

Hindusthan College of Engineering and Technology

(An Autonomous Institution, Affiliated to Anna University)
Coimbatore 641 032

DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

Collaborative Learning

Collaborative learning is a situation in which more than one student learn or attempt to learn together. Options are given to students to acquire knowledge through discussions and debates on current technology.

GROUP DISCUSSION







Hindusthan College of Engineering and Technology

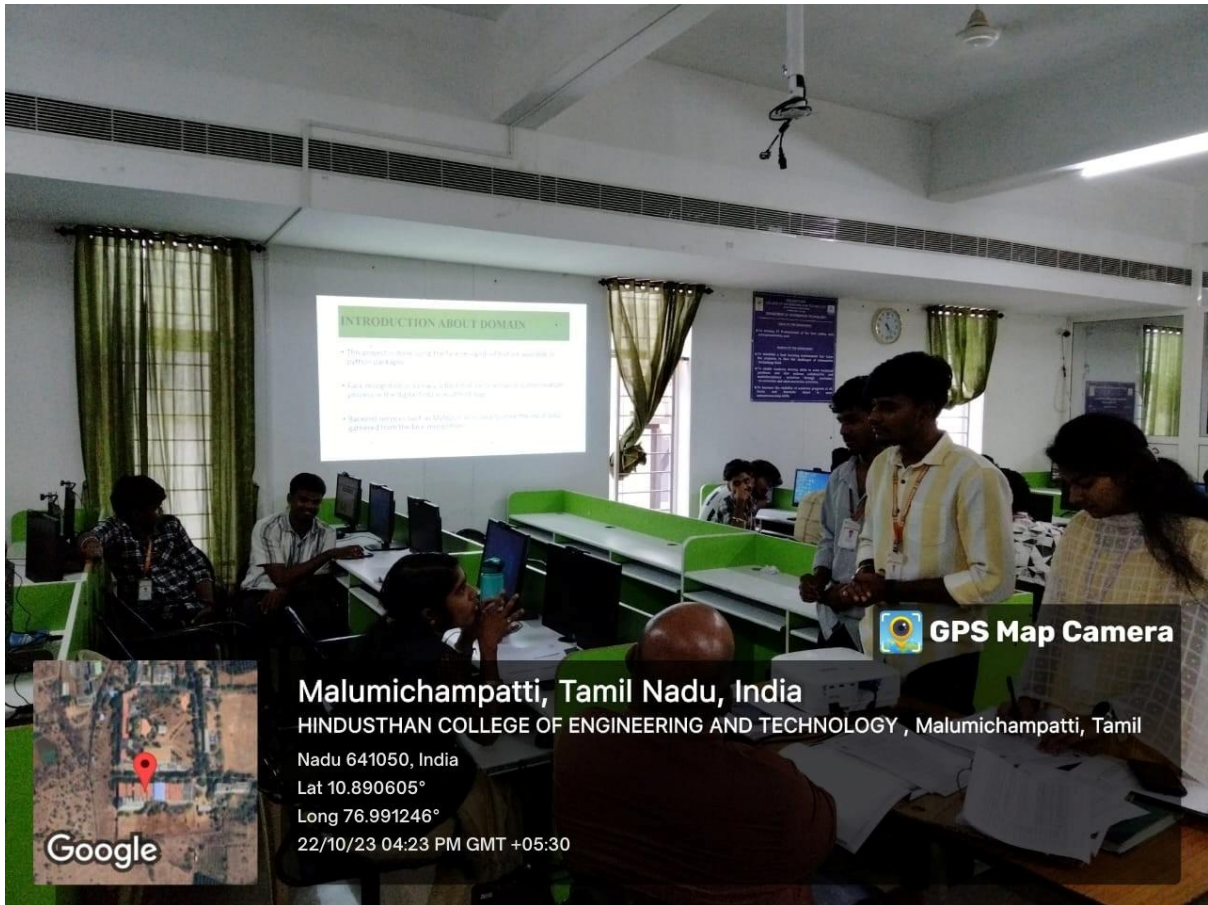
**An Autonomous Institution, Approved by AICTE, New Delhi, Affiliated to Anna University
Valley Campus, Pollachi Highway, Coimbatore 641032**



DEPARTMENT OF INFORMATION TECHNOLOGY

GROUP LEARNING







M. Sabarajith
HoD



Hindusthan College of Engineering and Technology

Autonomous Institution, Approved by AICTE, New Delhi, Affiliated to
University



Valley Campus, Pollachi Highway, Coimbatore 641032.

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

“Technology is best when it brings people together”- Matt Mullenweg

GROUP DISCUSSION



 **GPS Map
Camera Lite**

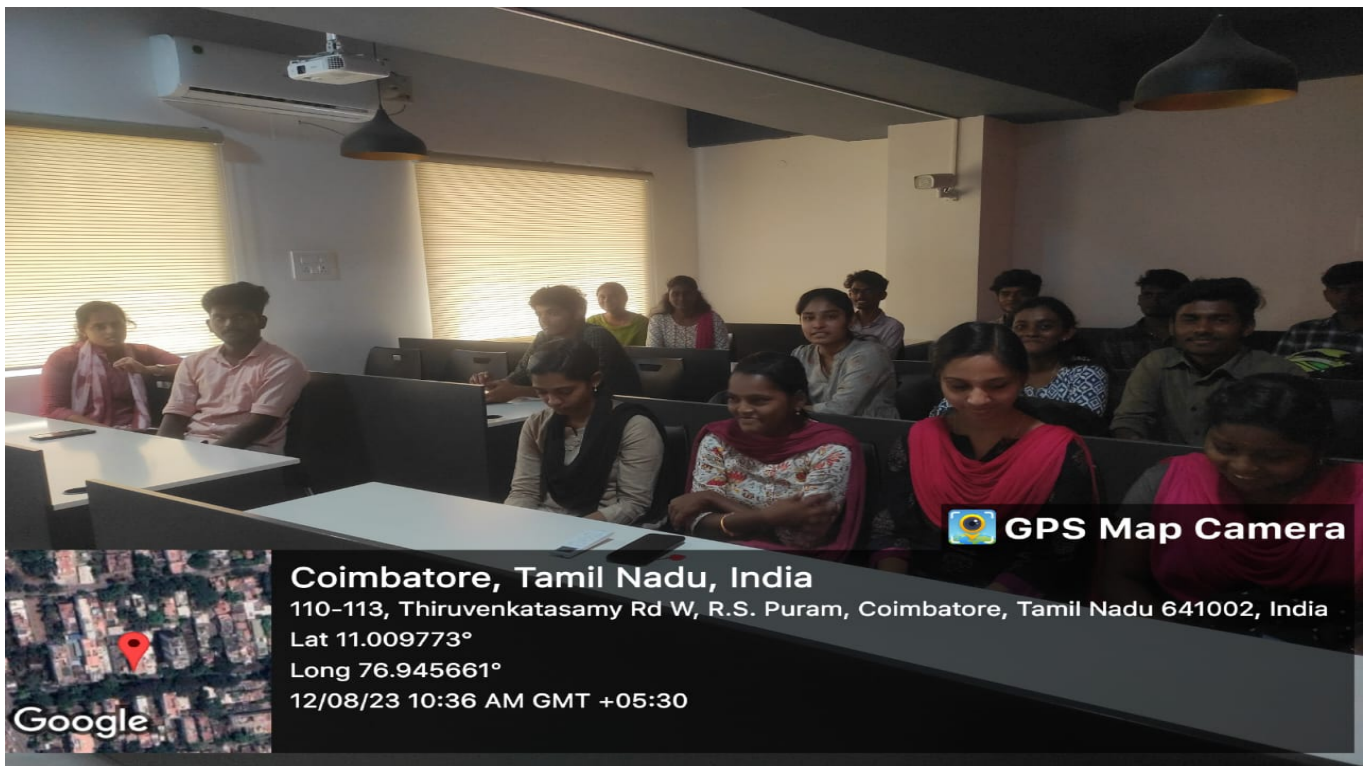
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GMT 05:01:44 AM

Altitude 362 meters
Friday, 18.08.2023



 **GPS Map Camera**

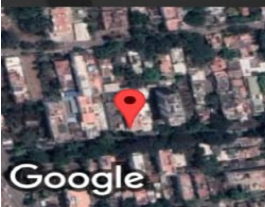
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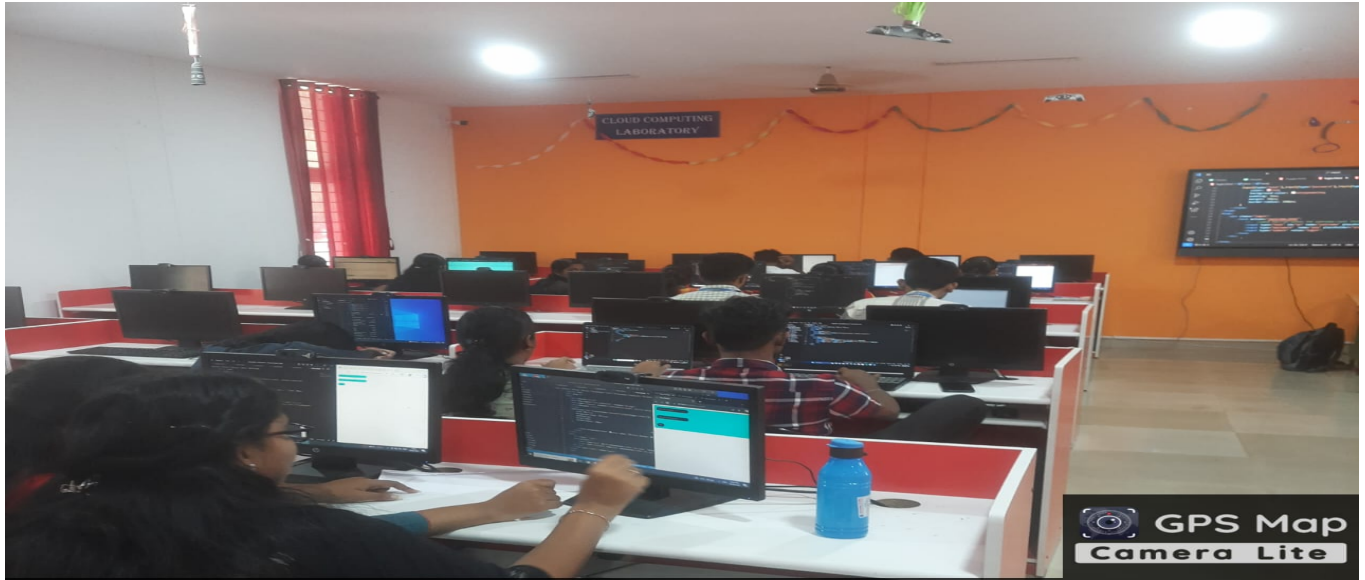
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Google



GPS Map
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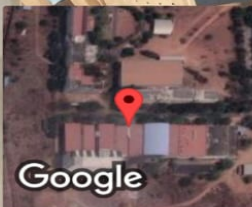
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GPS Map Camera



Malumichampatti, Tamil Nadu, India
VXRR+8G5, Malumichampatti, Tamil Nadu 641050, India
Lat 10.890584°
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GPS Map Camera



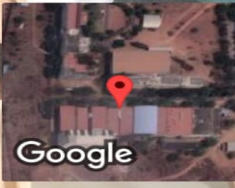
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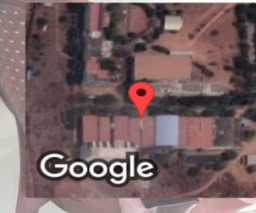


Malumichampatti, Tamil Nadu, India
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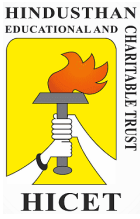
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GPS Map Camera



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GPS Map Camera



Hindusthan College of Engineering and Technology

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Valley Campus, Pollachi Highway, Coimbatore – 641032



Department of Electrical and Electronics Engineering

GROUP LEARNING

Use of Various Instructional Methods and Pedagogical Initiatives

Instructional Methods

- ❖ Pedagogies play an important role in delivery of the content and it varies with the audience. Student Centric learning methods are implemented to provide students with the best learning environment.
- ❖ Few hours are allotted in the lesson plan to teach content beyond the syllabus for every subject.
- ❖ All the Faculty are obliged to have registers for maintaining the attendance of the students.
- ❖ The course files are prepared for every subject by the subject handling Faculty.
- ❖ In order to reduce the gap between industry and institutes, industrial visits, Inplant Training and hands on practice workshops are arranged every semester.

Classroom teaching

Faculty deliver their lecture through a set of educational technology/tools such as:

- Chalk and talk - black board.
- Power Point Presentation (PPT).
- Animated videos
- Conceptualized Learning through animated Videos
- Crossword
- Demonstration
- Flash Cards
- Flipped Class Room
- Google Classroom
- Mind Map
- Peer to Peer learning
- Quiz by Google form
- Short Presentation
- Simulation based teaching and learning
- Socio constructive Approach

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Smart Classroom

All the classrooms are equipped with a smart board. Smart boards are more flexible compared to the white boards in the way that we can explain the concepts in a lucid manner to the students with the help of pictures and videos. It creates the learning environment more interactive. Smart boards allow integration of various technologies in order to improve the learning experience. For instance, it is possible to connect the student mobile phones to the whiteboard to aid in instruction. It is enriched to integrate the interactive learning tools with a wide range of software applications. The entire lecture delivery through the smart board can be converted and saved as PDF. Saved format could be sent to students for their reference and therefore it would benefit the absentees as well.



Figure 2.2.1.5: Smart Classroom

Snap Talk

Faculty members conduct a 5 minutes snap talk in the middle of their lecture hour and review it to help students understand where they stand. Snap talk is a technique that helps the students to improve their English communication and to overcome stage fear. First year students give the snap talking their interested topics. The Second-Year students select the topic from glossary of terms or subject, which are circulated earlier by the Department. Third and Final Year students are given specific topic by the faculty on the spot.



Figure 2.2.1.9: Student's Presentation during Snap Talk Time

Interactive Learning

Every student learns differently, and learning styles can vary from student to student, from visual, to aural, verbal, physical or logical learning styles. But there's one type of learning that benefits most students, and that's working model Demonstration Learning.



Figure 2.2.1.10: Interactive Learning

Self – Learning Courses

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Students are encouraged to register for at least one Online Course during their course of study. The participation of students in NPTEL, Learnathon, NASSCOM and Online Courses are evidence of their self-learning capabilities. These enable them to enrich their thorough subject knowledge with current trends, and also to equip themselves with inter-domain subjects. It is also considered as a key for lifelong learning. Students are encouraged to self-learn through spoken tutorial platform too. Sample certifications from self-learning portals that our students have received are shown below. We also encourage the students to include the online course as internal components for respective subjects.



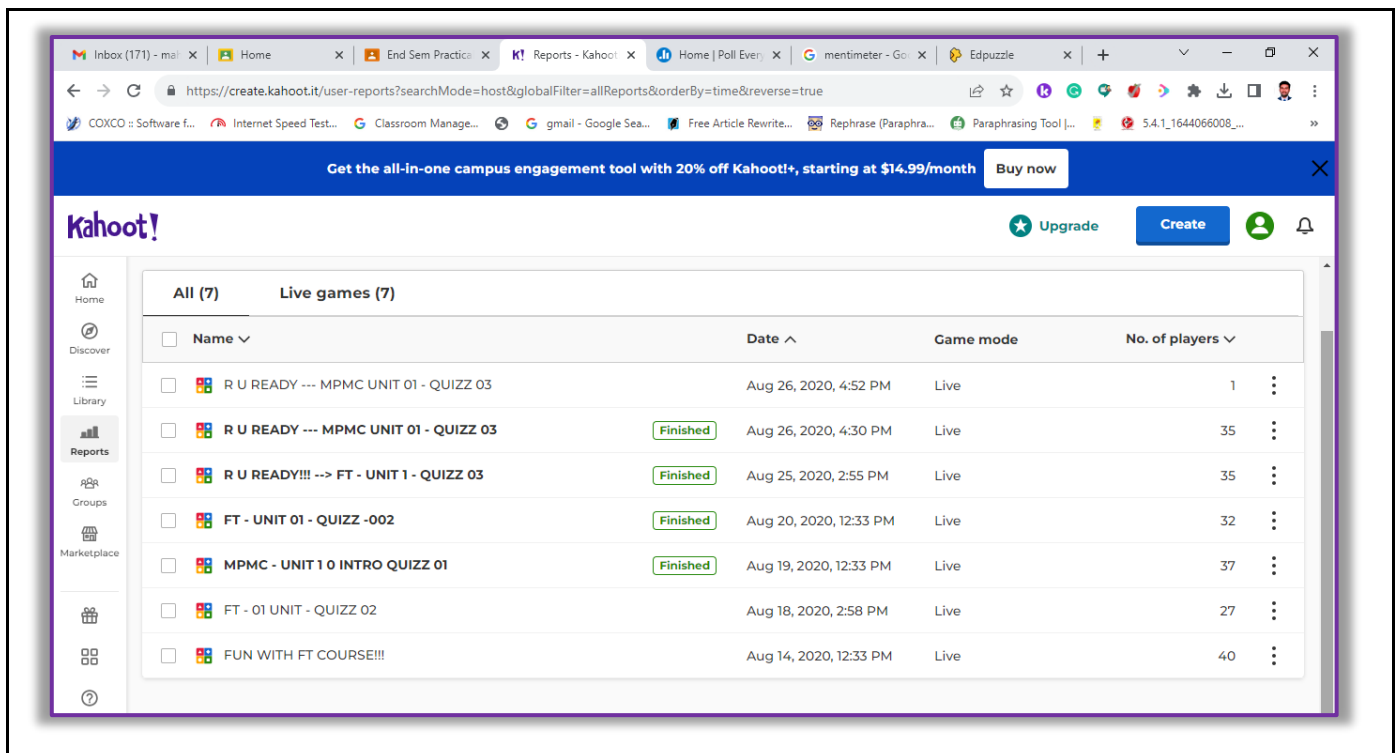
Figure 2.2.1.11: Students Completion of Online Course

Information and Communication Technology (ICT) Supported Learning

ICT tools help to improve the quality of Teaching Learning process by increasing student motivation, connecting students to a variety of knowledge sources, supporting active in-class and out-of-class learning

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settings, and allowing faculty to devote more time to facilitation. As a result, many educators are turning their attention to the use of ICT tools in the teaching and learning process. Students' drive, self-confidence, and self-esteem to learn are all boosted by these technologies. Furthermore, modern technologies often encourage independent and active learning, making students feel more responsible in their own education. A large body of study on the role of ICT in modernizing learning and teaching has prompted attempts to use these technologies in order to improve educational quality, flexibility, access, and affordability. Due to the Covid-19 pandemic situation, the classes were conducted via online platform (Google Classroom). To empower the faculties to effectively conduct online classes, workshops on ICT tools with hands on training were provided to ensure an involving Teaching-Learning experience.



The screenshot shows the Kahoot! user reports page. The page title is "All (7) Live games (7)". The table below lists the games with their names, dates, game modes, and the number of players.

Name	Date	Game mode	No. of players
R U READY --- MPMC UNIT 01 - QUIZZ 03	Aug 26, 2020, 4:52 PM	Live	1
R U READY --- MPMC UNIT 01 - QUIZZ 03	Aug 26, 2020, 4:30 PM	Live	35
R U READY!!! --> FT - UNIT 1 - QUIZZ 03	Aug 25, 2020, 2:55 PM	Live	35
FT - UNIT 01 - QUIZZ -002	Aug 20, 2020, 12:33 PM	Live	32
MPMC - UNIT 1 0 INTRO QUIZZ 01	Aug 19, 2020, 12:33 PM	Live	37
FT - 01 UNIT - QUIZZ 02	Aug 18, 2020, 2:58 PM	Live	27
FUN WITH FT COURSE!!!	Aug 14, 2020, 12:33 PM	Live	40

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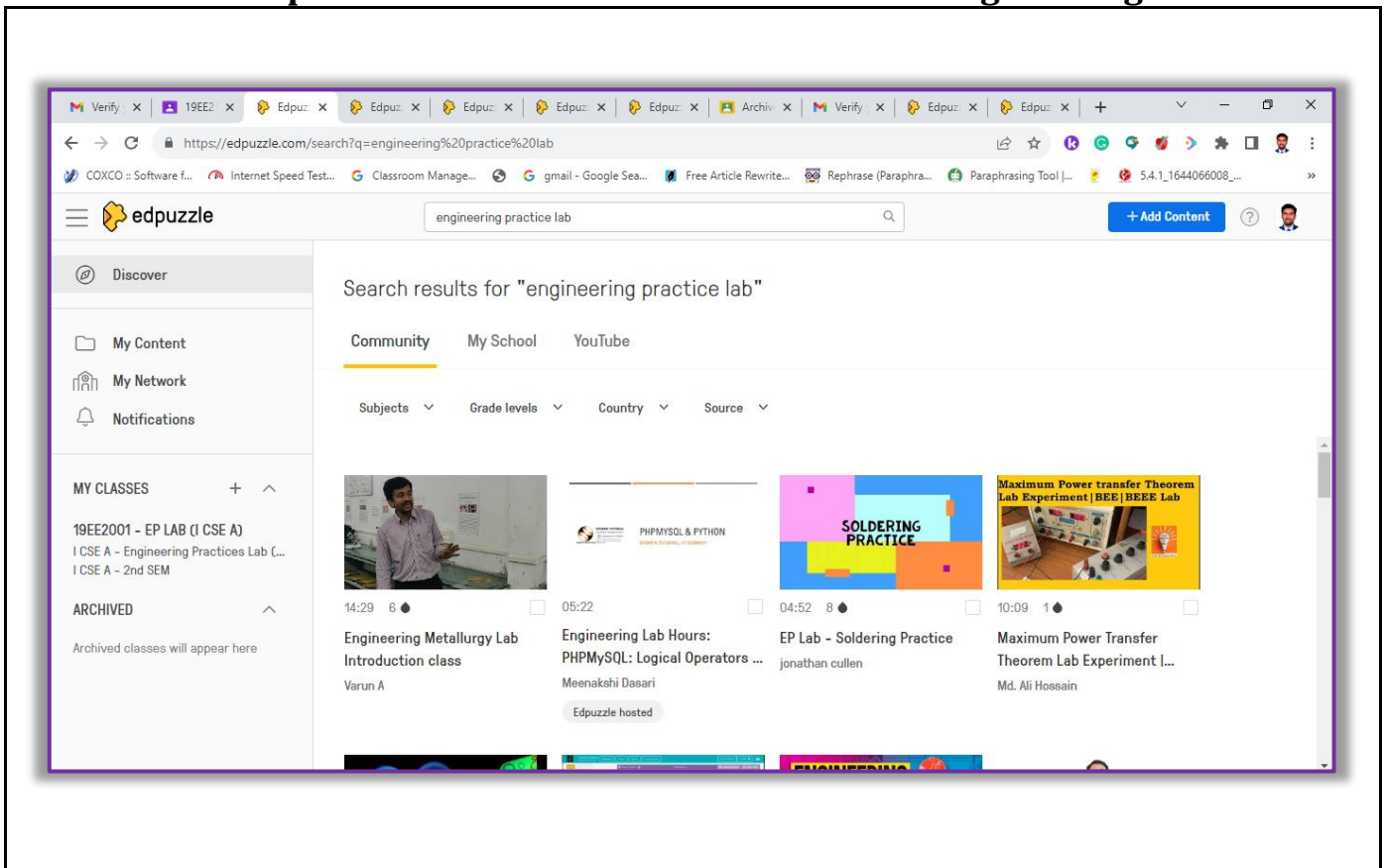
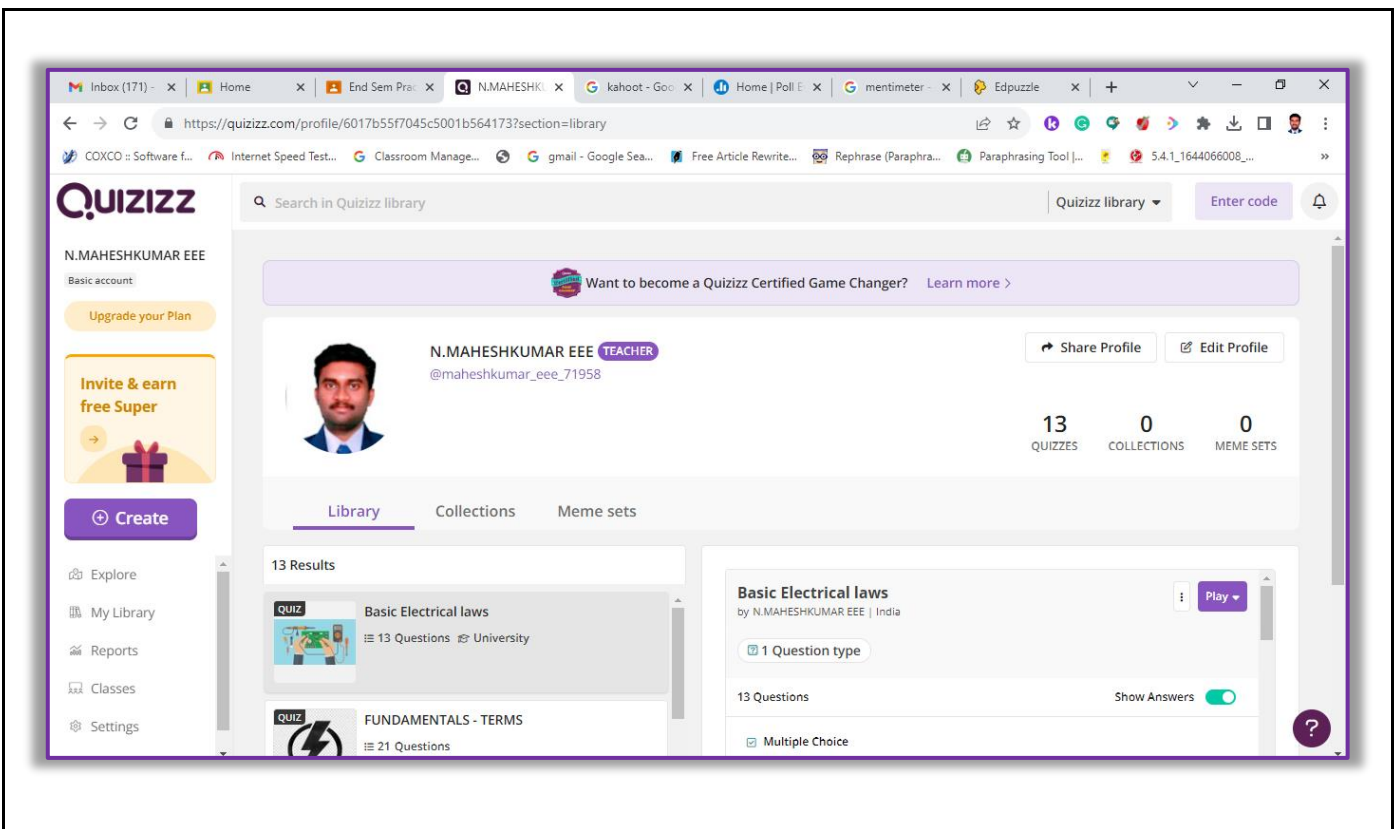


Figure 2.2.1.12: ICT Tools – Kahoot Platform



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Figure 2.2.1.13: ICT Tools - Quizizz Platform

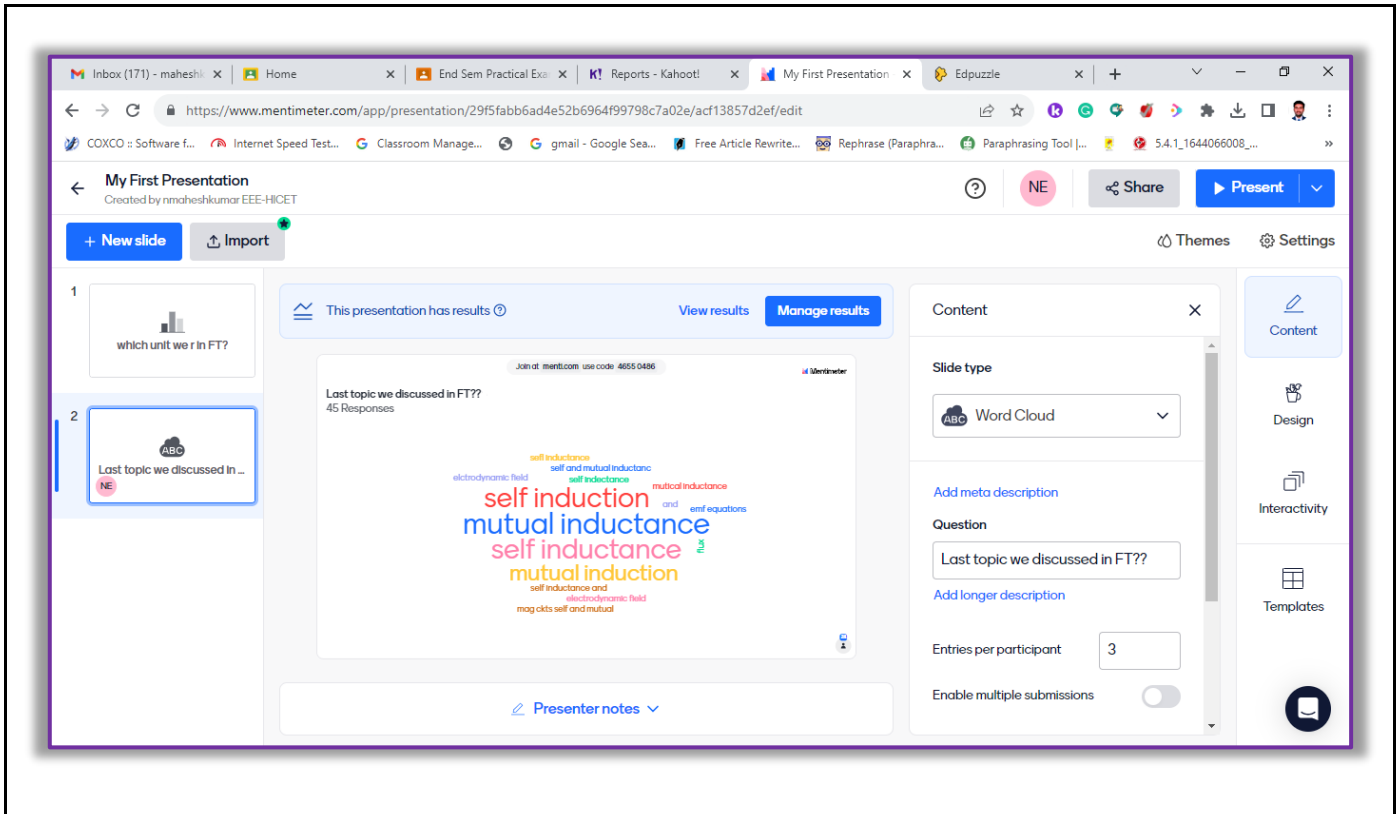


Figure 2.2.1.14: ICT Tools – Dunno Platform

Involvement of Students in Technical Activities

Students are encouraged to involve themselves in presenting innovative technical ideas in International and National Conferences, working on products which can be patented. Students are encouraged continuously to involve themselves in various competitions such as Paper Presentation, Project Expo and International/National Conferences.

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Figure 2.2.1.13: Technical Activities

Competitive Examination

Competitive Examination is an examination where students all over the country or state are ranked according to their grades and percentile and then top ranked students are selected. Competitive exams will enhance the skill of understanding the application of concepts, which is a pre requisite in a broader context when student appear for exams like GATE, TOFEL, GRE, CAT, Civil Service, etc.,

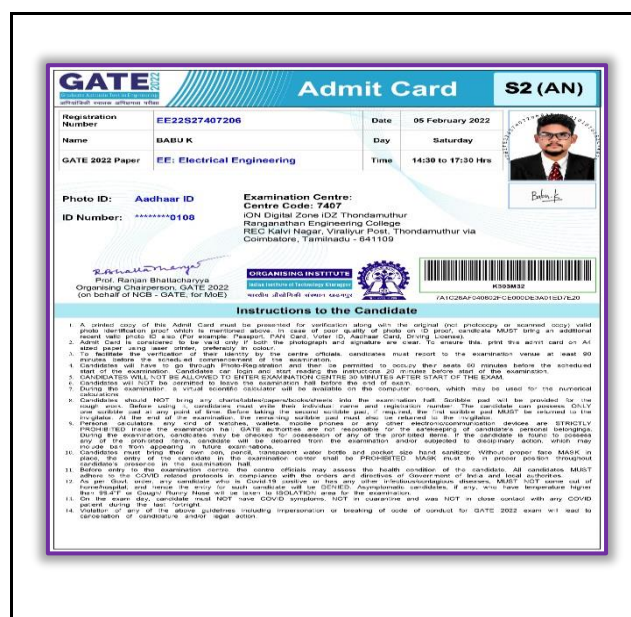


Figure 2.2.1.14: Admit Card for GATE Examination

Department of Electrical and Electronics Engineering Collaborative Learning

Collaborative Learning is a regular practice followed to motivate the peer learning activity, in which the fast grabbers in the team can support the slow learners to study and understand the concepts easily.

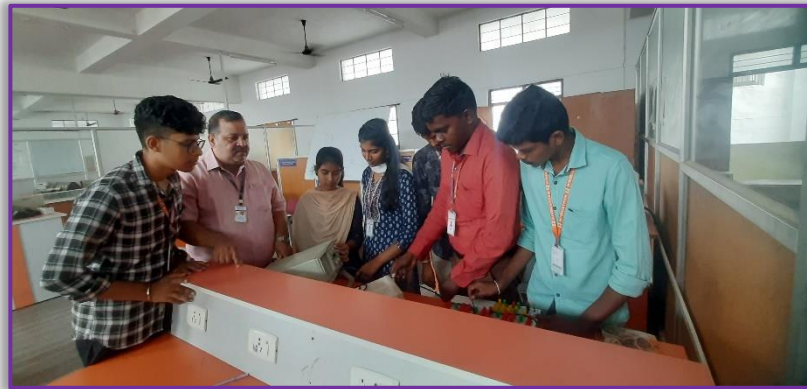


Figure 2.2.1.19: Collaborative Learning

Department of Electrical and Electronics Engineering Industrial Visits & In-plant / Internship Training

Industrial Visits are arranged by the Department inside and outside of Coimbatore to give a practical exposure to students which bridges the gap between theoretical learning and real time projects carried out in industries. Similarly, In-Plant Training for a minimum duration of four weeks is made mandatory to the students and based on the same an evaluation is done based on their improved knowledge and skills acquired from the In-Plant or Internship Training.



Figure 2.2.1.20: Industrial Visits & In-plant training