a larger sample to improve external validity.
- Introduction of interactivity in the lectures was agreed as enjoyable and fun, increasing enthusiasm and interest, active participation, making the teaching environment livelier, improving the attention span, breaking the monotony.
- The students perceived that interactivity improves the recall and retention of knowledge, understanding of the subject, clearing of doubts, better understanding and critical thinking. Also, interactivity improves the confidence and communication skills were agreed by the students as well.
- The learning ability and understanding is good of subjects when all these technologies is there in classroom. So, it should be there in educational areas.

The equation for calculating an arithmetic mean is virtually identical to that for calculating the statistical concepts of population and sample mean, with slight variations in the variables used:

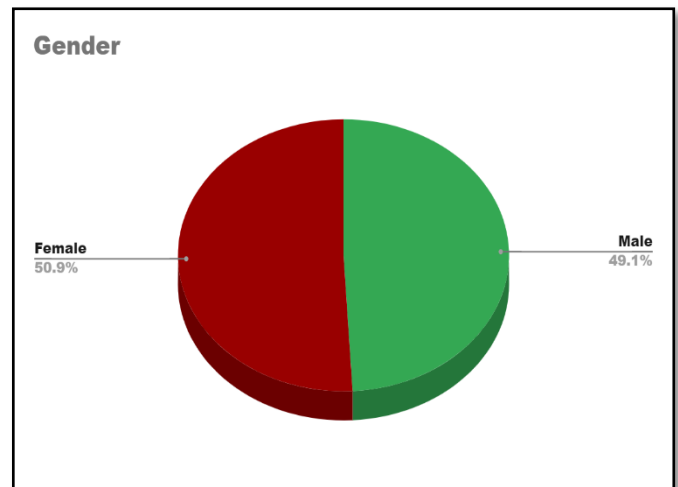
$$\bar{x} = \frac{1}{N} \sum_{i=1}^N x_i$$

Graph

Interpretation

The mean is often denoted as \bar{x} , pronounced "x bar," and even in other uses when the variable is not x , the bar notation is a common indicator of some form of mean. In the specific case of the population mean, rather than using the variable \bar{x} , the Greek symbol mu, or μ , is used. Similarly, or rather confusingly, the sample mean in statistics is often indicated with a capital \bar{X} . Given the data set applying the summation above yields the gender of male and female.

Percentage of Male = 50.9% and Female = 49.1%



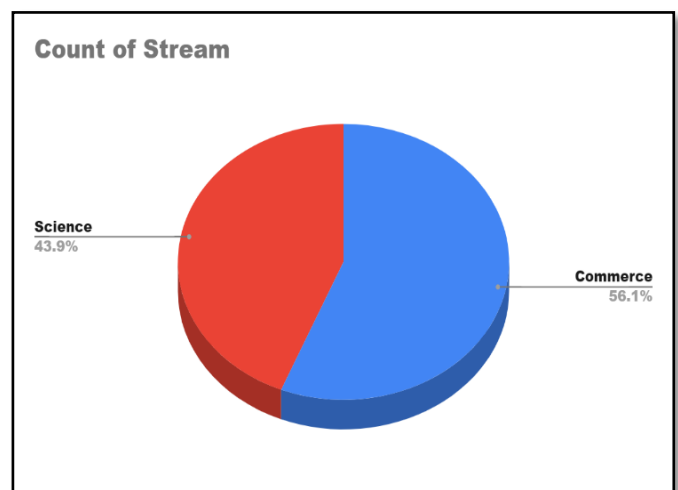
Graph:

Interpretation:

As previously mentioned, this is one of the simplest definitions of the mean, and some others include the stream of Commerce and Science Data indicating the summation above yields

Percentage Science = 43.9%

Percentage Commerce = 56.1%



Recommendations For Further Research

- The use of the new trend in education i.e. interactive teaching method and Strategies enhances the academic achievement of the teacher trainees in education and also enhances a student's grasping power towards a topic or subject.
- This teaching program gives more scope for having more interactions in the class- rooms and in making the learning process more interesting and joyful.
- It is recommended that the similar study can be carried out for teaching other subjects also.
- A comparison between interactive teaching method and other methods of teaching can also be carried out to find out the most effective method can also be done.
- The Correlation between learning style and thinking style of the students can also be studied.



| Sr. No. | Questions |
|---------|---|
| 1 | Which of the following teachings methods used at your college? <ul style="list-style-type: none">• Classroom Lectures• PowerPoint Presentations(PPT)• Webinars• Online lectures• Audio-Video Lectures |
| 2 | What are Students preference on teaching methodologies? <ul style="list-style-type: none">• Interactive• Demonstration and Tutorials• Audio-visual Aids• Group Discussions• PowerPoint Presentations• Expert Lectures |
| 3 | How often do you participate in the seminars/expert lectures/webinars etc Regularly <ul style="list-style-type: none">• Often• Sometimes• Never |
| 4 | How often the seminars/expert lectures/webinars etc are organized in your college? <ul style="list-style-type: none">• Monthly• Quarterly• Weekly• Very Often• Never |
| 5 | According to you, How useful it is in teaching and engaging are the interactive teaching techniques like ppt, seminars, Expert lectures? <ul style="list-style-type: none">• Excellent• Very Good• Good• Satisfactory• Unsatisfactory |
| 6 | Using interactive helps in understanding the concepts of the subjects? <ul style="list-style-type: none">• Strongly Disagree• Disagree• Neutral• Agree• Strongly Agree |
| 7 | According to you, Are the subject outcomes met with the help of interactive teaching methodologies? <ul style="list-style-type: none">• Strongly Disagree• Disagree• Neutral• Agree• Strongly Agree |



| | |
|----|---|
| 8 | <p>The colleges should implement more interactive teaching methodologies along-with the classroom teaching?</p> <ul style="list-style-type: none">• Strongly Disagree• Disagree• Neutral• Agree• Strongly Agree |
| 9 | <p>Using the new teaching methodologies improves students attention during lectures?</p> <ul style="list-style-type: none">• Strongly Disagree• Disagree• Neutral• Agree• Strongly Agree |
| 10 | <p>Do your teachers use any one of the teaching methods ?</p> <ul style="list-style-type: none">• Yes• No• Maybe |
| 11 | <p>Do you consider using ppt, seminar, workshop, expert lecture etc. during lessons has a positive impact on your studies?</p> <ul style="list-style-type: none">• Yes• No• Maybe |
| 12 | <p>Should students actively participate in such innovative teaching methodologies?</p> <ul style="list-style-type: none">• Strongly Disagree• Disagree• Neutral• Agree• Strongly Agree |
| 13 | <p>Does it helps in covering the syllabus on time?</p> <ul style="list-style-type: none">• Yes• No• Maybe |
| 14 | <p>Does it helps in building the interest in the subject ?</p> <ul style="list-style-type: none">• Yes• No• Maybe |
| 15 | Suggestions (if any) |

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