REPORT
OF
FACULTY DEVELOPMENT PROGRAMME
ON
ASPECTS OF E-CONTENT DEVELOPMENT

15th to 21st March 2024

ACTIVITY CENTRE
AMBEDKAR COLLEGE, FATIKROY
UNAKOTI, TRIPURA
799290

FDP ON ASPECTS OF E-CONTENT DEVELOPMENT
15/03/2024 TO 21/03/2024

INTRODUCTION:

As per the Activity Centre MoU signed by Ambedkar College with E&ICT Academy IIT Roorkee, Ambedkar College, Fatikroy, Unakoti, Tripura, organized a Faculty Development Programme (FDP) in online mode from 15th to 21st March 2024. Following the guidelines laid down by E&ICT Academy, IIT Roorkee, this FDP had nine lecture sessions and nine hands-on/lab sessions each consisting of two hours duration, excluding a total of two hours dedicated to discussion/Q&A. Besides, an expert lecture was delivered by the principal investigator of the E&ICT Academy, IIT Roorkee, during the inaugural session. A total of fifty-six participants from different parts of Indiaregistered for the FDP, of them forty-one from Tripura, six from Assam, one each from Rajasthan and Haryana, two each from Madhya Pradesh and Uttar Pradesh, and three from Punjab. Following are the day-wise details of the FDP.
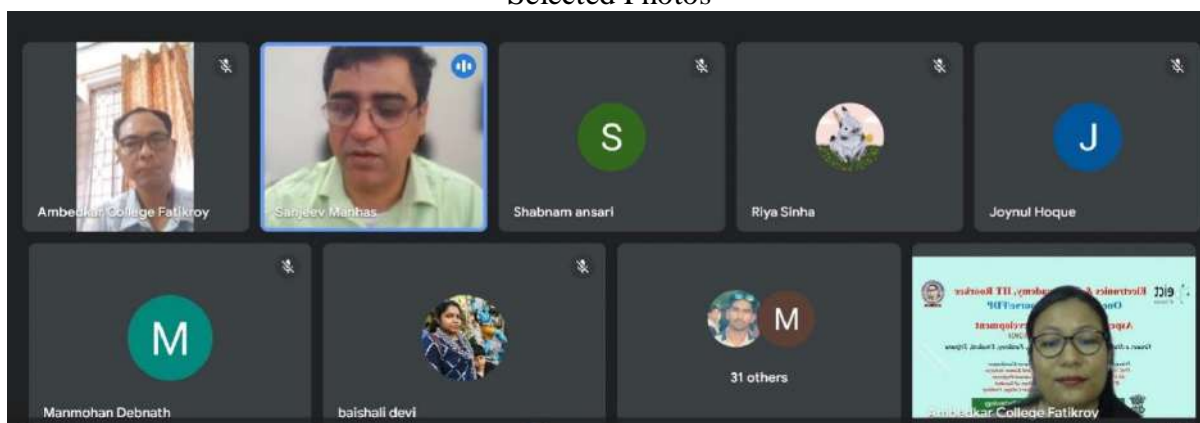
INAUGURAL SESSION
15/03/2024

The online inaugural session of the Faculty Development Programme was held on the 15th of March at 11:00 AM. This session commences with an introduction to the FDP and a brief introduction of the guests by Mrs. PusparwngHrangkhawl, Assistant Prof., Dept. of IT, Ambedkar College. After that, Prof. Sanjeev Manhas, Principal Investigator of E& ICT Academy IIT Roorkee delivered his expert speech highlighting the activities of the E&ICT Academy, the need for this FDP, and the role of e-Contents in the teaching-learning process of the contemporary world. Following the speech of Prof. Manhas, Mr L. T. MuanaDarlong, Principal in charge of Ambedkar College delivered the presidential speech reflecting upon the need to organize the FDP. The inaugural session comes to an end with the customary vote of thanks delivered by Dr. Melody L. Darlong, Assistant Professor, Dept. of Philosophy, Ambedkar College.

The first day's activity was confined only to the inauguration of the FDP.

Selected Photos

Prof. Sanjeev Manhas delivering his lecture in the inaugural session
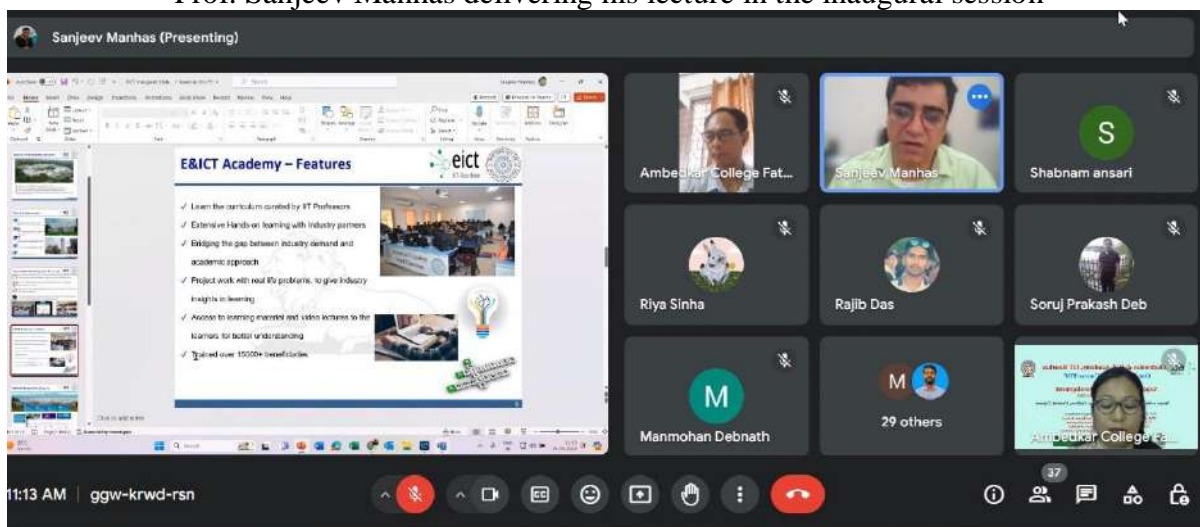
TECHNICAL SESSIONS
Day 1
16/03/2024

Technical Session of the FDP starts on 16/03/204 at 9.30 A.M. Two lecture sessions and two lab sessions were planned for this day. There wasa fifteen-minute tea break between each lecture session and lab session, and a one-hour lunch break, i.e. from 1.45 to 2.45 PM, between lecture and lab sessions. Following are the details of those sessions.

1. **Lecture Session 1**: This session, from 9.30 to 11:30 AM, was taken by Dr. V. Malathi, Associate Professor, Dept. of Biochemistry, Ethiraj College for Women, Chennai, Tamil Nadu. She gave her lecture on *Creating interactive, accessible e-content using the Lumi app*.She theoretically explains the use of the Lumi app to create e-content in great detail.
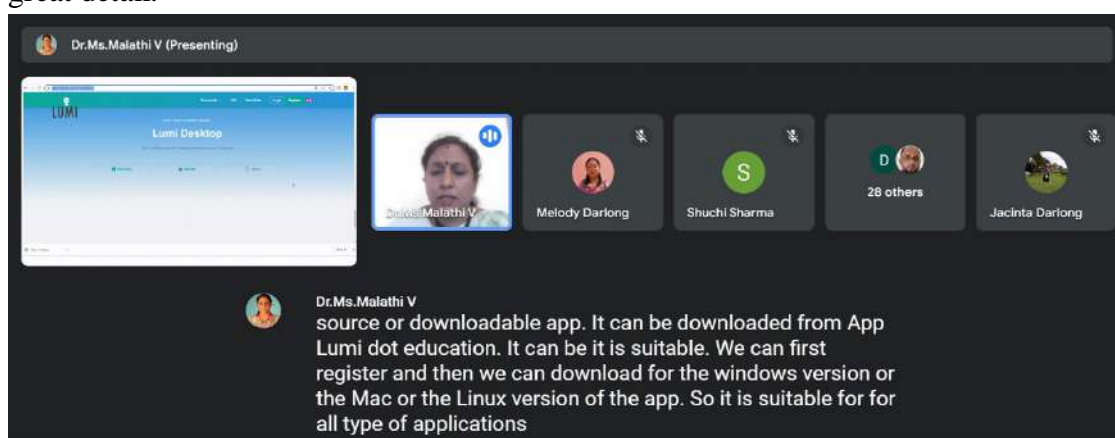
Dr. V. Malathi delivering her lecture

2. **Lecture Session 2**: This session, from 11:45 AM to 1:45 PM, was taken by Dr. Pankaj Debbarma, Associate Professor, Dept. of Computer Science & Engineering, Tripura Institute of Technology Agartala. He spoke on the topic *Knowing e-Content*. In his lecture, he explains to the participants the purpose of e-content, high quality e-content, types of e-content, different software, web usability, content formats etc. in detail.
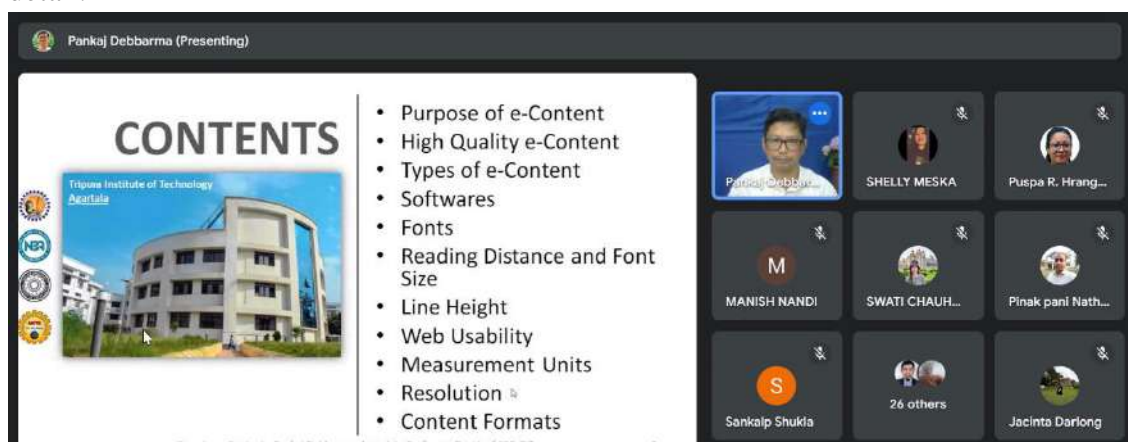
Mr. Pankaj Debbarma delivering his lecture

3. **Lab Session 1**: This session, from 2.45 to 4.45 PM, was taken byDr. P. Malliga, Professor, Dept. of Computer Science & Engineering, Head of the Department of Educational Media and Technology, National Institute of Technical Teachers Training

and Research (NITTTR), Chennai, Tamil Nadu. She took the session on *Need for e-content development*, wherein she discussed learners' characteristics, interactive and innovative teaching methods, managing technology, managing learning materials, managing students and packing content and delivery in detail. She interacted with participants through giving different simple tasks and discussed the outcome of those.
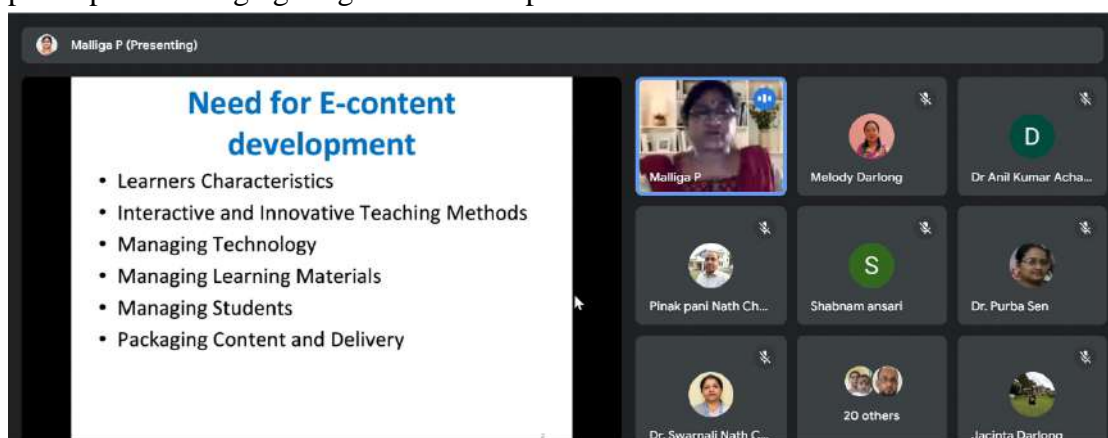
Dr. P. Malliga taking her session

4. **Lab Session 2**: This session, from 5.00 to 7.00 PM, was taken by Dr. Seshu Babu Pulagara, Assistant Professor, Dept. of Computer Science and Engineering, National Institute of Technical Teachers Training and Research (NITTTR), Chennai, Tamil Nadu. The topic of his presentation was on *E-content Module- The Four Quadrants*.He vividly explained the four quadrants related to e-content development and practically showed the use of a few software associated with audio and video presentations., at the end practically explained to the participants how to use GoogleForms for assessment purposesrelated to the e-learning process.
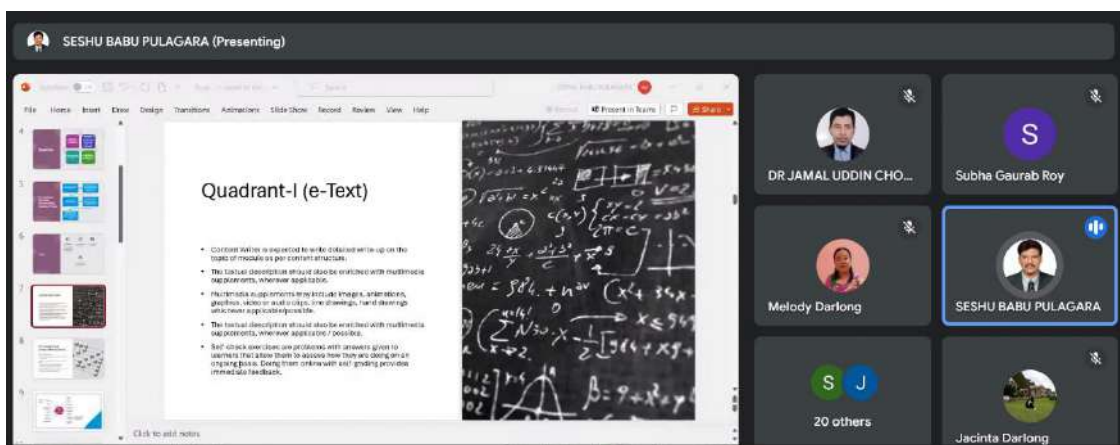
Dr. Seshu Babu Pulagara taking his session

Day 2
18/03/2024

After the weekend break, i.e. 17/03/2024, Sunday, the third day witnessed four technical sessions, two lecture sessions at the pre-lunch time and two lab sessions atthe post-lunch time.Following are the details of those sessions.

1. **Lecture Session 3**: This session, from 9.30 – 11:30 AM, was taken by Dr.Prodipto Das, Associate Professor, Dept. of Computer Science, Albert Einstein School of Physical Sciences, Assam University, Silchar, Assam. He delivered his lecture on the topic of *E-Content Generation: A Journey from Dream to Reality*. He first introduced the broad divisions of e-contents, explained various Indian and foreign e-learning platforms, and then described the Indian online e-learning platforms like SWAYAM MOOCs courses, the procedure to undertake those courses and practical difficulties related to those courses etc. at length.
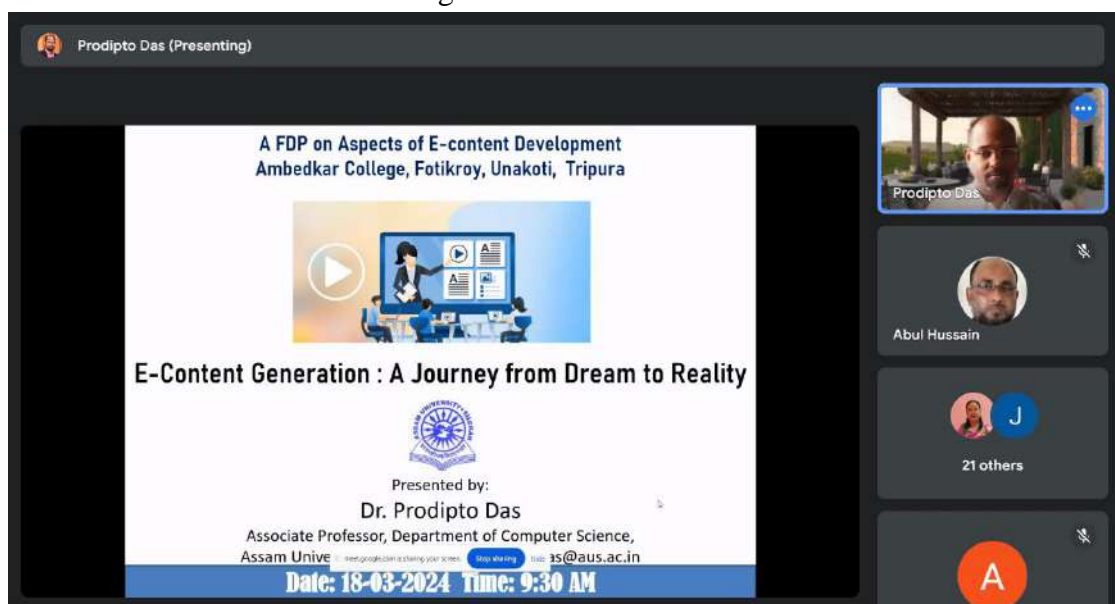
Dr.Prodipto Das delivering his lecture

2. **Lecture Session 4**: The lecture in this session, from 11.45 AM to 1.45 PM, was delivered by Prof. Debajyoti Bhattacharjee, Professor, Dept. Of Physics, Tripura University, Agartala. The topic of his lecture was *Aspects of e-Content Development and ICT Mode of Teaching*. He discussed the pros and cons of classroom-centric teaching and online mode of teaching, and usefulness of e-learning, and the use of different ICT tools to enhance the process of teaching-learning process in modern times.
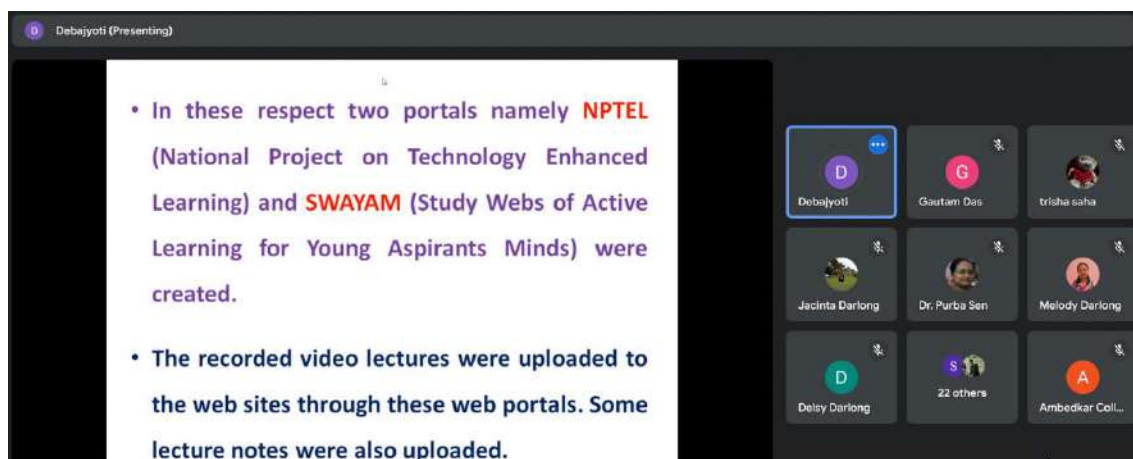
Prof. Debajyoti Bhattacharjee is delivering his lecture

3. **Lab Session 3**: This session, from 2.45 – 4.45 PM, was taken on the topic of *Open-source Software for Multimedia Content Editing* by Dr. Anirban Guha, Associate Professor, Department of Physics, Tripura University, (A Central University), Agartala, Tripura. He gave hands-on training on open-source software for graphic image, audio, and video editing software, viz. Inkscape, Audacity, and Shot Cut respectively. He actively engaged participants by instructing them to download the above software and work on those for simple training purposes for developing e-content.
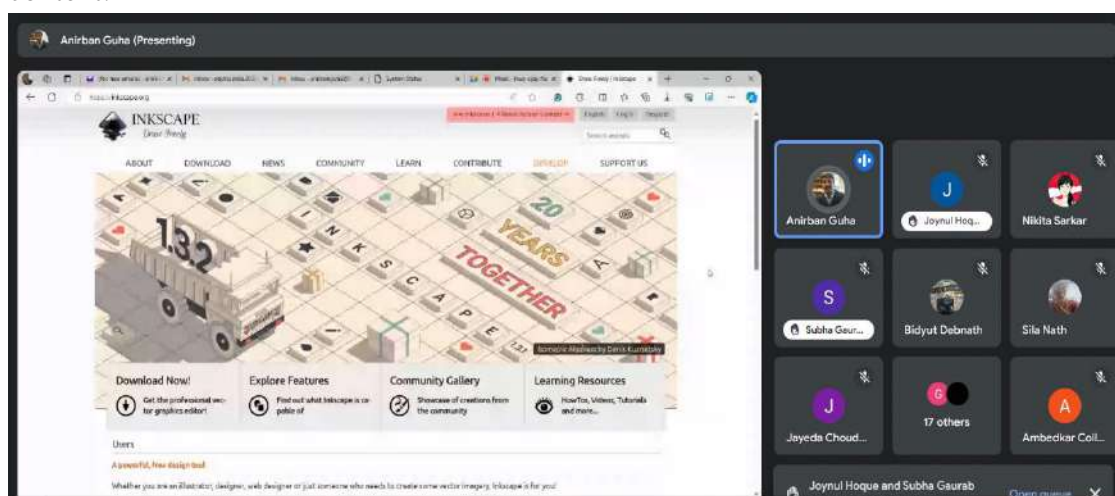
Dr. Anirban Guha taking his session

4. **Lab Session 4**: This session, from 5-7 PM, was taken byDr. Mona Semalty, Professor, in the Dept. of Pharmaceutical Sciences, Hemwati Nandan Bahuguna Garhwal University (A Central University) Srinagar, Garhwal, Uttarakhand. She took this session on *ICT in Education: Transition from OER/e-content to MOOC*. She first introduced the journey of the Indian education system from the Gurukul system to the era of e-learning, explained the difference between OERs and MOOCs, Learning Management System (LMS), different attributions on the copyright of e-contents, and trained the participants on the procedures for adopting MOOCs on SWYAM etc.
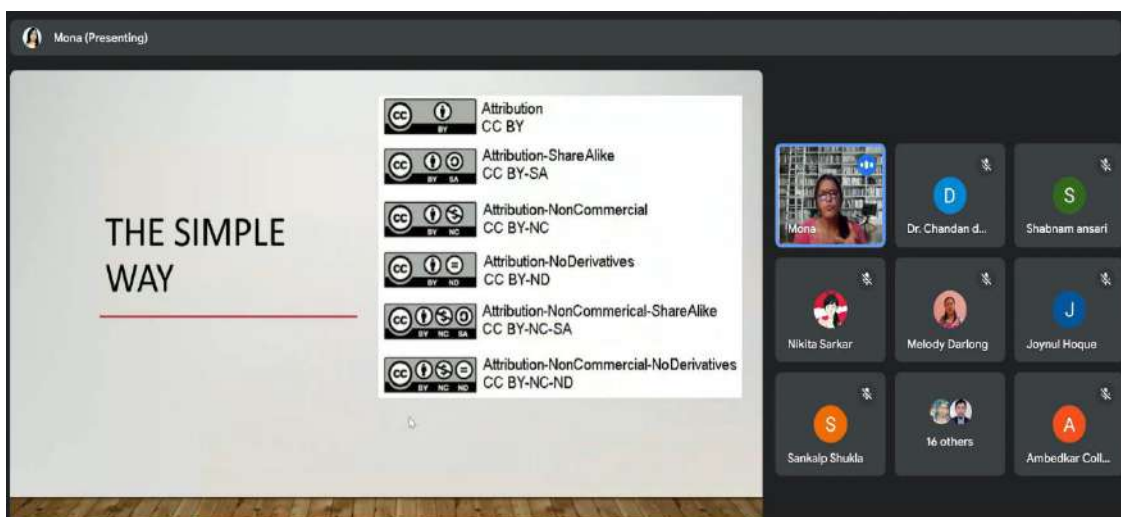
Dr. Mona Semalty taking her session

Day 3
19/03/2024

As per schedule, on the third day of the technical sessions of the FDP, there were two lecture sessions followed by two lab sessions. Following are the details of those sessions.

1. **Lecture Session 5**: In this session, from 9.30 to 11.30 AM, resource person Dr. Ajay Semalty, Professor, in the Dept. of Pharmaceutical Sciences, Hemwati Nandan Bahuguna Garhwal University (A Central University) Srinagar, Garhwal, Uttarakhand, delivered his lecture on *Important tools for developing e-content, interactive e-resources*. In his lecture, he explained about basics of e-content creation, the process of creating interactive resources, the use of a virtual lab for science subjects, the advantages of the Microsoft education portal, and the use of the Lumi app etc.

Dr. Ajay Semalty delivering his lecture

2. **Lecture Session 6**: In this session, from 11:45 AM to 1.45 PM, resource person Dr. Jayanta Pal, Assistant Professor, Dept. of Information Technology, Tripura University, Agartala, delivered his lecture on *Enhancing education with ICT-based Technology and Methodology*. In his lecture, he highlighted IT and IT enable services, Trending technologies like Artificial Intelligence (AI) and Machine Learning, the Internet of

Things etc., tools of ICT for Higher Education, advantages of ICT in education, challenges in the implementation of ICT in Higher education, learning management system, some LMS tools, and usefulness of LMS, types of smart classroom, benefits of virtual classroom, etc.
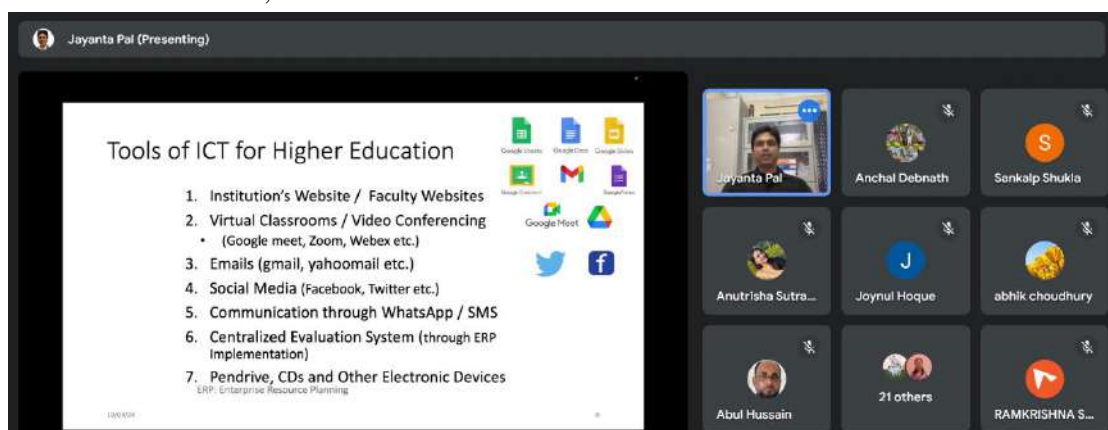
Dr. Jayanta Pal delivering his lecture

3. **Lab Session 5**: This session, from 2.45 to 4.45 PM, was taken by Dr. Alak Roy, Assistant Professor, Dept. of Information Technology, Tripura University, Agartala. He took this session on *Online assessment tools for teachers*, explaining theoretically different tools for formative assessment, and practically showing the use of various open-source assessment appsfor interactive lessons and videos, Quizzing, polling and student response, discussion, and their usefulness for teachers.
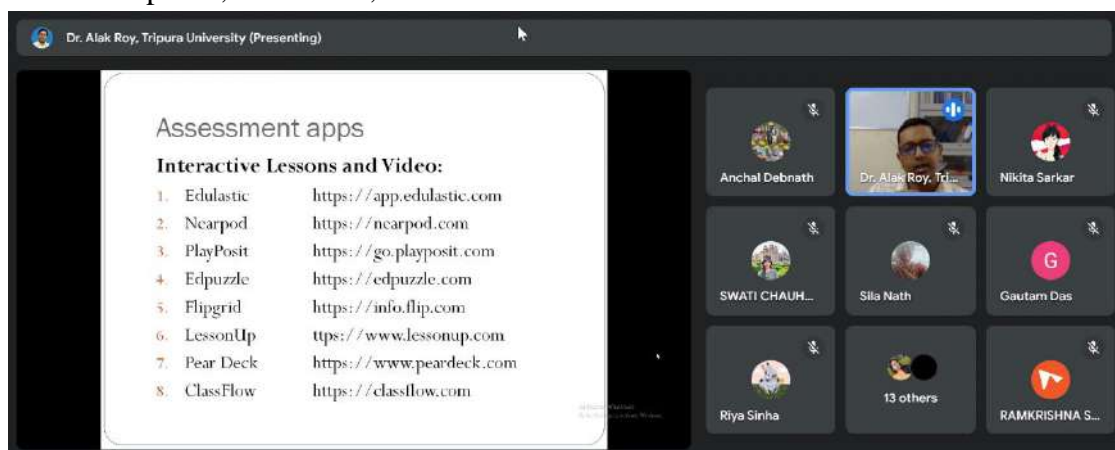
Dr. Alak Roy taking his lab session

4. **Lab Session 6**: This session, from 5.00 to 7.00 PM, was taken by Dr.Apu Kumar Saha, Associate Professor, Dept. of Mathematics, National Institute of Technology, Agartala, on the *Digital Education System: Future of Mathematics Learning*. He practically showed through short videos the advantages of digital education with special reference to mathematics. Benefits of NPTEL courses, the influence of Indians in the digital education system, online teaching via CHEGG, use and misuse of ChatGPT and other open AIs, etc.

Dr.Apu Kumar Saha taking his lab session

Day 4
20/03/2024

As per schedule, on the fourth day of the technical sessions of the FDP, there were two lecture sessions followed by two lab sessions. Following are the details of those sessions.
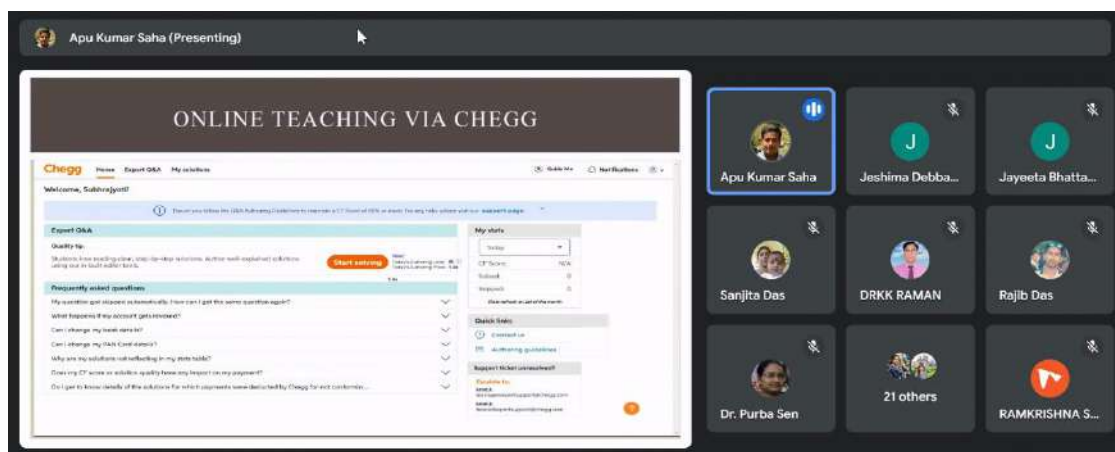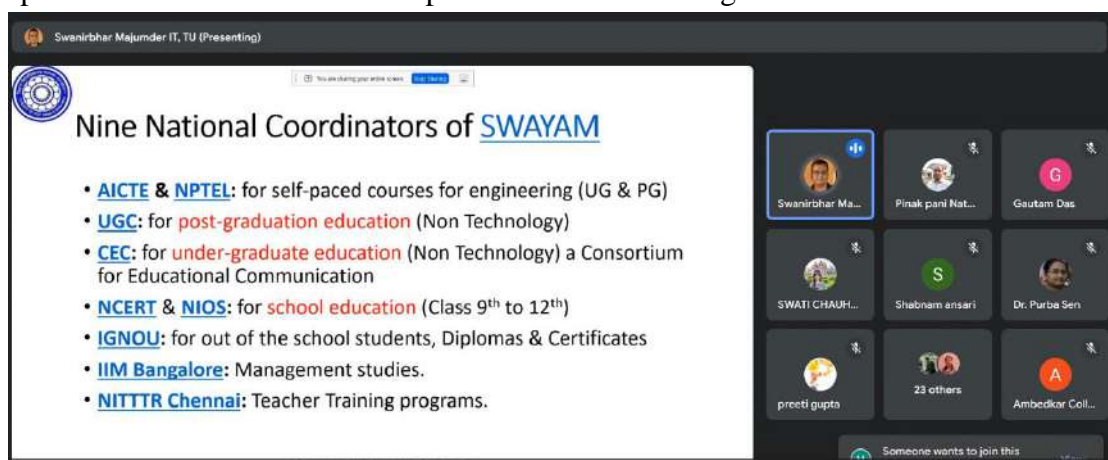
1. **Lecture Session 7**: In this session, from 9.30 to 11.30 AM, Dr.Swanirbhar Majumder, Professor & Head, Dept. of Information Technology, Tripura University, Agartala, delivered his lecture on *E-Content available in SWAYAM for Credit Transfer under NEP 2020*. In his lecture, he highlighted different courses available in SWAYAM for teachers and students and the credit transfer mechanism under NEP 2020. He also spoke on how to start a local chapter of SWAYAM in higher education institutions.


Dr.Swanirbhar Majumder delivering his lecture

2. **Lecture Session 8**:In this session, from 11.45 AM to 1.45 PM, Mr Dhaval M. Bhatt, Assistant Professor (TAP), Faculty of Science, The Maharaja Sayajirao University of Baroda, Gujarat, delivered his lecture on *Important aspects of e-content development*.

In his lecture he highlighted on usefulness of e-content, the process of e-content development, challenges in developing e-content, and important aspects, viz. audience analysis, learning objectives, content organization, interactivity etc., to be considered in developing e-content etc.


Mr. Dhaval M. Bhatt delivering his lecture

3. **Lab Session 7**: This session, from 2.45 to 4.45 PM, was taken by Dr.Joyanta Basu, Joint Director, Centre for Development of Advanced Computing (CDAC), Kolkata. He took this session on the topic *e-Content Development using Language Technology*. During this session he first introduced CDAC, language technology, e-content development process etc. theoretically, and then practically explained to the participants various online toolsdeveloped by CDAC, viz. speech to text translation, text to speech translation, speech to speech translation, etc.
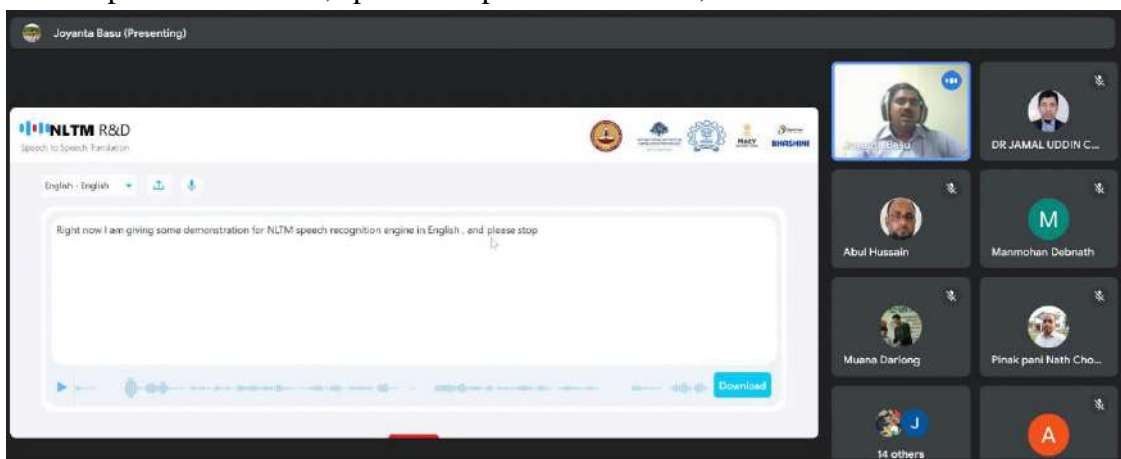
Dr.JoyantaBasu's practical session on language translation tool developed by CDAC

4. **Lab Session 8**: This session, from 5.00 to 7.00 PM, was taken by Ms. Jayita Das, Assistant Professor, School of Pharmaceutical Sciences, University of Science and Technology, Meghalaya. Her theme of the presentation was *Online Delivery of Lectures*, wherein she explained different tips for effective delivery of online lectures and explained practically the use of freely available online tools for delivering lectures.
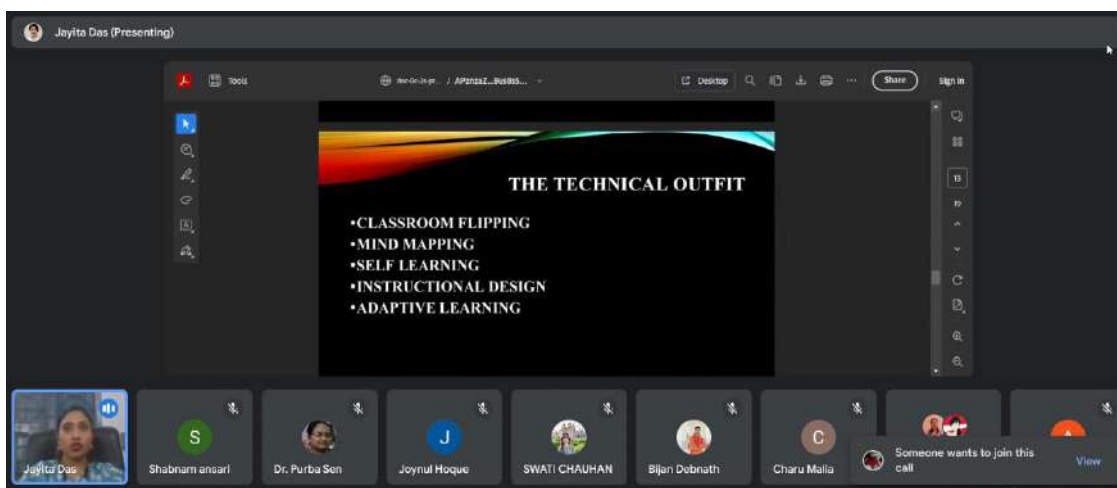
Ms. Jayita Das taking her session

Day 5
21/03/2024

As per schedule, on the fifth day of the technical sessions of the FDP, there was one lecture session and one lab session. Following are the details of those sessions.

1. **Lecture Session 9**: In this session, from 9.30 to 11.30 AM, resource person Prof. Barin Kumar De, Professor, Dept. of Physics, Tripura University, Agartala, delivered his lecture on the *Necessity and Importance of e-Content Development*. In his speech, he elaborately discussed on necessity and importance of e-contents in the modern era by recollecting the history of the Indian education system, information technology, the development of computers etc. He highlighted different objectives and purposes of e-content development and six different phases of e-content development. In the end, he explained the usefulness of different freely available online tools in the field of physics for developing e-contents.
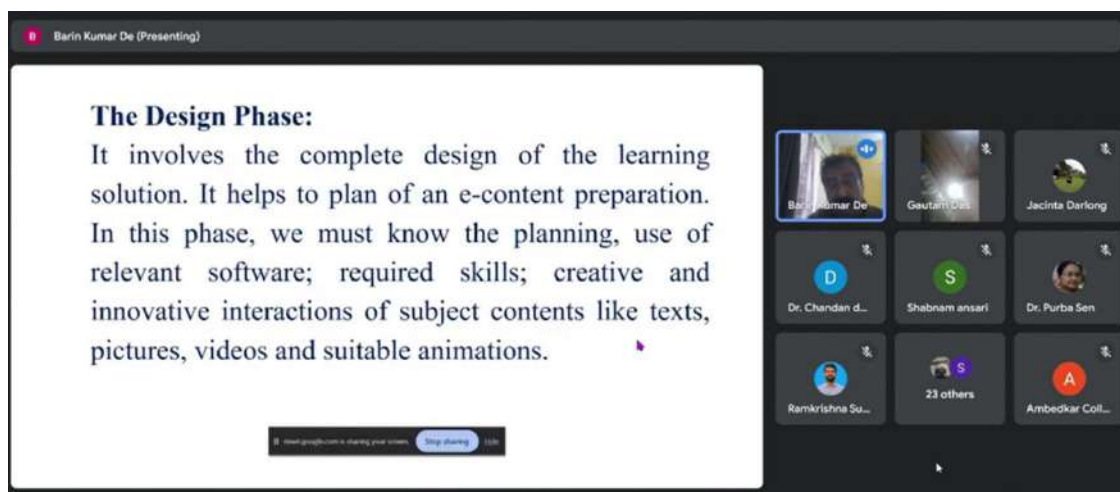
Prof. Barin Kumar De delivering his lecture on phases of e-content development

2. **Lab Session 9**: This session, from 11.45 AM to 1.45 PM, was taken by Dr.Swarnali Nath Choudhury, Professor & Head, Dept. of Chemistry, ICFAI University, Agartala. She took this session on *LMS on Moodle Platform*. She practically explained to the participants how to develop an institutional learning management system using Moodle platform, and how to create a course, enrolment of students for a course, etc. Also, she explained about four quadrants of instructional design and open-source software, viz. screenPal.com, Edpuzzle, creativelicence.org etc., to be used for effective delivery of those four quadrants, viz. e-tutorial, e-texts, assessment, and discussion forum.
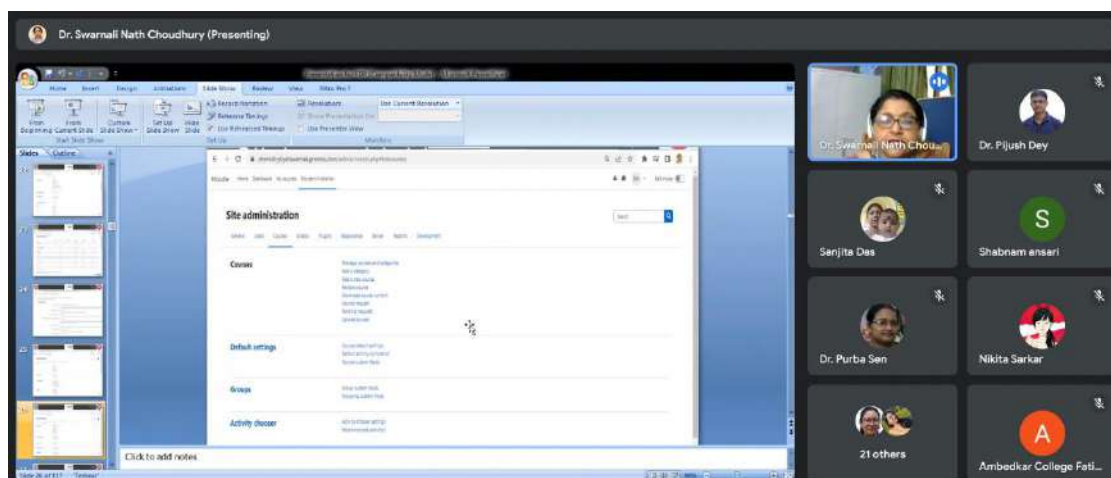
Dr.Swarnali Nath Choudhury taking the session on LMS on Moodle platform

VALEDICTORY SESSION
21/03/2024

On the last day of the Faculty Development Programme at 2.45 PM the valedictory session. Dr. Subrata Sharma, Principal i/c, Ambedkar College, presided over the session. The session begins with a short introduction of guests present on the occasion and a welcome address by Mrs. Jacinta Z. Darlong, Assistant Professor, Dept. of English, Ambedkar College. Followed by, Dr. Subrata Sharma delivered his speech highlighting the need for this FDP and the importance of e-content in the teaching-learning process of the present day. After that, some participants, viz. Dr. Jamal Uddin

Choudhury, Patherkandi College, Assam, Dr. Shabnam, Chandigarh University, Punjab, Dr. Ritu Gupta, Indira Gandhi Engineering College, Madhya Pradesh, Mrs. Charu Malia, from Rajasthan, and others, share their experience regarding the FDP. This session comes to an end with the customary vote of thanks given by Dr. Anil Kumar Acharya, Assistant Professor & HOD, Dept. of Sanskrit, Ambedkar College, and coordinator of this FDP.
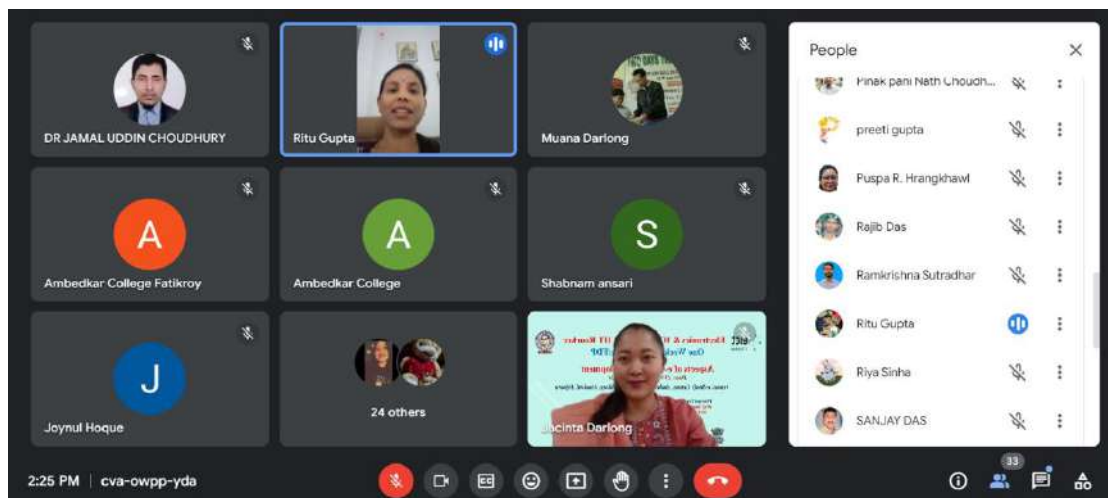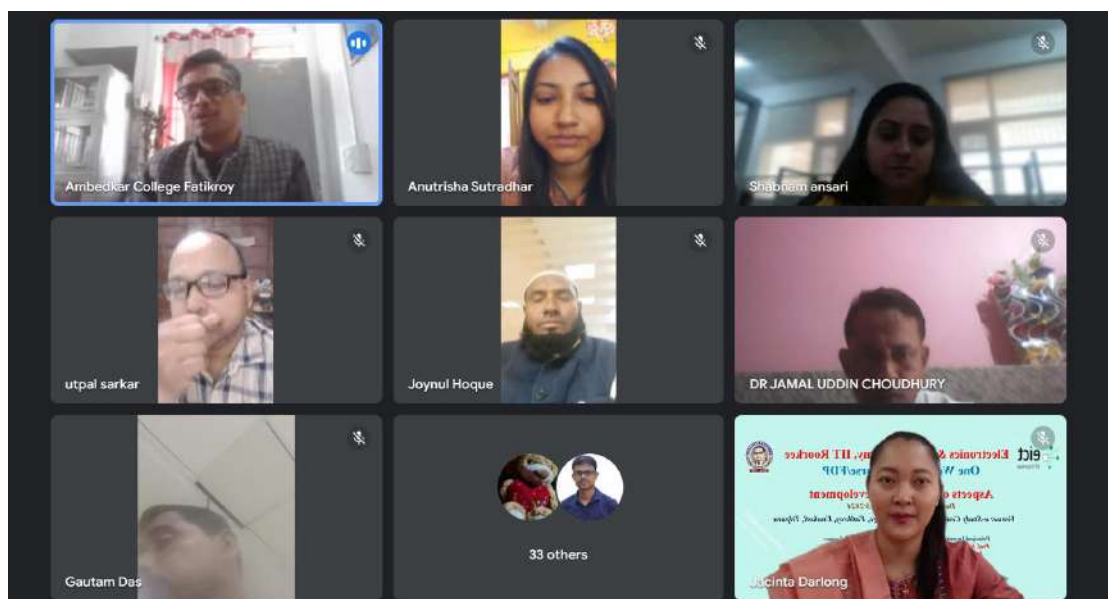

Dr. Subrata Sharma delivering his speech
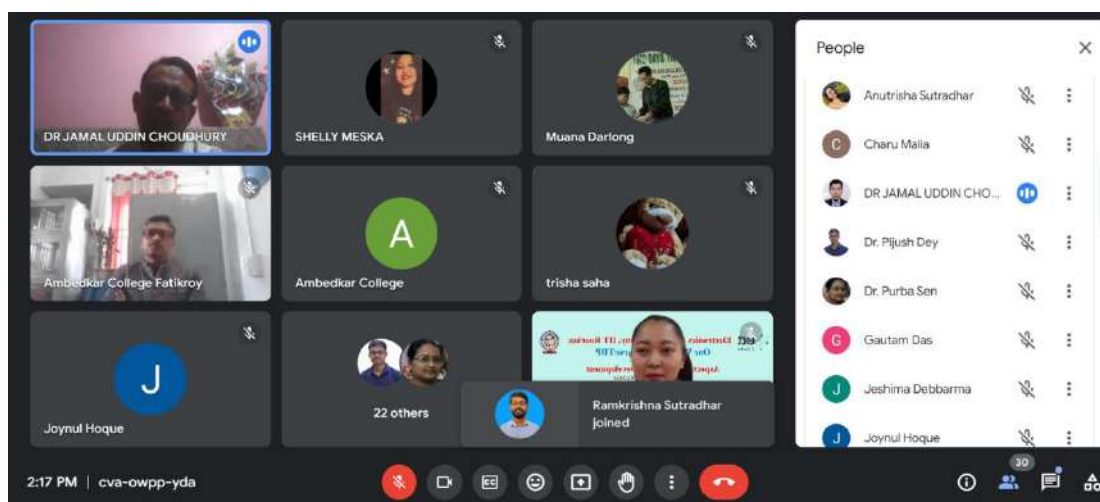
Dr.Jamal Uddin Choudhury sharing his experience on FDP
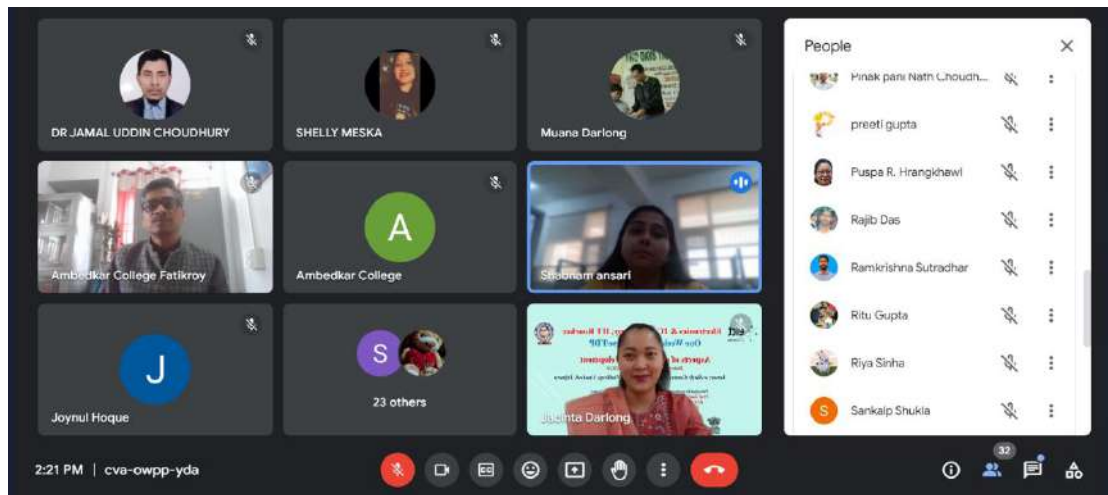
Dr. Shabnam sharing her experience on FDP

Dr. Ritu Gupta sharing her experience on FDP

Dr. Anil Kumar Acharya presenting the vote of thanks

Group Photo with the local coordinator Dr. Anil Kumar Acharya

Signature
Principal i/c
Ambedkar College

Signature
Local Coordinator
Ambedkar College