

Faculty Development Programme on Leveraging Open Educational Resources

A nine-day Faculty Development Programme on ‘Leveraging Open Educational Resources for Effective Teaching-learning’ was organised by the Association of Indian Universities (AIU)—Academic and Administrative Development Centre (AADC) and Avinashilingam Institute for Home Science and Higher Education for Women, Coimbatore, Tamil Nadu during December 09-17, 2022. About fifty-six participants from various Higher Educational Institutions (HEIs) attended the programme in blended mode.

Dr. V Bharthi Harishankar, Vice Chancellor of the Institute welcomed the gathering and highlighted the vision and mission of the center and the ambitious goal of the institute in upskilling the human resources of the higher education system. Dr. Harishankar also spoke about the focus of the event, following the welcome address, Prof. S P Thyagarajan, Chancellor of the Institute presented his presidential remarks and spoke about the role of teachers from the *Gurukula* period till date. Prof. Thyagarajan spoke about the significant reforms envisioned in NEP-2020. He further assured Shri Ravindra Narayana Ravi, Hon’ble Governor of Tamil Nadu and Dr. Pankaj Mittal, Secretary General, AIU that the center would work constantly to upgrade the quality of human resources of the higher education system.

Dr Pankaj Mittal opined that the NEP-2020 is the key to stimulating the aspirations of future generations. Dr. Mittal highlighted the differences in the teaching- learning scenario then and now and also discussed the importance of AI-based tools in teaching-learning. She also mentioned that teachers need to be prepared to teach not just in classes but also in front of the camera. She also stated that the new Academic Bank of Credit (ABC) would be helpful for the students to become meritorious by adding to their grades and credits when they complete courses from multiple universities. She insisted teachers stay updated and wished the center all success.

Shri Ravindra Narayana Ravi inaugurated the programme and submitted his homage to the founder, Dr. Avinashilingam Ayya, and spoke about

his contributions to the nation and to women's empowerment. Further, Hon'ble Governor spoke of the drawbacks of the post-British education system and highlighted the positives of the National Educational Policy-2020 and mentioned that it is a policy for the new *Bharath* as dreamt by Swami Vivekananda. He stated the importance of updating knowledge in the emerging areas of Artificial Intelligence (AI) and Virtual Reality. Hon'ble Governor further stated that the center would be working towards creating the right kind of ecosystem, teachers, and learning materials and wished the center to stay updated about happenings across the world.

Hon'ble Governor cited examples of the legacy of the country in the past and quoted from the Hon'ble Prime Minister's Independence Day speech about total decolonisation of our minds and pride in our heritage. Hon'ble Governor also insisted the center impart a sense of pride about the country alongside imparting the latest technologies and knowledge. He told that each one of us should collectively contribute towards making *Bharath* self-reliant, fully-developed by 2047 and wished all success to the institute.

Dr. Krishnan, initiated his session by insisting on the importance of integrating teaching and learning with the learners' environments. He emphasised that NEP-2020 recommendations such as revamping the curriculum, pedagogy, and assessment should be focused to promote the critical thinking of the learners. The speaker remarked that learning management systems like Moodle and Canvas offer integration options for OER, allowing seamless incorporation into existing courses. The various steps required for effective online teaching were also discussed and highlighted by the speaker. Finally, he concluded as technology continues to evolve, the development and sharing of OER will become more accessible, allowing educators and learners to contribute to a global pool of knowledge. Collaboration and partnerships between educational institutions, governments, and content creators will be crucial in fostering the growth of OER and realizing its potential to democratize education worldwide.

The next session was about Open Educational Resources by Dr. Murugan, Former Registrar, Tamil Nadu Open University, Chennai. He explained the paradigm shift of Tyranny vs. Democratic Education through OE, OER, OCW and OA. He stated that learning is not only information dissemination, but to infuse the critical thought process. He clearly explained the benefits of OER such as a large amount

of data that is easily accessible during flexible timings and also provided self-paced learning which elevates lifelong learning. Though it has all the pros there are some challenges like social, economic, and legal issues which could be manageable in due course. Finally, he concluded that learning is not linear it is spiral. The speaker insisted that the syllabus has to be contemporary, relevant, and usable.

Dr. Ram Ganesh, Bharathidasan University, Tiruchirappalli, Tamil Nadu spoke on 'Leveraging OER for Achieving Educational Goals'. He facilitated the participants by stating the paradigm shift from the brick classroom to the click classroom. He also added that the teachers are digital immigrants and they need to handle the students of digital natives. To bridge this gap, he insisted the teachers to adopt cybergogy/ webagogy. He further insisted teachers to understand the difference between equity and equality. He also insisted on the importance of collaborative teaching through personalized learning where equity vs. equality in order to cater to the needs of the student's caliber. Speaker insisted that India is lacking in innovation and he shared a survey stating that China and US are far ahead in innovation when compared to us and they are contributing to more patents filed. He also stated that teachers can create OER interestingly and creatively using websites like Pixabay.com, Splash Images, www.freeimages.com. He also facilitated the audience about values, initiatives, and the features of OERs.

Ms Kirthi Seth, Nascom handled the session on 'Online Education'. She insisted the participants to design strong pedagogy which will simulate the needs of the students. She also stated that project based- learning encouraged the students to develop their self-paced learning. She said that digital platforms increased the visibility of individuals around the globe. The session narrated the different perspectives of the NEP-2020 and the OERs.

The next session was followed by Prof. S P Thiyagarajan, Chancellor of the Institute. He facilitated the participants on 'NEP-2020: Online and Digital Perspectives'. In NEP-2020, the main focus was the development of higher education institutions all over the world. The speaker highlighted the evolution of higher education institutions. Initially, it started as higher educational institutions 1.0, then modern education institutions 2.0, postmodern higher education 3.0 institution and finally higher education institutions 4.0. During his session, participants were educated that the NEP-2020 has a special focus on online and distance education. In addition, he said

that the policy envisions multidisciplinary, holistic undergraduate education with flexible curricula, creative combinations of subjects, and multiple entry and exit points with appropriate certification. The speaker also emphasised on ‘Significance of Teaching Pedagogy and Methodology’. Then he explained the national educational technology forum, operational methodology, thrust of technological intervention, adoption of emerging technology, etc. in detail. The session provided a different perspective on the NEP- 2020 and its importance.

Dr. V Barathi Harishankar, Vice Chancellor facilitated the participants by narrating the importance and the basics of OER during her session. Further, the difference between Direct Resources and Open Educational Resources and the usability of OERs was explained clearly. During the interaction, the speaker highlighted the characteristics of OER.

Further, the next session was a hands-on training on ‘Creating OER’. The Resource Person gave a group activity to the participants. They were given a pack of 36 cards. Each card highlighted the aspects of OER. This specific task was to analyze the purpose, various funding models, prevailing technology, and resources available and to discuss major concerns regarding OER. Each group presented their ideas and opinions regarding OER and what is their plan for the creation of OER content. The participants discussed the qualities and attributes that OER should possess, including factors such as flexibility, interoperability, adaptability, universal design, and reliability. Participants shared their ideas and the resource person is well-engaged with the interactive session of delivering idea accumulation. The discussions emphasized the need to decide on an appropriate license that allows others to use, modify, and share OER content while still giving proper attribution to the creator. They also discussed about sustaining and improving OER by continuously updating and refining the content based on feedback and usage data. Collaborating with others and seeking input from educators can also be beneficial.

Dr. V Barathi Harishankar, Vice Chancellor handled the session on ‘OER as a Collaborative Teaching Learning’. She stated that the OERs must contain self-learning study materials with simple definitions in order to facilitate the learners. Even though this type of OERs have some challenges like quality issue, lack of human interaction, language/cultural barriers, technical cliché, IPR concerns and sustainability issues, it certainly facilitates the learners through expanded access to learning scalability, enhancement of regular course content, quick circulation, less expense for the learners.

The Resource Person, Dr. G Mythili, Additional Director, Indira Gandhi National Open University, New Delhi facilitated the participants on ‘How to Use OER in Our Teaching and Learning Process’? She started the presentation by briefing the concept of OER, where the teachers can enhance themselves. She

vividly explained how to adapt, reuse, and share online materials ethically. Participants were educated about the 5Rs, attributions, creative commons, types of OERs, citations, etc. Further, the speaker briefed the participants on ‘Licensing and Copyrights’. She also educated the participants that the OER content can create through Power Point Presentation, Windows Media Player, Audacity, Flash Player, Course Lab, etc. Further, Dr. Mythili insisted that a learning management system has to be created effectively by blending all three modes – open and distance, face-to-face and online.

Dr. S Kowsalya, Registrar, Avinashilingam Institute for Home Science and Higher Education for Women, Coimbatore, Tamil Nadu shared her experience with e-PG Pathshala – an initiative of the MoE under its National Mission on Education through ICT (NME-ICT) being executed by the University Grants Commission, New Delhi. She stated that it has high-quality interactive content across all disciplines. Every subject had a team of principal investigators, paper coordinators, content writers, content reviewers, language editors and the multimedia team which supports the facilitators to configure the content in a proper way.

It was followed by Dr. G Padmavathi, Dean, School of Physical Sciences and Computational Sciences on ‘My Experiment and Experience with MOOCs’. She stated that the content and the learning materials should be learners centered, which enhances the students’ self-learning attitude. She added that this kind of massive open online courses helps the teachers to refine and rethink their own content and also increases the visibility of the teacher where it paves way for the professional development, etc.

Dr. Chitramani, Dean, School of Commerce and Management explained the importance of content creation right from the story board, script writing, etc. She stated that one can create interesting content even with the help of GIF images. While creating the audio files, she insisted the participants to concentrate more on the quality of the recording.

Finally, the session was paired by Dr.T K S Lakshmipriya, Head, Department of Printing Technology, School of Engineering. She shared some of their students' work on OER creation and also explained how to get the creative common license and the attributions. Overall, the experience-sharing session gave confidence to the participants to transform themselves into tech-savvy.

Dr. Ishan Abeywardena, Associate Director, Systems, Centre for Extended Learning, University of Waterloo, Canada facilitated the participants on 'Open Extended Reality for Education Framework'. Dr. Ishan started the discussion with browser-based Virtual Reality (VR) and Augmented Reality (AR) experiences which can be accessed through standard web browsers, avoiding the need for specialized equipment or expensive hardware. These open technologies allow students to engage with VR simulations and AR experiences on devices such as tablets and smartphones. This accessibility makes it feasible for educational institutions with limited resources to integrate VR and AR into their curriculum. The speaker highlighted the integration of browser-based VR and AR projects with LMS platforms. Dr. Abeywardena also discussed the concept of mixed reality, where virtual reality and augmented reality are combined. This combined mode allows students to interact with virtual objects within their real-world surroundings progressing the learning experience and providing a deeper level of engagement. The importance of institutional policies to support the use of Extended Reality (XR) technologies in education was also stressed. The session gave an idea of the potential of browser-based virtual reality and augmented reality for education.

Participants were given hands-on training in creating their OER in their own field of interest. They were instructed to follow all the aspects of OER including licensing. Actually, the hands-on training session kindled the interest and curiosity of the participants.

The Resource Person, Dr. R Samyukta started her discussion with an overview of the short-term capacity- building programme on 'Open Educational Resources (OERs) for Effective Teaching and Learning'. Dr. Samyukta mainly focused on the significant changes in infrastructure, storage mediums, collection content, teaching methodologies, and skilled professionals over the past four decades. From the use of magnetic tapes and punched cards to the digital era, technology has transformed the way information is stored, accessed, and shared. In the adaptation to new environments

strategy, the resource person emphasized the need to adapt to evolving technologies and environments. The speaker shared examples of her experiences, such as transitioning from receiving emails in the library to facilitating internet connectivity for faculty and staff. She mentioned conducting workshops and providing information sessions to help faculty and students understand new storage mediums, such as CDs, and later, the shift to cloud storage and PDF formats.

In the session, there was a tutorial video session of Mr. Patrick Winston on 'How to speak'? which is suggested by Dr. Mangala Sundara Krishnan, Professor of Chemistry, IIT Madras. The talk was intended to improve one's speaking ability in critical situations by teaching a few empirical rules. In that video, Winston framed a structure of talk /rules of engagement. He vividly narrated how to handle the tools, and information in a proper way. He also explained the way of conclusion that should be impressed the audience.

The Vice Chancellor, Dr. V Barathi Harishankar chaired the session on 'OER'. The participants enthusiastically presented their OER presentations. The Chairperson observed all the presentations and gave valuable feedback for better improvement. It was a wonderful experience for all the participants.

Dr. Vasudha Kamat was the Chief Guest for the Valedictory Session. During the session, the resource person discussed the National Education Policy and its focus on five pillars: success, equity, quality, affordability, and accountability. The policy aims to promote flexible, high-quality higher education that is learner-centered. Open Education Resources (OER) play a significant role in this context, as they utilize digital technologies to make learning accessible, abundant, and customizable for all. The speaker also discussed the support framework for higher education institutions, which involves ten dimensions, including access, content, pedagogy, recognition of prior learning, collaboration with others, research, technology, leadership, quality, and assessment. The speaker emphasized the point that being open to sharing and trusting others is essential for fostering collaboration and innovation in education. Reflective practice and peer review are also highlighted as ways to assess the quality of educational resources and ensure their authenticity and usefulness. The eminent resource person emphasized the need for greater awareness and adoption of open education resources and pedagogy while also highlighting the importance of accessibility and capacity building for educators to ensure that open education initiatives benefit all learner

