

MHRD-TEACHING LEARNING CENTRE UNIVERSITY OF CALICUT
REFRESHER COURSE ON CURRICULUM DESIGN, DEVELOPMENT AND
EVALUATION

OCTOBER 09-22, 2020.

Course Report

Day 1, 09.10.2020

The Refresher course on Curriculum Design, Development and Evaluation was inaugurated today 9th October 2020 by the Honorable Vice chancellor Dr. M. K. Jayaraj of Calicut University. This course was organized by the Department of Education under TLC sponsored by MHRD, Govt. Of India. Dr. K. Abdul Gaffor gave an introduction about the TLC and this programme. Dr. Abdul Majeed explained the importance of teaching learning process. This process happened in the morning session. In the afternoon session, the context of higher education in India was better explained by Dr. Rajan Varghese. He was the member secretary of State Higher Education Council. He deliberated the implementation policy and difficulties in introducing the new HEI's policies.

Day 2, 12-10-2020

The first session was by Dr. Baiju K. Nath, who discussed about the Determinants of Curriculum.

In his talk, he has explained why a well-designed curriculum is essential for the systematic delivery of the subject and knowledge build-up. He emphasized that while designing a curriculum one must think about 1) What all to be included and/or discarded in the curriculum that too depending upon what students have already learned 2) Why it is necessary to introduce something in the curriculum, and 3) How this is going to impart effective knowledge transfer. He has explained the different significant determinant points of curriculum such as Concept, Perception, Needs, and Structure. Further Dr. Nath has explained about the different approaches such as Body of knowledge, Product, Processes, and Parxis.

In the later stages, he has illustrated the role of considering psychological, social, environmental, political, and institutional aspects as the determinant factors of curriculum design. He also urged for a universal design for learning (UDL) system in the forthcoming generations to meet the global needs. The session was lively and interactive with many interesting and thought-provoking questions from the participants' side.

The second session was by Dr. Biju K, who discussed about the Integrating technology in education.

In his talk, he explained about the integration of new technologies in our teaching and how it helps to the students and teachers and also the difficulties due to this. He has emphasized about the various technologies and explore those to get benefit in our field. He has given clear idea about the information which we are getting from internet and its nature, type, source, hygiene, authenticity, analysis and customization. He explained the need of good communication and attitude and skill toward accepting new idea of information technology. He has given his talk in interactive mode and it help all of us to get new information about technologies and different platforms for online classes, he has also explained about various difficulties facing by our students for attending the online classes.

The third session was by Dr. Habeeb C., who discussed about the strategies for inclusive education.

In his talk he has explained about the education of differently abled students and their inclusion to our main stream of higher education. Today differently abled students are facing lot of issues from the society as well as from the higher education point of view. He has talked about the importance of special schools for those students and also about their inclusion in to higher studies without any discrimination. He has given lot of examples about the harassments facing differently abled students and different kind of divisions they are facing in our society. It was a wonderful lecture by Dr.Habeeb and most of us have got a new dimension about those students, they are mostly avoided by our society.

The fourth session was by Dr. Ashkarali P., who discussed about the learning management platforms.

In his talk, he explained about the new technologies and platforms which can be used for our online classes. He has emphasized about the various technologies and explore those to become a 21st century teacher. He explained about the transformation of knowledge to digital format and its use in the learning and management system. He has illustrated different skills which are needed for a teacher in new pandemic time like, record and edit videoclips, create interactive video content, use of collaborative tools and ability to use social media for

professional development. It was interesting session for us to understand about the moodle platform for online classes and how it will be benefited in our classes.

Day 3, 13-10-20

The first and second sessions of Day 3 were handled by Dr. K Abdul Gafoor, Project Head & Professor, Department of Education, University of Calicut. He has presented the different perspectives of 'Blooms Taxonomy in the context of Higher Education curriculum'. Discussion had been done regarding contribution of Blooms Taxonomy in setting measurable/attainable objectives and the arrangement of different levels as an indicator of student's progression in learning. Further the session mentioned the different dimensions, ie, cognitive, psychomotor and affective domains, of this concept and elaborate discussions were done about the suitability of different action words in each domain with suitable examples.

The afternoon proceedings started with a session on 'Curriculum Organization and Structure' by Dr. Noushad P P, Asso. Professor, School of Gandhian Studies and Development, M.G. University, Kottayam. In this session, discussions were carried out on curriculum challenges, pillars of education, curriculum & syllabus, and four major components of curriculum, organisation of content in a curriculum and alignment of components of curriculum.

The final session of the day was handled by Dr. Biju K, Asst. Professor, Department of Education, Central University of Tamil Nadu on 'Content Authoring and Mapping tools'. In this aspect, a live session regarding the operation and use of free software 'eXelearning' was carried out which is very much effective as well. The session also peeped into different type of mapping tools available for regular use as well.

Day 4, 14.10.2020,

4th day of refresher course has four sessions with two resource persons and the first session started exactly by 9.30 am. Dr. Edamana Prasad, Professor of Chemistry, IIT Madras was the resource person for the forenoon session (session 1 & 2). Dr. Soumini C introduced the resource person. Dr. K. Abdul Gafoor, Professor, Department of Education, University of Calicut and program coordinator preside the sessions. Dr. Edamana Prasad engaged the first session on the topic 'OBE - Outcome Based Education' and discussed different learning domains and conveyed the idea with relevant examples. The second session was on the topic 'Setting Graduate Attributes'. The session started by explaining the different stages of outcomes like Learning outcome-LO, course outcome-CO, programme outcome-PO, programme specific outcome-PCO and programme education outcome-PEO. More than

70 percent of the session was based on interaction with participants and it was very interesting and informative. This way of presentation makes the sessions smooth and lively. The participants were highly encouraged and motivated. Mrs. Shajitha A delivered vote of thanks.

Afternoon session were handled by resource person Dr. Ramesh A R, Asst. Professor, Dept. of Chemistry, Govt. Victoria College, Palakkad. Mr. sukesh c introduced the resource person. Both session 3 and 4 were hands-on sessions entitled 'tools for assessment in Higher Education'(e tools for online teaching) and participants well trained on different tools like Loom (screen capture and recording and editing of videos), Kahoot (for conducting online quizzes and online internal exam), Mentimeter (tool for real time voting with audience). The sessions were progressed by clearing even minute doubts and therefore the participants got engaged. The whole session was very interesting. Dr. Ayisha muhsina delivered vote of thanks.

Day 5, 15.10.2020

The 5th day of Refresher Programme conducted by MHRD- Teaching Learning Centre, University of Calicut, based on 'Curriculum Design, Development and Evaluation, started at 9.25 am. Four sessions were conducted. First session was handled by Dr. Naseema , Professor, Department of Education, University of Calicut. Her topic was "Assessment in Education". She explained the role of assessment, its functions, utility etc. in an appealing way. She emphasized the importance of merging assessment and teaching. Next two sessions were presented by Dr. Lancy D'Souza, Head and Associate Professor, Department of Psychology, University of Mysore. His topics were "curriculum models" and "curriculum evaluation Models ". Dr. Ashkarali, Assistant Professor, Department of Education, Government College, Thanur engaged the last Session. His topic was "Interactive Contents and Assessments". He introduced Visual Understanding Environment and us how to make teaching plans and Question Paper for a content.

All the classes were very effective for the improvement of our career.

Day 6,16.10.2020

On the 6th day of this programme, the first session was started with a class by **Dr. A. Hammed, Assistant Professor, Department of Education, University of Calicut**. He very nicely introduce his topic on "**Developing life skills through curriculum**".

He began the session with some interesting brain teasing exercises. The participants were actively involved each of the exercises and shared their queries and get clarified. Through some motivating examples he discussed the problem of why some people become achievers and others not in different phases of life. He explained the various capacities of the learners to be achieved as to learn, to unlearn and to relearn. Also explained the various competencies required by the learner for

the 21st century. He made clear the idea through playing the video on “Animal School”. After that the discussion was on the four pillars of education, such as, learning to know, learning to do, learning to live together and learning to be. Various skills to be learned by the learner through curriculum are also discussed. Then he explained the life skills, that is the abilities for adaptive and positive behaviour enables individuals to deal effectively with the demands and challenges of every life. His session was very informative and interactive.

The remaining three sessions were handled by **Dr. Vijayakumari** and **Dr. Mumthas**, both of them are **Associate professors at Farook Training College**. They clearly explained their topic **“Formative and Summative assessments”**. **Dr. Vijayakumari** started the session with the question on “Can we make the assessment interestingly”. She discussed the various tools for formative and summative assessments. A detailed discussion was made on how to make assessment as objective, reliable and valid. **Dr. Mumthas** explained in detail about the marking scheme, check list, rating scale and rubrics. Through their interesting sessions participants got an idea about the various assessment tools. These sessions were also ensured the active participation through online exercises.

Day 7, 17/10/2020

The session on the ninth day of the refresher course (17/10/2020) began with the report presentation of previous day’s activities by Dr. Gireesh Babu. It was followed by a welcome speech by Sri. Venugopal Edakkat. Dr. Meera K.P and Dr. Bindu C.M. were the resource persons for evaluating the seminar presentations of the faculties during the morning session. Earlier all the participants were divided in to eight teams by grouping of faculties from similar or related disciplines. Time slots were also assigned for presentations. As per the schedule, the seminar session started with the presentation from first team, the faculty members of Botany. The team presented on the topic **“Identification of plants and documentation”**. It was followed by second team of chemistry faculties. Their presentation was on the topic **“Reflection on issues in chemistry and their solution in UG curriculum”**. Third presentation was done by the Physics & Electronics faculties together, on the topic **“On Moving Physics and Electronics Courses Online on Short Notice”**, It was followed by vote of thanks by Dr. Gopi Krishna. M. Then meeting dispersed for lunch.

Dr. Vasumathy T was one of the resource persons for the afternoon session. Mam was welcomed by Dr. Abdul Gafoor sir and the session began with the presentation of the fourth team of Physics faculties. They have discussed the topic **“Improvising Physics Education”**. Then the team of faculty members from Mathematics presented on the topic **“Strategies for teaching learning mathematics”**. The next team members from Geology discussed the topic **“Geology self-guided and virtual field trips as a supplement to field training programmes in introducing geoscience curriculum”**. Vote of thanks for the session was done by Dr. Gopi Krishna. M.

Dr. A. Hameed was the resource person for the forthcoming session. The team Statistics discussed the topic on “**Multidisciplinary aspects of statistics**”. Last presentation was done by zoology team. They have presentation on-“**special issues and their solutions/strength on goals, transaction strategies & assessment practices in the curriculum of zoology**”. Sessions on seminar presentation were winded up with the vote of thanks by Dr.Sreerekha.

Day 8, 19.10.2020

On October 19, 2020, 11 th day of the MHRD TLC Refresher course on “Curriculum design, development and evaluation” was organized. The day’s session started off with previous day’s report presentation by Dr. Suthertha S.Nair, Assistant Professor, NSS College Neeramankara, Thiruvananthapuram.

Session I: Time : 9.30am – 11.30 am

Resource person: Dr. Mohamedunni Alias Musthafa, Professor and Dean, School of Education, Central University of Kerala

Topic: Curriculum Teaching learning strategies

The session started off with an introduction of the resource person by Dr. Pramod Kumar,Assistant Professor, Department of Botany, NSS College Ottapalam.

Dr. Musthafa introduced the topic by stating that the future of a nation is decided by how science is taught inside the classrooms. Dr. Musthafa presented the session in 3 segments. The first segment of presentation discussed significance of Science curriculum. He stated that science is both a verb and noun, i.e, scientific knowledge can be represented as both process and product.

He then discussed the cardinal pillars of Science as a discipline, viz. reliability, testability and replicability. The second segment of his session dealt with the scientific methodology, while the third segment detailed on the approaches to effectively employ the scientific methodology in aclassroom in order to develop scientific process skills in learners. Dr. Musthafa detailed on different approaches, viz., discovery approach, inquiry approach, reflective teaching, co-operative and collaborative learning. He concluded the session by stating that there is paradigm shift from teacher-oriented pedagogy to self-determined heutogogy.

Mr. Sajayan, T., Assistant Professor in Statistics, Govt. College Malappuram extended vote of thanks.

Session II: Time : 2pm – 4.30 pm

Resource person: Dr. Shakila T. Shamsu, Govt. Of India Former Officer on Special Duty (NEP), MHRD, The resource person Dr. Shakila Shamsu was officially introduced to the participants by Sri. Sirajuddeen P.K., Assistant Professor in Statistics, Govt. College for Women, Kannur.

The session dealt on the changes needed to bring about an educational reform and challenges in bringing about the changes. Dr. Shakila had played a vital role in the drafting of National Education Policy 2020 and her session explained the recommendations put across in NEP in detail. NEP is a comprehensive policy framework to guide the development of education in the

country. With reference to higher education, highly flexible four year graduation programme is recommended along with emphasis on vocationalisation and customized learning. The new approach to teaching learning recommended in NEP 2020 thrusts on giving equal importance to curricular, co-curricular and extracurricular learning. Dr. Shakila mentioned that NEP has recommended the constitution of regulatory system of Higher Education Council of India (HECI) that will include National Higher Education Regulatory Council (NHERC), to regulate higher education, National Accreditation Council (NAC), Higher Education Grants Council (HEGC) and General Education Council (GEC). The session concluded with interaction of the resource person with the participants.

The day's programme was wrapped up with vote of thanks by Dr. Jilna Alex, Assistant Professor in Zoology, Little Flower College Guruvayur

Day 9, 20.10.2020

The day has been stunningly unlocked by a beautiful report presentation done by Preethi N, Assistant professor, NSS college, Ottapalam. Later the gathering has been greeted by Dr. Muhamamed Shereef, Assistant professor, Dept of Zoology, PSMO College, Tirurangadi. Also, he introduced the resource person for the first session of the day.

Dr. N. Mohammedali (Asst. Prof. & Head, Department of Journalism and Mass Communication, University of Calicut), dealt with trends and nuances of “Blended design of curriculum” in the era of knowledge explosion. He started the session with “How to design a course in a blended mode?”. He explained the importance of traditional mode of education and inclusion on blended mode at the time of online mode of transaction. The entire session was pointed to identify, what is blended learning? Different kinds of blended of learning (Inside out mode, outside in mode, Supplement mode, Lab rotation, flipped class room, Project based blended learning etc) Advantage and disadvantage in the blended learning,

Assessment in blended learning and Plans for designing blended learning. Dr. Mohammedali has also disposed the idea of Triple action model for course designing (Intended learning outcome, Teaching learning activities, Assessment methods). The session was concluded with the remark on the mandatory Digital literacy required for making creative e-contents and discussing about the Brevity, simplicity, clarity in teaching content preparation. He also promoted the importance of traditional face to face learning mode along with the benled mode for the future curriculum designing aspects. The words of gratitude for the session was conveyed by, Gayathri U. K, Assistant Professor, Govt Victoria College, Palakkad

The welcome for the second session and Introduction of the resource person was beautifully done by Dr. Swapna Johnny, Assistant Professor, Little flower college, Guruvayur. The topic entitled “Why Patent/ Intellectual Property be Included in the Curriculum” has been brilliantly handled by Sri. C. Gopinathan, Asso. Professor, Dept. of Bio-Technology, University of Calicut in the topic. He dealt the topic in a direct manner. With his humble voice he explained the role of IPR in economic development, Patent profile of a country, Economic benefits of IP protection, and also, he mentioned about the proportionality of economic development of a country with its technologically advancements. Dr. Gopinathan vividly outlined the processes involved in patenting, types of research and its importance, how to file a provisional application for IPR, technical and economic feasibility of a process etc. He concluded the session by sharing his experience in patenting process and showing his exemplary achievements in attaining patents.

After the session, Dr. Sreedevi E.P conveyed the vote of thanks for the resource person for handling the session with post presentation active discussion.

The third session was handled by Dr. V.L Lajish, Asst. Professor, Dept. of Computer Science, University of Calicut, he has been introduced to the group by Dr Feroz Khan, Assistant Professor,

Dr Lajish handled the topic entitled “Digital learning: sources and productive searches” by providing the perspective for those who need to understand. He included the ICT impact attributes, e-Learning web resources and productive searches and blended learning with MOOC. He emphasized the needs of students to lesson from their teachers. The described about the paradigm shift happening in the scientific world, that eventually demands exemplary methods in planning contents, gathering data, authoring and sharing the learning contents for science education. He highlighted different instructional strategies for science

education during this time of contagion. Dr. Lajish inflated the importance of teachers to shift the focus from knowledge-as-possession to knowledge-as-construction, and from learning as outside-guided to learning as self-guided one. He also explained that the teacher as a leader who lead within and beyond the classroom. Identify with and contribute to a community of teachers, learners and influence others towards improved educational practice. He also included the matter of Continuing Professional Development (CPD) which has impact on teaching mode and learner experiences. The session was concluded by prompting the teacher participants to lead the effective use of technologies to enhance learning opportunities and trigger students' appetite for learning and to aid them to create a culture of success.

The fourth and the final session of 9th day of the refresher course was moved by Dr. Sajan K.S, Asst. Professor, NSS Training College, Ottapalam, on the topic Techno Pedagogy Tools for Curriculum Transactions, the session got two parts, and handled the first part was very efficiently. He was introduced by Dr Sajesh, Department of Physics, S N College Varkala. The session was completely interactive and hands-on sitting. He presented the fellow participants with Nearpod, Quizizz, Jamboard, Open Board, Jawcam etc and also the nuances of Google doc and Microsoft power point as the infrastructures in teaching processes. He emphasized the vitality of creative learning and giving active studies to the learners in an ever-challenging world of effective education.

The day was settled with the concluding remark from Dr. Abdul Gafoor, MHRD-TLC Project Head, Department of Education, University of Calicut.

Day 10, 21/10/2020

The refresher programme on 21/10/2020 (Wednesday), conducted by MHRD – TLC, University of Calicut, was scheduled in four sessions. The first session started officially at 9.30 am, but the resource person was available from 9.15 am onwards. Dr. Sajan K. S., Assistant Professor, NSS Training College, Ottappalam was the resource person. He focused on 'Techno Pedagogy Tools for Curriculum Transactions', and introduced the features of tools like Google Lens, Google Doc, etc. The recording and streaming of live video content by OBS Studio was demonstrated in a passionate manner. The second session on 'Open Book Exam' was handled by Dr. Baby Shari P. A., Professor & Head, Department of Psychology, University of Calicut. She detailed the 'Open Book Examination' as an assessment tool to reflect the proficiency of a child more accurately. The key challenges in designing the

questions was also addressed. Dr. Sajna Jaleel, Assistant Professor of Pedagogical sciences, M. G. University, Kottayam, engaged the third session. It was on 'MOOCS and SWAYAM'. She started with 'National Mission of Education through ICT' and explained how to develop and deliver online MOOC courses through SWAYAM platform. The fourth session was on 'Peer and Self Assessment' by Dr. Sameer Babu M, Assistant Professor, Department of Education, University of Kerala. He emphasized on how an assessment results in an up-to-date and renewed curriculum, suitable for innovative teaching learning process.

Day 11: 22.10.2020

The last day of MHRD TLC Refresher Course on "Curriculum design, development and evaluation" started off with an introduction to the last day's session by Dr. Abdul Gafoor, Project Director, MHRD TLC, University of Calicut

Session I: Time: 9.30am – 10.50 am

Resource person: Dr. M. Manoharan, Professor & Head, Department of Statistics, University of Calicut Topic: Role of IQAC in Curriculum development. The first session of the day dealt on the topic „Role of IQAC in Curriculum development“ by Dr. Manoharan. The resource person was introduced to the participants by Dr. Pramod Kumar, Assistant Professor in Botany, NSS College Ottapalam.

Dr. Manoharan introduced the session with detail on the establishment and monitoring of Internal Quality Assurance Cell (IQAC), with special reference to colleges. He explained the composition of IQAC under the chairmanship of the Principal, along with the goals and role played by IQAC towards the development of quality system to improve academic performance of college. He stated that the prime responsibility of IQAC is to initiate, plan and supervise various activities necessary to improve the quality of the education imparted in colleges. He detailed on the monitoring of IQAC in a college system through Annual Quality Assurance.

Report of each department documented. He cited that the institutions can take up self assessment strategies for quality assurance by setting certain quality benchmarks. With reference to curriculum development in a economic, job-oriented outcome based education, he explained the curriculum format – program level, course profile (in paragraph and matrix

forms). He also put across the concern on poor employability of graduates and vocationalisation as part of curriculum. He stressed on the need to bridge gap between the curriculum and societal requirements. Finally he suggested for drastic change in both classroom and learning, need for the shift from teacher centered to learner centered, from solitary students to learning communities. Vote of thanks by Ms. Soumya, C.C., Assistant Professor in Chemistry, MES Ponnani College, Ponnani

Session II: Time : 11.15 am – 12.30 pm

Resource person: Dr. Jose. T. Puthur, Associate Professor, Department of Botany, University of Calicut

Topic: Integrating research and development into Higher education curriculum

The last session of this refresher course dealt on how research and development need to be integrated with curriculum and revamp the curriculum for the same. The resource person was introduced by Dr. Abdul Gafoor, Project head, TLC. The session made an overview on the position of India in Higher education, NEP recommendations on Research in Education, research based teaching and research-based learning. Dr. Jose commented on the initiatives from Government of India like NIRF, IoE, Prime ministers Research Fellowship to bring forward the Indian educational institutions to the international standards. To bring about key changes in research, National Research Foundation is established and focus on research in Higher Education by start up initiatives, empowering the faculty to conduct innovative teaching, research and service as regard to NEP. NEP has also the recommended the inclusion of research and internships in undergraduate programmes. Dr. Jose opined that the research-based teaching is the best method that can help in inculcating the research culture among learners. He suggested the strategies to involve the students in active involvement in learning process to instill attitude for research in learners.