REPORT OF THE ONE-WEEK WORKSHOP ON "ICT IN EDUCATION" ORGANISED BY THE SCHOOL OF PEDAGOGICAL SCIENCES, MAHATMA GANDHI UNIVERSITY DATED 21-25 FEBRUARY 2022

Human lives saw remarkable changes in the last couple of years from the beginning of the COVID-19 pandemic. A virus of microscopic proportions challenged human existence and locked people indoors. Lives and livelihoods were destroyed worldwide indiscriminately. However, after the initial shock, mankind retaliated with preventive measures like vaccines and alternatives for lives to go on despite the crises.

Prolonged closure of schools resulted in loss of academics for students all over the world. It was during this time that ICT emerged as a path of deliverance for all the stakeholders in education – teachers, students, parents and the governments all over the world. Devoid of direct interactions, academics shifted to online platforms like *Google classrooms* and *Zoom* meetings. There are concerns and complaints regarding online education in countries like India where digital divide remains a sad truth depriving a large majority from availing the benefits of ICT. But it is impossible to deny the inevitability of ICT as it prevented learning loss to a great extent during the lockdown days.

The realization of the importance of ICT for the academic community resulted in gaining the subject its due place in teacher education and research. For enhancing the ICT skills of teachers, students and research scholars, School of Pedagogical Sciences, Mahatma Gandhi University conducted a one week workshop on *ICT in Education* from 21st to 25th February, 2022. The workshop commenced on the first day with a simple and graceful inaugural session at 10.30 am in the seminar hall of School of Pedagogical Sciences, Mahatma Gandhi University. Prof Minikutty A, Head of the Department, School of Pedagogical Sciences, Mahatma Gandhi University welcomed the gathering with a brief talk after which the presidential address was delivered by Prof Asha JV, Dean, Faculty of Education, Mahatma Gandhi University who put forward some thoughts and concerns on the relevance of ICT in education. Prof CT Aravindkumar, Honourable Pro Vice Chancellor, Mahatma Gandhi University did the honour of inaugurating the workshop and enlightened the session with his inspiring thoughts on ICT in education. The session was attended by the teaching faculty, research community and the students. The inaugural session came to an end by 11.30 am with the delivery of vote of thanks by Dr Ismail Thamarasseri, Assistant Professor, Mahatma Gandhi University.

The first technical session of the workshop began at 11.45 am with Ms Revathy Madhusudhanan of first year MEd welcoming the resource person. Mr. Naseerali MK, Assistant Professor, ISS College of Teacher Education, Perinthalmanna, blogger, edupreneur and who is also an alumnus of Mahatma Gandhi University was the resource person of the day's technical sessions which were mainly focused on the uses of ICT in Education. The themes dealt with included technology based learning environment, Learning Management Systems, pedagogic designs for ICT supported education, teacher centered and learner centered systems, evaluative learning and a whole variety of tools for the same.

The afternoon session began with an oath taking in the context of *International Mother Language Day*. The resource person familiarized us with various ICT tools like *Jam board*, an interactive whiteboard and *Google Docs* applications. The versatility of Google docs with excellent features like voice typing, translation of documents and other modifications

captured the attention of many participants. *Google slides* which could gracefully replace *MS PowerPoint* with many special features like add ons were also discussed in detail. In addition, the participants were familiarized with designing online certificates.

The afternoon session also dwelt on Learning Management systems, a quintessential component of ICT based learning of the day. The relevance and scope of LMS were outlined before a demonstration of *Moodle* – a popular one. The resource person demonstrated the entire process of creating a Moodle site, explained various features of it and discussed the advantages and applications of it. He also introduced the participants to *OBS Studio* - for recording live classes and *Slido.com*, another important tool.

The session came to an end by 4.45 pm in the evening with a brief doubt clarification session in the end where many of the participants voiced their questions regarding various ICT tools to be used in classrooms and were answered to with great zeal from the part of the resource person. The session was truly interactive and productive. The vote of thanks was delivered by Ms Julie Jacob, student of first semester MEd programme.

The day saw enthusiastic participation from the part of teachers, research scholars and an overwhelming presence of MEd students all of which contributed to the liveliness of the session. The resource person, Mr Naseerali MK, took great efforts to convey to the participants the significance and applications of various ICT tools in education through elaborate explanations and detailed demonstrations. His expertise in the field of handling ICT resources with great ease and brilliant demonstration skills were the highlights of the day. It goes to his credit that there were no feelings of exhaustion or monotony throughout the session.

Research has come a long way from the days of pen and paper labour and relentless travels to libraries in different places. Today, it has become possible for the researchers to access enormous sources of knowledge by a simple click on their devices. Digital libraries and other online sources have made it convenient for the researchers to carry out their work and improve its quality in a relatively comfortable manner. In order to mould efficient researchers for the future, the first session of the second day was focussed on ICT resources for research.

The second day of the workshop began on 22nd February 2022 with a prayer song, led by Ms. Revathy Madhusudhanan of 1st Semester MEd programme at 09:45 am in the seminar hall. The session started with a report presentation of the previous day by Ms Parvathi Rajan, after which Ms Athira VV of MEd 1st semester welcomed the gathering and the resource person for the day, Dr Vimal Kumar V. The session was attended by a total of 61 participants including the teaching faculty, research community and the MEd students.

The first technical session of the second day of the workshop began at 10 am. Dr Vimal Kumar V, a reputed scholar and professional, Reference Assistant at the Central Library, Mahatma Gandhi University was the resource person for the session. The themes that Dr Vimal Kumar dealt with included ICT Resources for Research which consisted of E-resources in Education, General and Academic Search Engines, Digital Libraries, Academic Research Database, Indexing Services, Reference Management Software, Writing and Publication and so on in detail. Various aspects of learning plans, tips and tricks for efficient Google search using 'modifiers' like 'file type', academic search engines like Google scholar, digital libraries like 'Archive.org', 'National Digital Library of India' and institutional repositories like Annual Reviews were discussed. The session also provided in-depth analysis

and discussion on Academic Research databases wherein various indexing services like 'SCOPUS', 'UGC Care list', 'Web of Science', 'Kerala Index', authentic online journals, various Reference Management Software such as 'Zotero' and 'Mendeley' were discussed. The final segment of the session was a study on publishing – traditional versus digital modes. The speaker compared and elucidated on various types as well as pros and cons of publication modes. The session ended at 1 pm with a doubt clarification session after which there was a lunch break.

As the world became more tech-savvy, the risks and dangers making their ways through the cyber world are burgeoning. Cyber Security and Cyber Privacy are areas of great concern these days with the number of frauds, felonies and crimes committed through internet constantly on the rise. While actions might be taken against the perpetrators and justice served to the victims, it is important to protect oneself in all ways possible in the cyber world. Taking into consideration the significance of the issue, Cyber Security and Cyber Privacy were the topics of the second session of the day.

The afternoon session began by 2 pm. Ms Shalini Joseph of first semester MEd welcomed the esteemed resource person, Dr Abdul Jabbar P from School of Computer Science, Mahatma Gandhi University, a specialist in the field of cyber laws and cyber security. The speaker began the session in quite a different manner – by telling a story. By awakening the interest and curiosity of the audience, he elaborated on cyber security and cyber laws that widened the participants' understanding of cyber space in itself. Further, different IT Acts, the Copyright Act of 1957 and the Universal Declaration of Human Rights were discussed especially in the context of the right to privacy – a highly debated right in the modern world. Deliberations on themes of hacking, phishing and malwares involving the participants were carried out for some time. The speaker also advocated on the need of good cyber hygiene and discussed in detail about 'netiquette" – the code of behavior and actions to be followed on the internet. Although slightly tedious due to the technical terms and aspects, the session, overall was engaging and tremendously informative.

The session came to an end by 4 pm in the evening. The resource person stressed on the need for honesty, integrity and objectivity – the qualities and traits to be followed on the cyber world. The queries of the participants were answered with necessary explanations in between and even towards the end. A healthy interaction was maintained throughout the session with encouraged engagement from the side of the participants.

The day saw fervent discussions of high quality among teachers, research scholars and students. Both the resource persons presented their topics remarkably well and kept the participants engaged throughout the session by putting forth seemingly tedious concepts in interesting ways. Their expertise in handling ICT resources coupled with great erudition in their own respective areas made the session's really productive ones. It goes without saying that the second day of the workshop was an immense success in shaping the mindset of the social engineers toward ICT based learning.

There has been a paradigm shift in academics in the recent period occasioned by the pandemic. Online classes have necessitated the use of ICT tools in all academic activities, especially in content transaction. Even live classrooms require novel technological applications to cater to the modern day learner who is a digital native. Teachers of the technological era must be properly equipped to confront a tech-savvy generation. Therefore, the third day of the workshop was dedicated to ICT integrated transactional strategies.

The third day of the one-week workshop started with a prayer song by Ms Vanisree V of 1st semester MEd at 9.40am. The session began with the report presentation of the previous day by Ms Reshma Elizabeth Rosh. Ms Rinchu Mariam Varkey of 1st year MEd welcomed the gathering and introduced the resource person of the day Dr Sajan KS.

The workshop began at 9.55am at the morning. Dr Sajan KS, an expert in the field of ICT, is currently working at NSS Training College, Ottapalaman, has been a part of several professional training courses and UG and PG levels besides other achievements. The major aspect of the session was 'ICT Integrated Transactional Strategies' and the resource person ventured into digital storytelling, techno pedagogical content knowledge, criteria for selecting ICT resources, cost and copyrights, licensed ICT resources, reference sites, ICT initiatives of Govt of India and so on. The session began with the resource person refreshing the students' knowledge regarding digital lesson plans, use of smart boards and e-portfolios. It was followed by the introduction of certain techniques in using Google platforms such as *Google classrooms*, *Google docs* and *Google forms*.

The session was engaging and activity oriented one as the speaker engaged the audience constantly by assigning activities likes making posters, creating cartoons and so on in applications which were familiarized in the session. He took great interest in introducing certain hardware and applications which are essential and quite useful for teachers in an ICT enabled classroom. The participants were also enlightened on certain aspects regarding intellectual property and copyright laws for better caution while accessing content from internet.

Dr Sajan's boundless knowledge in research sites and especially on the use of *Zotero* answered many queries of the audience, especially the research community. Many of the participants downloaded the applications with adequate guidance and proper instructions from the resource person. The afternoon session began around 2.15pm where Dr. Sajan introduced certain gaming applications such as *nearpod*, white *board.fi*, *Quizziz* etc. These applications will certainly be useful to those teachers who would like to make their classrooms more interesting and engaging. The introduction of national and state initiatives of ICT proved to be highly informative. In addition, *A-Z Screen recorder*, a screen recording application was also introduced with ample demonstration.

The session came to an end by 4.15pm with a brief doubt clarification. Vote of thanks was delivered by Ajitha TA of 1st semester MEd programme. The day was characterized by a good amount of activity from the part of the audience and the speaker. Dr Sajan K S did not spare even a single opportunity to engage the audience in the session by making the maximum people download the applications and learn by doing collaboratively. It goes to the credit of the resource person that the participants really felt at home throughout the session.

Theories of education and learning have come a long way from the days of the past where the teacher was kept on a pedestal and considered to be an idol and the epitome of all knowledge. Modern constructive classrooms require excellent facilitators with good subject knowledge and pedagogy rather than erudite scholars pouring out their knowledge in the traditional method of teaching and learning. Learner centered instruction has called for new techniques like the application of ICT tools and features in classrooms for teaching and learning. Augmented reality and Robotics have made their way to the modern classrooms. Thus, the fourth day of the workshop was dedicated to ICT integration in education.

The fourth day began with a prayer song by Ms Anjusha Anil of 1st semester MEd programme at 09.45 AM followed by a report presentation of the previous day by Ms Neelanjana G. Ms Vinny Catherine Sam has delivered the welcome address. The first session began sharply at 10.00 am led by Dr K Thiyagu, from School of Education, Central University of Kerala, a brilliant scholar and an eminent academician. The topic for the day was "ICT Integration in Education." Being a versatile personality, Dr Thiyagu resorted to familiarising mobile applications as per the convenience of the audience. The resource person introduced *augmented reality* through applications like *Spacecraft AR*, *AR Solar System* etc. He explained similar applications which can be used for different subjects like 3D Shapes AR, AR Loops, Safari Central, Animal 4D.

At 12.15pm Mr. Deepu, Sub Inspector of Gandhinagar Police Station gave a special talk on cyber security. This session winded up at 1.15 pm with Ms. Rinchu Mariam Varkey delivered a vote of thanks.

The afternoon session began at 2 pm by Dr Thiyagu. Mobile applications like *Mindomo*, *Mi Mind*, note making apps like *Keep notes*, *Google Keeps* for making notes were introduced. The session came to an end by 4.45 PM. Ms. Amalu Kattunilam of 1st semester MEd and Ms. Anu, PhD research scholar gave the feedbacks about the session which was followed by a vote of thanks by Ms Bency Benny.

The day was energetic and enthusiastic with participants actively engaged throughout the session. The day stands out as the liveliest one with the maximum number of mobile applications for teachers being introduced with a good deal of demonstration. The active involvement and participation of the participants were incomparable and the way in which the resource person took great efforts to familiarise the audience with various applications was remarkable.

The pandemic period made the academic community realise the importance of ICT tools not only for teaching and learning but also assessment and evaluation purposes. People explored various online assessment tools like *Google forms*, *Survey heart* and so on. In order to familiarise academicians with novel online assessment and evaluation tools, the fifth day's main topic was on ICT for evaluation. The fifth day began with a prayer song by Ms Jain Ann Chacko from first semester M.Ed followed by report presentation of the previous day by Ms Karthika Rajeev. Later Ms Anjusha Anil welcomed Dr Muhammed KV, Assistant Professor, School of Pedagogical Sciences, Mahatma Gandhi University, the resource person of the day.

The session was basically on different ICT tools that can be used for assessment and evaluation purposes. Applications like *Cahoot*, *Survey heart*, *Voliz* were discussed with necessary practical sessions where the participants were encouraged to prepare such tools. The resource person explained the applications in detail with live demonstrations. The session saw active interaction between the resource person and the participants. Ms Sumi AM delivered the vote of thanks at the end of the session by 12.45 pm.

The afternoon session began at 2.15 pm with Ms Uthara Prasad of first semester M.Ed giving the welcome speech. It was a business session led by the faculty of M/s. Senses Electronics Private Limited dealt with the uses of smart TV in classrooms, an essential requirement of the modern era. The teachers, research scholars and the MEd Students found it to be highly

useful for the classrooms. On the conclusion of the session, the vote of thanks was delivered by Ms Soorya P.

The valedictory session of the One week workshop on ICT Education began on 25th February 2022 Friday at 3.45 pm. Ms Jeeva P, student representative of university students union welcomed the gathering. Prof Minikutty A, Head of the Department, School of Pedagogical Sciences, Mahatma Gandhi University launched the e-certificates for the workshop in online mode. Prof Jaya Jaise felicitated the gathering followed by the representatives from the research and student community. The report of the workshop was presented on the stage by Ms Elizabeth K Lukose and Ms Parvathi Rajan. Dr. Sibu G Netto, Assistant Professor, School of Pedagogical Sciences delivered the concluding remarks and Ms Jain Ann Chako has delivered vote of thanks for the workshop. The session ended by 4.30 pm with the National Anthem.

Overall, the workshop was a great success and the entire credit goes to a well-coordinated team of School of Pedagogical Sciences which included faculty members, research scholars, MEd students and non-teaching staff. The inaugural, technical, refreshment, hall management, time keeping and rapporteur committees which were formed some time before the workshop acted in a systematic and organized manner throughout the week. All the students and teachers who constituted the committees toiled hard for the effective conduct of the programme. The effective coordination of the workshop adds another feather in the cap of School of Pedagogical Sciences, Mahatma Gandhi University Kottayam.

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