

Lets Go Digital & Digicol Scheme The Kerala State Higher Education Council

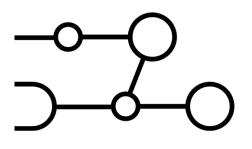
DIGITAL ENABLEMENT OF HIGHER EDUCATION INSTITUTIONS MOODLE-LMS TRAINING PROGRAMME REPORT

Kerala State Higher Education Council Let's Go Digital & Digicol Schemes (Hands on Training) MOODLE-LMS TRAINING PROGRAMME Consolidated Report

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Lets Go Digital & Digicol Scheme

REPORT MOODLE-LMS TRAINING PROGRAMME

Manulal P. Ram

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CHAPTER I

INTRODUCTION

Digital Enablement of HEIs

Today's rapidly evolving digital landscape, the digital enablement of higher education institutions has become increasingly relevant as it offers transformative opportunities to enhance teaching, learning, research, and administrative processes, ultimately shaping the future of education. This requires several key components, including robust infrastructure and connectivity, integrated digital tools and platforms, skilled faculty and staff, comprehensive data management systems, student support services, and a culture of innovation and collaboration. These components work together to create a digital ecosystem that supports effective teaching and learning, enables efficient administrative processes, fosters research and innovation, and enhances the overall student experience.

Over these years, especially during the Covid induced lockdown period, online education emerged as a crucial tool, enabling students to continue their learning remotely and stay connected with their educational institutions.

To enhance our education environment in the State HE institutions, the Government of Kerala has multiple programmes run through various schemes under different departments which focus on removing the digital divide exist in this sector as well as to implement various techno pedagogical support in the HE sector of the State.

State Higher Education Council

The Kerala State Higher Education Council (KSHEC) is an autonomous body responsible for overseeing and regulating higher education institutions in the state of Kerala. Which performs as an Advisory Body to the Government in Higher Education sector, consisting of Advisory, Governing and Executive Bodies constituted by the Government for a four-year term on time-to-time basis. The KSHEC is the principal higher education policy input provider and trendsetter of the State of Kerala and it strives to bring about equity and excellence in higher education sector.

The Council is an apex level statutory body, instituted under the Kerala State Higher Education Council

primarily functioned as a coordinating body working in collaboration with universities and colleges in Kerala to enhance the quality and relevance of higher education in the state Act, 2007, and the Kerala State Higher Education Council (Amendment) Act 2018 of the State Legislature of Kerala. Perceiving its democratic structure and participatory approach in making decisions, the Council is often denominated as a mandated, working

collective of all the stakeholders of the higher education sector, including academics, administrators

and students. The Council undertakes various faculty enrichment programmes through a variety of schemes addressing the pedagogical, subject specific, induction and in service quality enhancement etc.

Its academic division consists of four centres namely,

- (1) Centre for Research on Policies in Higher Education
- (2) Centre for Research on Human Resource Development and Capacity Building
- (3) Centre for Research on Curriculum Development
- (4) State Assessment and Accreditation Center (SAAC) for Higher Education Institutions
- (5) Faculty Development Centre (FDC)



The activities undertaken by the Council for the quality enhancement of the HE sector in the State spread across these 5 centres though some of the programmes overlap on others too. Its major activities include:

- Policy Formulation: The council is responsible for formulating policies related to higher education in Kerala. It analyzes existing policies, identifies areas of improvement, and recommends changes to enhance the quality and relevance of education.
- Accreditation and Quality Assurance: KSHEC is involved in the accreditation and quality assurance of higher education institutions. It establishes standards and guidelines for accreditation, conducts evaluations, and awards accreditation to institutions that meet the prescribed criteria.

- Research and Development: The council promotes research and development activities in higher education. It supports research initiatives by providing funding, organizing workshops and conferences, and facilitating collaborations between institutions and researchers.
- Curriculum Development: KSHEC plays a role in the development and revision of academic curricula. It ensures that the curriculum is up-to-date, industry-relevant, and aligned with national and international standards.
- Capacity Building: The council focuses on capacity building of faculty members and administrators in higher education institutions. It conducts training programs, workshops, and seminars to enhance teaching methodologies, research skills, and administrative capabilities.
- Student Support: KSHEC aims to provide support and guidance to students pursuing higher education. It facilitates scholarships, grants, and financial assistance schemes, as well as counseling and career guidance services.
- Collaboration and Networking: The council fosters collaboration and networking among higher education institutions within Kerala and with national and international counterparts. It encourages partnerships, joint research projects, and student exchange programs to promote academic and cultural exchanges.
- Monitoring and Evaluation: KSHEC monitors the functioning of higher education institutions and evaluates their performance. It conducts periodic reviews, assesses the implementation of policies, and takes necessary measures to address any deficiencies or concerns.

Context of Online Education

The Covid-19 pandemic issue has resulted in a significant loss of human resources and has exacerbated the fundamental contradictions in the historical economy, leading to a drastic systemic transformation. The modern higher education system was likewise susceptible to the trend. Higher education institutions that are forced to close due to a lockdown will be forced to operate in online mode, and in addition to other directives, there will be a push for a de facto switchover to the system using online learning. The online form of teaching, which has been hailed as more efficient, rapid, and affordable, would enable all Open and other institutions to operate their UG and PG programmes online, forcing an unprecedentedly sizable number of teachers into a mode they are unfamiliar with.

The idea of higher education institutions, their clients, and their activities have all changed as a result of the COVID-induced online mode. There will be differences in the ideas of results, instruction, learning, evaluation, quality, access, equity, and excellence. Faculty are essential in enabling the system to capitalise academically on the current situation..

To help teachers better understand the challenges of online learning, The Council has started a series of workshops on "Online Education in HEI" in 2020. Due to its accessibility, adaptability, and scalability,

which enable people to learn from anywhere at their own pace and make it highly relevant, it has continued to grow in significance even after the Covid pandemic period by providing opportunities for lifelong learning, remote education during emergencies, and closing educational gaps.

Phase I Training Programme:

As part of our curriculum and instructional strategy, it was critical to develop a comprehensive understanding of the scope and technology of online education. By organising training sessions that may impart a basic understanding of the philosophy and context of online teaching-learning environments as well as numerous supporting tools to accomplish it, the Council has made significant action to achieve this goal. Over five days in July 2020, the first round of workshops was conducted online in synchronous style utilising Zoom. Two 90-minute sessions will be held each day. A few basic IT tools might be used thanks to the workshop. The exercises must be completed offline using Google Docs, as instructed to the participants. A MOODLE web was used to provide access to the workshop's resources.

Workshop Outcomes

- WO1. Understand the nature and role of Online Education in HEIs offering general formal programs (1)
- WO2. Understand the features of technologies (MOODLE, Zoom, Google Talk, Google Hangouts, Google Classroom, Google Docs, Google Forms) for online courses (2)
- WO3. Understand the design of Online courses using the Instructional System Model of ADDIE (2)
- WO4. Understand the use of technology for formative and summative assessments in online courses (2)
- WO5. Understand Online instruction methods (2)
- WO6. Understand models of communication in Online courses to enhance the quality of learning (1) [Note: The numbers in the brackets indicate the number of sessions]

Resource Persons: Prof. R. Chandrasekhar, Prof. N.J. Rao and Prof. K. Rajanikanth

It provides pre-workshop support by way of background materials, presentation slides and exercises for use during the workshop; as well as technical help for post-workshop consolidation of materials generated during the workshop through a MOODLE web site. The general structure of the workshop is shown in the table below:

Workshop Schedule				
Monday	Monday 1. Online Education HEIs			
03-08-2020	2. Technology Platforms for Online Teaching Synchronous Online classes			
	(Zoom, Google Classroom, MS Teams)			
Tuesday	3. Communication Beyond Content			
04-08-2020	4. Design of Online Courses – 1			
	5. Tools -1			
	Introduction and Installation of MOODLE, demonstrate creating courses,			
enrolling students to a course, grouping the students, illustrating adding resour				

	(slides, text and multimedia content), making use of appropriate file formats and file size		
Wednesday	6. Design of Online Courses – 2		
05-082020	7. Teaching Online – 1		
-	8. Tools -2		
	Zoom, OBS, Mind Map and Concept Map		
Thursday	9. Teaching Online – 2		
06-08-2020	10. Assessment on Moodle		
	11. Tools -3		
	Forum, Management of communication (messages, chat), Management (backup		
	and Restore) of their respective course, Evaluate the utilization of activities in		
	MOODLE based on requirements		
Friday	12. Tool – 4		
07-08-2020	Advance features of PowerPoint including embedding audio/video		
	13. Tools – 5		
	GIMP/Pinta for image editing and Snip and Sketch for screenshots, Data		
	Visualization using Excel, Video and Audio Capture and Editing		

Programmes held in the first phase of training

No	Programme	Beneficiary Group	Period
1	FDP in Online Education in HEI's (For Science Discipline) Resource Persons: Prof. N.J. Rao, IISc Bangalore Prof. C. Chandrashekhar, IIIT Bangalore Dr. K. Rajani Kanth, Bangalore	Faculty members in Science discipline from universities and colleges (<10 years in teaching service) Venue: Online Webex Platform No. of Participants: 291	13-7-2020 To 17-7-2020
2	FDP in Online Education in HEI's (For Arts and Humanities Discipline) Resource Persons: Prof. N.J. Rao, IISc Bangalore Prof. C. Chandrashekhar, IIIT Bangalore Dr. K. Rajani Kanth, Bangalore	Faculty members in Arts and Humanities discipline from universities and colleges (<10 years in teaching service) Venue: Online Webex Platform No. of Participants: 286	3-8-2020 To 7-8-2020



Research Y Academics Y Campus Life Y Media Y People Y About Us Y

CHANDRASHEKAR RAMANATHAN

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Professor & Dean (Academics)

Prof. N.J. Rao

2006.

Consultant, Indian Institute of Science, Bangalore,

Design, OBE, and Assessment.

🖂 rc@iiitb.ac.in

Education : Ph.D. (Mississippi State University)

Professor Chandrashekar Ramanathan is a faculty member at IIITB since 2007. His primary focus area is data science, software engineering and application development. Professor Chandrashekar received his Ph.D degree from Mississippi State University. His thesis was in the area of object-oriented databases. He has extensive application software development experience spanning over 10 years in large multinational organizations. His current focus is in the area of information convergence and software engineering. Technology for education, Application architectures, enterprise architecture and content management are his other areas of interest.

IAE

EVENTS * SOFTWARE TOOLS * RESEARCH WEBINAR * NAAC WORKSHOP * NIRF WORKSHOP * CURRICULUM FRAMEWORK * GALLERY DOW

N.J. Rao was the Chairman of CEDT (Centre for Electronics Design and Technology, IISc during 1981 + 1996, and Chairman, Department of Management Studies during 1998 + 2006, and superannuated as Professor at CEDT in July

He is presently a Consulting Professor at International Institute of Information Technology (IIIT), Bangalore, a member of several committees associated with NBA, and a member of the Core Committee that defined the new Accreditation processes of NAAC. His research areas included Control Systems and System Dynamics. His present research interests

He is presently working with Department of Higher Education, Kerala for improving quality of learning in Higher Education

Degree Colleges, and several engineering colleges for curriculum design, pedagogy and quality of learning. He has designed and has been conducting a wide range of faculty development programs on NBA Accreditation, Curriculum Design, Course



Prof N.J. Rao Consultant, Indian Institute of Science, Bangalore,

Dr. K Rajani Kanth

Former Advisor, Principal, Professor in Information Science & Engineering - M S Ramaiah Institute of Technology (MSRIT),Bangalore rajanikanth.kundurthi@gmail.com



include higher education, pedagogy and education technologies.

PROFILE SUMMARY

Academic Qualifications:

B E (Electrical): Govt College of Engineering, Ananthapur,

Sri Venkateswara University

M.E & Ph.D: School of Automation, Indian Institute of Science, Bangalore

Academic Experience (Reverse Chronological Order):

- Advisor (Academics & Research), MSRIT, Bangalore
- Principal, MSRIT, Bangalore
- Vice Principal, MSRIT, Bangalore
- Professor & Head, MSRIT, Bangalore
- Professor & Head, Kakatiya Institute of Technology and Science, Warangal
- Senior Scientific Officer, Center for Electronics Design and Technology, IISc, Bangalore

Scientific Officer, Center for Microprocessor Applications, IISc, Bangalore

Resource People were essential in providing educational and professional direction, mentoring, and training to specific participants so they could increase their knowledge of and proficiency in online education. They are great resources in workshops because of their knowledge and capacity for clearly communicating complicated ideas, where they help participants improve and progress. Resource people improve the learning process and encourage others to explore and succeed in their individual fields of interest by bringing a distinctive viewpoint, practical ideas, and a strong understanding of their field.

Brief Outline of the Training Sessions

- Sessions started every day at 10.00 Hrs. There were afternoon sessions on Tuesday, Wednesday, and Thursday at 14.00 Hrs.
- Exercises for each of these were given each day for practice and not for evaluation.
- A poll was conducted before every Q&A session.
- YouTube links for self-checking the process of creation of activities/resources were given in the Workshop Moodle site on NJRAO.ORG.
- There was an online test in the MCQ format on 10-08-2020.
- Feedback was taken on 10-08-2020.

Test Conducted on 10-08-2020 for 47 Marks Number of Registrants: 288

Average Marks Recorded: 31.81 (67.68%)

Performance in the Test

Questions	Average out of 5
The content of the course is relevant to the stated workshop outcomes	4.5
The sequence of the topics is appropriate	4.2
The course material was complete and consistent with respect to all essential issues	4.2
The time allocated to different topics as appropriate	3.6
Resources provided during the workshop were adequate	4.1
Resource persons were competent in conducting this workshop	4.6
Overall. the workshop was effective and useful	4.4

Feedback

- Include practical session on Course Designing using ADDIE on one or two specific topics.
- Assignments are also needed. Then only we will be able to know how far we understood the technique.
- Add assignments (Practical) for evaluation.
- A formative evaluation of the workshop activity may also be included.
- Conduct online test on the same day.
- If the participants are given opportunity to create their own content using relevant tools and uploaded as an assignment for each day in LMS, the workshop team can understand the result and outcome of the workshop instantly.
- Provide more sessions on conducting exams, valuation, question paper setting
- Awareness classes to be arranged on Open Educational Resources and its accessibility and possibilities

- Can confine syllabus to the practical requirements for online classes
- Incorporate whatever is absolutely necessary in terms of theory since it is a short-term course
- some sessions on CO and PO mapping as that involves calculations based on marks scored by students in examinations.
- Focusing on any one of the LMS would be more effective
- The course was meant to induct social science and humanities teaching faculty into technology enabled classrooms. The liberal arts subjects are dealing with emotions, pain, in society.
 - Teaching this content through technology requires a new paradigm. This element was absent in this course as the faculties all came from science background. So the course tended to be boring.
 - Online classes in the afternoon and continuous online classes is impractical. This course needs to be reworked that way. Hence course was boring.
 - Online classes about how to conduct is good idea. But question whether the course outcome really reached its client is to be seriously studied. That is why the course was boring.
- Thoughts on the intricate skills required in the new online teaching was great. But more thoughts could be added in subsequent sessions. Indeed the sessions were totally enriching.
- A model course based on the OBT that will lead to a clear understanding to the participants should be created by the organizers. It was absent in the program
- Afternoon sessions are ok but better if it is for practical. THANK YOU Resource Persons for not only the class but also for being accommodative to all the queries of the members. This program is surely a value addition.
- An update in the form some resource or advice is expected after a month or so. The reason is that we have started doing something and the process can be continued as online part of education is going to stay.
- We have come across many tools and facts that are truly useful for teachers to deliver online classes efficiently. This workshop has boosted our confidence to walk the technological way to handle the classes both in online as well as offline mode. On the whole, it was very effective despite the constraints being in the virtual mode.
- More detailed hands on training session on including tools for teaching differently abled students.
- A session on hands-on training will help participants to clarify their doubts (35)
- Give more importance to free online platforms
- Should have included more sessions on audio, video recording/editing, animation applications instead of taking long theory sessions on course design and outcome based education (2)
- Hands on training for moodle and other LMS platforms.
- A session from the technical expert (as was provided during lunch time) is also required.
- A survey on the involvement of participants in online teaching prior to the workshop would have helped to design adequate content.
- As it is an online course, if the materials and the recorded presentations uploaded in the site will be helpful to the participants.
- Please provide us with the recorded video of the course.
- Video resources for post training learning. Follow-up training sessions
- As it is organized by the HE authority, they should provide precise guidelines to what will be the course outcome and should design the curriculum in accordance with the changing national and international scenario, rather than concentrates on the traditional courses
- Can ask for the level of the participants in online teaching. Can be more audience friendly.
- The basic knowledge level of participants was not specified when the course was called for. Had it been for a group of basic level learners, I would not have joined
- In future scheduling of courses could be avoided during monsoon season.

- Though the course was relevant, I would personally suggest some other/more related courses for teachers like NLP (I heard you are offering course on this for Sanskrit teachers), counselling, courses for professional Development etc.
- Special training should be given to syllabus setters
- To improve the effectiveness of such type Workshops the sessions should be practical oriented also, especially in the sessions on Online Teaching Tools. I think it is better to handle a demo and practical session on Revised Bloom Taxonomy in Item Bank Preparation. Majority of Question Paper Setters are not aware of such things. I suggest to KSHEC to take necessary steps to confirm that the outcomes of all programs offered by the universities in Kerala are well stated in the Syllabus of the programs.
- About training on working with, the instruction could be at a slower pace
- Add more online classroom tools on hand training in class interactive tools for communication
- It will be better if the session on is given from the basic level information. Many of the technical terms are unfamiliar.

Moodle

- Should have been Interactive, participatory activity oriented mainly training
- Small assignments could have been given for trial of the online methods
- Some exercises in the form of creating site etc. as assignment would have been given to participants.
- The introductory part of needed slow explanation because participants like me are new to. So practical session was necessary. Then only we could easily learn minute details of it.
- The resource person who taught went at a rocket pace. That session should have been slow with repetitions of stages explained. Setting up is a bit complicated.
- To give more lessons on course especially on how to enroll students in a particular course
- With regard to the class on, if some materials regarding the basics were shared on the previous day, it would have been easy to follow.
- would have been better if it were a workshop model giving time and space for the participants to create classroom or install zoom along with the RPs

OBS

- plz give us a demo of how to edit the OBS videos.
- add some new online tools like OBS, Mind Mapping etc
- We expected a session on OBS studio which was not held .

Online Tools

- M S team platform also should be included.
- Address in general challenges of online teaching and how to overcome them.
- Kindly add more technical sessions on the technologies used in online teaching.
- Focus more on what could be applied in the online classes
- Introduce more online learning applications
- It is requested to provide group-wise sessions for participants to get familiar with atleast one or two online platforms that they are not much aware of.
- It would be more helpful if more information is provided on commonly used online platforms like Google classroom, GMeet, Zoom etc How to make online learning more interactive. More demo classes would be appropriate (3)
- Would have been better if it were a workshop model giving time and space for the participants to create classroom or install zoom along with the R.P.s
- Suggestions and applications to manage a large group (150 +) of students should be included.
- We all are more into using Google Meet and Google classroom... Sessions pertaining to that would have been more useful as compared to.
- When you conduct classes for Faculty in Humanities first you should make sure that all have proficiency in handling basics of online learning. Pre-pandemic period it was not mandatory to have detailed technical knowledge and now all are forced to learn new techniques of

teaching and learning. So such programs in the beginning should try to well equip them in online teaching. So need more practical or specific sessions.

• More application level videos on technology assisted teaching as in, may be posted the website.

Poll

- It could have been more interactive if all resource persons had made use of polls.
- Daily polls were useful. More MCQs could have been included daily.
- It can be made more interactive by more poll questions as it is actually like an incentive. (2) **Practical sessions**
 - Avoid theory classes and include some practical videos
 - Reduce theory classes
 - I expected interactive sessions, where participants are asked to practice what they are taught. The sessions were lectures or theory classes without giving any chances for participants try the tools and platforms practically.
 - Could have given more practical oriented assignments, than theory lectures. (2)
 - It would be good if there was a slot(s)/session(s) for practical work and a Q&A based on queries that will arise from the work.
 - It would have been great if there were more practical integration on the first three days on the aesthetics of online teaching and pedagogy.
 - Please make the course more engaging by quoting real world examples.
 - Practical session on video editing can be given (2)
 - Provide adequate time for practical sessions in the afternoon (40)
 - The sessions were informative. Give more time for practicals. Include more sessions like augmented reality etc.
 - Theory and explanation are given by many people and institutions. Make them create something practical by moving to application level.

Q&A

- Direct question/answer session instead of Q and A
- Instead of too much content, allocate at least 25% of time for doubts clearance and interaction

Resource Persons

- All resource persons were highly competent, and the attitude of the resource persons were very very positive. Maintained a friendly interface throughout.
- Bring young techies to the sessions. It was sad to see the persons who were teaching us were finding it to difficult to manage the platforms. The post-lunch sessions, even if brief, were very good. Introduce more such easy (unfortunately expensive) devices and tools. Thanks a lot for the FDP. In the present scenario of Virtual Learning, participating such a course is a must.
- Instead of offering the program for heterogeneous groups from different disciplines, make it more focused by offering discipline-wise.
- Resource persons with experience in handling the particular issues of social science disciplines should be incorporated.
- Thank you. I greatly appreciate the three resource persons who were remarkable.
- Thank you, Rao sir and all other resource persons. Chandrashekar sir's classes were exceptionally good, it was made more interesting by his sense of humor.

Students

• Include sessions for the students too simultaneously, at least a one day orientation program, on using online tools of learning.

Synchronous/Asynchronous

• Instead of live classes asynchronous classes should be included. That will help the participants to go through the sessions and topics in their convenient time and can reduce the technical issues related to it. Also it would have been helpful as there were many

connectivity issues. The participants would get more time to practice the tools and techniques (7)

- Needed more technical sessions. Synchronous mode of teaching for six or seven hours will not be effective.
- If live interaction is possible, instead of chats and messages, it would be some more effective
- More video of lectures should be made and distributed for future reference along with synchronous mode of instruction.
- Offline availability of some instructional videos
- The mode of teaching can be made asynchronous on some days. (2)

Time

- Some more time could be provided for workshop.
- The time allocated for the Technical sessions must be increased.
- The schedule 10.00 to 1.30 without sufficient interval is difficult. It should have been more than 5 days (6/7)
- Two-day workshop on each subject should be conducted so that teachers will get a general idea regarding how to prepare each subject effectively and from where to find the required materials.
- Reduce the duration of the program to half day. It is difficult to be online because of internet and electricity issues
- The technical sessions were very useful, but I felt that more time should be allocated for these sessions.
- Avoid the use of devices continuously ie. there should be a gap needed at least to charge the device.
- Instead of having continuous online sessions for three hours or so, it is better to break it into small sessions of 1 hour .. I will be fine I think. (4)
- Can increase time but not a whole day.
- There should be 5 mins breaks at least every 30 mins. Sitting in front of a computer at a single stretch is very stressful.
- Time duration of the technical sessions was little bit hectic and it'd be better if you reduce the duration of class/day.
- Split up the sessions rather than completing it at a stretch
- The programs need to be scheduled as half day sessions
- Continuous live classes should be reduced
- Scheduling of the program was a bit too tight. More spacing out is called for.
- Simplified program schedule
- Time schedule must be re-defined. Shorter schedules would have been better to focus on the contents
- Workshop was very informative and effective. Suggestion is only to keep time.
- Time allotment for each topic should be increased.
- Some sessions should be more elaborate.
- The sessions were too hectic, afternoon sessions may be avoided
- Restrict each class for maximum 45 mnts including Q & A. Allot 10 mnts break after each class Give time for hands on exercise.
- Felt a sort of hastiness in Sessions. Take a little more time.
- Give more time for demonstration/ technical sessions/practicing the various Platforms (2)
- Giving more time to the aspect of designing an online Course- preferably more practical oriented could further strengthen the learner. (6)
- More days with shorter duration of modules, particularly installation and use of on line platforms and tools might be more effective
- Length of the course should be increased to at least two weeks (10)
- If the length of the course is increased to two weeks, it will be more effective for a concrete understanding

- Increase the number of days of the program to include more sessions on state of the art techniques of teaching and content creation at a relaxed pace.
- I feel the course should be extended to 07 days. So that both conceptual and practical implications of the content would get enough time to get elaborated. (2)
- If excel/ spreadsheet, word etc come under the preview of the training, that too also need a little more time and the pace could be a little slower (2)
- More importance may be given to, ppt and excel.
- Kindly provide more session for online class/tools/techniques/demo/practice (5)
- More technical sessions should be included and should be efficiently conducted.
- More time and practice would have much more benefited the teaching faculty.
- More time could be devoted to each topic. Hands on training could be provided.
- More time could have been allotted to Course design- esp the Assessment and Evaluation part.
- Practical experience, More days, More resource persons
- Provide interactive activities, Five minutes break after every session, Need time to practice.
- Some classes had more content than we can grasp.
- Some sessions were superfast as I found it difficult to catch up on certain occasions.
- The Resource persons sometimes tend to just speed up the presentation and it's hard to catch up with them.
- The speed of practical sessions should be reduced so that those who are unfamiliar with the online teaching can also learn well
- Time constraint, some topic like OBE must need to be much more elaborated. Since we are now compelled to do with OBE.

Tools

- Include more ICT tools that could help the teachers get the students more interested.
- A session on online evaluation tools could have been integrated
- The session on power point, word and excel were only preliminary
- MS office is widely used by faculty members and hence half day session is not required.
- As majority of us are already into online teaching, new tools could have been discussed rather than using PowerPoint and spreadsheets...
- More time could have been devoted discussion on excel workbook. It goes without saying that it is an excellent teamwork.
- As most of the teaching and student community are familiar with Google platform, emphasis should have been given to manage the tools in it as a learning-teaching mode. (2)
- More time should have allotted on things like power point, G-suite, Google meet etc. (4)
- More sessions on online meeting platforms
- More sessions on the use of interactive boards
- No need of elaborating the basics
- Could have special sessions for Language & Literature teachers on special tools required by them
- Creating Animated videos like Powtoon and Peardeck can be given
- Details of more user friendly interfaces like ignomio and Teams
- Each topic can be explained with the basic concepts, as many of the teachers may not be well versed in them
- Few more teaching tools could have been included
- Give more importance to introducing tools. Overall it was an excellent FDP program
- Help participants to create and manage their online resources.
- In the case of tools, if a recorded video is given before the class then the participants can try it and raise relevant questions with regard to its usage.
- Introduce more ICT tools, ones that teachers are not familiar with. (6)
- It would have been better to have more Practical sessions & more emphasis to other online platforms. (2)

- Try to incorporate both theoretical and practical sessions in future. The last two days the topics were finished in haste. As it deals with TOOLS, it was pretty difficult for me to move along with the pace. So please arrange the future classes in such a way that the participants can practice the use of tools along with the session.
- Please include subject wise tools
- Latest online technologies are to be introduced more.
- Latest trends like creating webpages can be done
- Less of theory and more info about helpful websites and apps eg. for chart creation
- More practical demonstrations of ICT tools are required, than the age-old conventional educational pedagogical theories.
- More training on computer programs will be useful.
- Please give us updates about the new technology arrives, give us short term course like this and sometimes organize a webinar about the new teaching tools and technology
- Some attention has to be paid to sequence of topics. Microsoft word, excel and PowerPoint should have been taught in the beginning.
- Participants not familiar with technology find difficult to cope with the course and pace
- The sessions could be more engaging through use interactive and participatory tools with demonstration of tools you have mentioned in the content of sessions.

Video Tools

• More time can be given for training in video recording etc. (5)

CHAPTER II LET'S GO DIGITAL & DIGICOL SCHEMES

Training on Learning Management System

LMS stands for Learning Management System, a software application or platform that helps institutions and organizations manage and deliver educational content, administer courses, track student progress, and facilitate communication between learners and instructors. This has become increasingly popular with the rise of online and blended learning, as they provide a centralized hub for all aspects of the learning process.

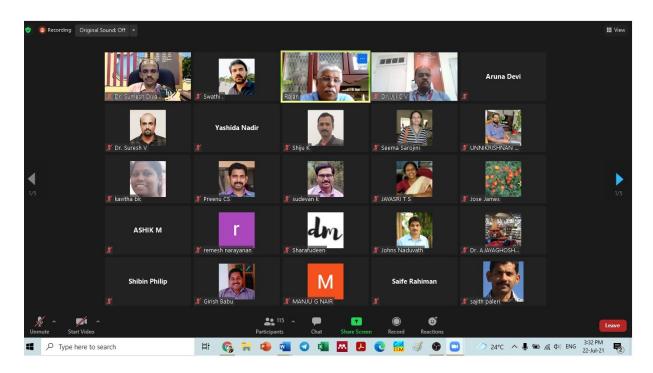
Moodle is one of the most widely used open-source LMS. It stands for Modular Object-Oriented Dynamic Learning Environment. Moodle provides educators and administrators with a flexible and feature-rich platform for creating and delivering online courses. It offers various tools and functionalities, such as content management, course administration, assessment and grading, discussion forums, and collaboration tools. The context of LMS and Moodle lies within the realm of education and training. They are utilized by educational institutions, corporations, government organizations, and other entities that require a structured and organized approach to delivering learning experiences. LMSs like Moodle enable the creation of online courses, allowing learners to access educational materials, participate in activities, submit assignments, and interact with instructors and peers, regardless of their physical location.

Context

The importance of LMSs like Moodle is manifold. Firstly, they enhance accessibility to education by breaking down geographical barriers and enabling remote learning opportunities. Learners can access course materials and resources at their convenience, promoting flexibility and self-paced learning. Secondly, LMSs provide a centralized and organized approach to course management, allowing instructors to create and structure content effectively, monitor student progress, and provide Moodle offers a comprehensive suite of tools for course management, content creation, and student assessment. With its intuitive interface and robust features, Moodle facilitates seamless communication, collaborative learning, and personalized instruction in virtual classrooms

timely feedback. Thirdly, LMSs facilitate collaboration and interaction among learners through discussion forums, messaging, and group activities, fostering engagement and knowledge-sharing. Lastly, LMSs offer comprehensive tracking and reporting capabilities, enabling administrators and instructors to assess learner performance, identify areas for improvement, and make data-driven decisions.

Being a powerful tool that revolutionizes the way education and training are delivered, it is high time to equip our educators and teacher community to this software and associated tools. A fundamental idea and use of Moodle based LMS and topics like online instructional methods/tools such as softwaredriven course designing, web-based instruction, computer-mediated communication, mind mapping, participatory learning facilitation, and effective management of digital content are dealt in detail during the FDP on online education held in July & August 2020. The feedback we receive from the participants is very positive about the relevance of topics covered in all sessions, but a vast majority of them demands more exposure and familiarity to online tools for creating quality course contents and its instruction delivery, through adequate sessions on hands on training essentially to build such capability among them. The council has a purchased version of WebEx platform which can hold large number of participants.



Phase II Training on Moodle based LMS

The Let's Go Digital initiative aims to increase faculty members' awareness of and comfort level with the use of Moodle-based LMS in their course delivery. The Council organised a series of meetings with specialists and the Digital University of Kerala as part of it (DUK).

The use of MOODLE for teaching-learning-assessment components in higher education is what the Government of Kerala hopes would transform these institutions into a digitally enabled environment as part of the Let's Go Digital programme. The Kerala State Higher Education Council is tasked with conducting institutional training for the entire faculty through cluster level trainings, as well as engaging in providing training for the faculty members of state universities and colleges.

The project involves a central management and system administration by KSHEC with the backend infrastructure developed, maintained with technical support by Digital University of Kerala for implementing the software.

Technical Summary

The technology of the Virtual Machines Docker Containers System (VMDCS), on which this concept is based, only needs a small number of physical machines. It can offer each institution and college its own Moodle site, providing all students and teachers access to use it as an additional tool for teaching and learning.

Each institution or university receives its own dashboard to oversee its operations through an LMS thanks to instances created for them by Digital The project involves a central management and system administration by KSHEC with the backend infrastructure developed, maintained with technical support by Digital University of Kerala

University's centralised cloud platform. The privilege of managing one's own courses within the system will be granted to each faculty member.

The number of containers in use will depend on how many colleges are using the solution at once. Each college will be in its own docker container. Since the docker will accommodate numerous colleges,

CHAPTER III TRAINING PROGRAMMES

Decentralized Training Programme

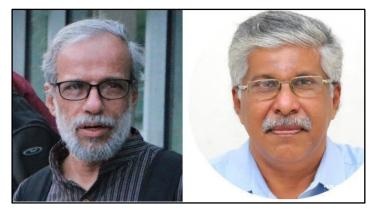
In order to frame the procedure to launch the training programmes for Institutions and trainers for Moodle based LMS, the Council had convened an online meeting held on 9-7-2021 by the Vice Chairman Prof. Rajan Gurukkal. The Member Secretary Dr. Rajan Varughese, the Research Officers, and various faculty members from different institutions attended the online meeting called by the Council on 9/7/2021 in order to frame the procedure to launch the training programmes for institutions and trainers for Moodle-based LMS. The meeting's main purpose was to discuss the action plan to disseminate the training programme so as to reach a larger section of the population.

It concentrated on advancing the fundamental training programmes in digital pedagogy, MOODLE tool management proficiency, admin management, Moodle installation, and the necessary server setup at the institutional level, among other topics. The faculty who participated in the programme have expertise in all of the aforementioned levels of areas, and they have come to an agreement on the structure and syllabus of the Trainer's Training Program at KSHEC level, but held at an institution-centered location with effective and knowledgeable resource people and server facilities available to conduct training as well as MOODLE course management.

It is suggested that such training should be conducted in two phases: Basic Training and Advance Training, both of which should include two-hour hands-on sessions, task-oriented practise sessions, and RJ submissions. After the usual session, there will be a chance for clarification the following day. During the conversation, certain crucial remarks are raised, including:

¹We could create a handbook in Malayalam by modifying/trimming this content and adding fresh write ups so that teachers will have a ready reckoner. Govt. Brennen College has a few training experts on

MOODLE who can offer support for training programme. ²A host institution that can conduct training in association with KSHEC may have a server with 16GB RAM, with adequate bandwidth and 4 TB of storage. A Google Meet account that can accommodate up to 150 people for a live class and a Go Meeting platform that can accommodate even up to 250 people



¹ Dr. Dileep Raj, Assistant Professor, Government Brennen College

² Dr. Santhosh H.K., Sree Neelakanta Govt Sanskrit College, Pattambi

are likely to be available in such an institution. Government College Pattambi is presently having such a facility.

³ It is appropriate if we could provide small videos (ideally 3-5 minutes duration) in between for better understanding. St. Thomas College Thrissur is also having a dedicated physical server with capacity of 32GB RAM, 2 TB hard disk with good bandwidth connection. Since the college have a core team for moodle training, they are willing to provide we support for support KSHEC activities.

⁴It looks like we have ICT facilities readily available and a handful of resource persons at various institutions. For technical education stream, adequate and manpower to train the faculty at basic as well as advance MOODLE levels is available. We have to identify which all admin activities will have to be managed at the Institution level like user addition, resetting user credentials when required, adding necessary plugins, etc. and is better to have a clear picture about which all parts of server administration will be managed centrally and which all to be managed at the Institution level. It would be great if experts can prepare a draft list of activities to be managed at these levels.

⁵Now Calicut University can share their available resources and resource persons and they can plan trainers training with a design that includes moderate level content covering almost all the relevant processes involved.

Once MOODLE is installed, we only need to centrally back up the site maintenance server, assigning system admins at the institutional level can be best done with all other customization and user course plug-in management at the institutional admin level (Dr. Santhosh H.K).

⁶There would be four types of courses are required: Everything is five days long. Two hours of instructional hours each day, one hour of self-practice, and one hour of doubt clearing for those in need, eg.

- 1. Training of Basics MOODLE (for everyone. Essential mood training and pedagogical matters included)
- 2. Training for Advanced MOODLE (Optional Site Administrators / Coordinators and Advanced Learners.
- 3. Trainers Training (Two-day server configuration plus system installation administration management matters and two days advanced course tools and so on, depending on why the pedagogical aspect is in the mood)
- 4. Training for the technical support team.

³ Dr. Johns Naduvath, St. Thomas College (Autonomous), Thrissur

⁴ Dr. Sumesh Divakaran, CET, Trivandrum

⁵ Dr. Lajish V. L., University of Calicut

⁶ Dr. Santhosh HK, Sree Neelakanta Govt Sanskrit College, Pattambi

Create a state level technical team and district level technical sports cell involving programmers in technical institutes and train them.

Those who have passed the basics can start a discussion forum for additional training and quizzes.

We can also put short videos in it. One or two -hour follow-up live session can be arranged if required.

All courses must be task oriented and their activities must be assessed at the end.

⁷If we plan long duration courses, faculty may be reluctant in joining, thinking that this is something not easily learnable. Hence, 5 days 2 Hr. Sessions is a good option. We may not be able to cover everything in this. Remaining contents if any may be covered later based on demand from learners after they start practicing and identifying use cases where they don't know how to get it done.

⁸Regarding Technical Manpower: Technical Education Department has Computer Programmers and Computer Analysts posts, some of them are interested in taking such responsibilities. Also, we have tradesman and trade instructor posts in Computer Science and also in Information Technology, with many incumbents. They are not teaching. They are basically doing installation, configuration and maintenance of software. If we can train them in Moodle administration, we can utilize them in managing activities at Institute, cluster and district levels

Prof. Gurukkal suggested to bring out a concrete syllabus and schedule after having discussion among the members and to work out a plan for starting the training programme at institution levels. The expert team of proficient faculty who can lead sessions as per the schedule /syllabus prepared, have to be widened to accommodate at least 100 in number and also to enlisted either by pick and use or through institutional contact. This has to be done in faster pace ideally on 13—2021 (Tuesday).

The Member Secretary has emphasized the need of starting the training programme as it has been enlisted in the 100 days programme schedule of Hon'ble Chief Minister. He called for the collective discussion and inputs from various teachers organisations and individuals who have expertise in this activity.

No	Name	Address
1	Prof. Rajan Gurukkal	Vice Chairman, The Kerala State Higher Education Council
2	Dr. Rajan Varughese	Member Secretary, The Kerala State Higher Education Council
3	Dr. Sumesh Divakaran	Professor and Head, Department of Computer Science and Engineering, College of Engineering, Trivandrum
4	4 Dr. Ashkarali P. Asst Professor of Electronics, Govt. Arts and Science Colle Tanur	
5	Dr. Ramesh A.R. Asst Professor of Chemistry, Govt. Victoria College, Palakkad	
6	Dr. Biju K.	Assistant Professor of Education, School of Education and Training,Central University of Tamil Nadu
7	Dr. Santhosh H. K.	Associate Professor & HOD Malayalam Sree Neelakanta Govt Sanskrit College, Pattambi

⁷ Dr. Sumesh Divakaran, CET, Trivandrum

⁸ Dr. Sumesh Divakaran, CET, Trivandrum

No	Name	Address
8	B Dr. Johns Naduvath Department of Physics, St. Thomas College (Autonomou Thrissur	
9	Dr. Dileep Raj Assistant Professor, Government Brennen College	
10	Dr. Lajish V. L.	Assistant Professor & Head, Department of Computer
10		Science, University of Calicut
11	Dr. Priya K. Nair Research Officer, The Kerala State Higher Education Council	
12	Dr. Shafeeque V. Research Officer, The Kerala State Higher Education Council	
13	Dr. Manulal P. Ram	Research Officer, The Kerala State Higher Education Council

Prof. Gurukkal has suggested of forming a working group to bring out a well-structured syllabus and schedule after discussion among other members and it has been decided to work out a plan for starting the training programme at the institution level also. He pointed out that an expert team of proficient faculty who can lead sessions as per the schedule /syllabus prepared is to be formed. Such a number of trainer faculty need to be large enough and to be enlisted either by pick and choose or through institutional contact by the members of this group.

He added that when these programmes are implemented at the state level, peer pressure will build among the institutions to jump on the technology bandwagon and become leaders in the nation. Because MOODLE is free and open source software, it will be advantageous to a bigger community.

Dr. Rajan Varughese, the Member Secretary, has stressed the importance of beginning or maintaining the training programme at the KSHEC level as it is currently being done. He recommended that after that, we may use university, district, or institution-level training to include certain institutions as the centre of training programmes. After a group discussion with several teacher's organisations and experts in this field, he underlined the necessity for thorough standards for the proposed training programme that incorporate discipline-specific demands and inputs.

The conversation centred on strengthening the fundamental training programme in digital pedagogy, proficiency with MOODLE tool management, admin management, Moodle installation, and the necessary server setup, possibly at the institutional level. The faculty members who attended the meeting are experts in all of the aforementioned fields, and they have come to a consensus on the format and curriculum of the Trainer's Training Programme at both the KSHEC and institution levels. The course management on MOODLE can be done anywhere there are resource people and server facilities available. The training must be completed in two phases: Basic Training and Advance Training. Both are expected to consist of two hours of hands-on practice sessions.

Courses Proposed

□ Training of Basics MOODLE (for everyone. Essential mood training and pedagogical matters included)

- □ Training for Advanced MOODLE (Optional Site Administrators / Coordinators and Advanced Learners.
- □ Trainers Training (Two-day server configuration plus system installation administration management matters and two days advanced course tools and so on, depending on why the pedagogical aspect is in the mood)
- □ Training for the technical support team. Create a state level technical team and district level technical sports cell involving programmers in technical institutes and train them.
- □ Those who have passed the basics can start a discussion forum for additional training and quizzes.
- □ We can also put short videos in it. One or two -hour follow-up live sessions can be arranged if required.
- □ The duration of all courses are five days. Two hours of instructional hours each day, one hour of self-practice, and one hour of doubt clearing for those who need
- □ All courses must be task oriented and their activities must be assessed at the end.

Meeting ended at 1.30 pm

Online Hands-On FDP on Learning Management System

Online hands on training programme to the faculty members to make them proficient to use Moodle as a Learning Management Systems to create, upload and deliver e-contents to support regular classes and also to conduct online courses. Moodle is the best alternative as an LMS which will be able to supplement the regular or online classes.

- After completing this session, faculty members may have capacity to build and conduct regular classes and online courses with the help of MLS (Moodle).
- Building confidence among teachers to use modern digital tools and technology to integrate in the teaching, Learning and Assessment process.

As mentioned earlier a draft scheme & module is prepared putting together a design of a training program for trainers. Which would be preferably to be in the nature of a course planning workshop. It can be with, one day to discuss its pedagogical vision, three days to further develop their platform knowledge in the mood as a group that knows the basics of the mood and to gain a general knowledge of the administration matters.

The team has brought out a document as follows:

Title: Live Hands- on Training Programme on Moodle Basics

Proposed Scheme & Schedule

Day 1 Session 1 (one hour)

Introduction to TPACK, Bloom's Digital Taxonomy, LMS & Pedagogy Advantages of Moodle LMS & Basic Features Session 2 (one hour) Setting up moodle classes -Creating Category, Course, Course Settings. User Registration, User Roles, Cohort Creation, Course Enrollment. Practice & Doubt Clearing -(1+1 Hours)Day 2 Session 3 (one hour) OBE- Learning outcomes and Course designing, Grade Book, Session 4 (one hour) Activity and Resources: Adding URL, File, Folder Creating web pages & Book Practice & Doubt Clearing -(1+1 Hours)Day 3 Session 5 (one hour) Assignment, Chat, Glossary, Label, Session 6 (one hour) Ouiz, Wiki Practice & Doubt Clearing – (1+1 Hours) Day 4 Session 7 (one hour) Live Classes (Bigbluebutton & Meet), Session 8 (one hour) Discussion Forum, Reflective Journal, Feedback, Choice, Practice & Doubt Clearing -(1+1 Hours)Day 5 Session 9 Advancing with Moodle A short introduction to Workshop, Lesson, H5P, SCORM PODCASTING Other Activities etc. Session 10 Peer Evaluation & Feedback Post Course Activity Discussion (Hour) Post Course Activity: A peer reviewed workshop activity to assess what learnt from the Course.

Task: All participants create their own moodle website and then start a course in their subject area, enroll students, start a course and provide seven different activities and resources. Then give grading

based on quizzes and assignment activities.

The time limit of the entire training programme is 10 days

Training Collaboration

Training programmes under the Let's Go Digital scheme and LMS to colleges under Digicol scheme are operationalized collectively by the Council in association with Digital University of Kerala (DUK). This programme has opened the intensive Institution level Online Hands-on Training on Moodle LMS for colleges and university departments in the State. The DUK has the project of setting up Server Infrastructure for the colleges once these colleges have completed the KSHEC training on Moodle

LMS organised by the Council. The training programmes organised by the Council for Institution level as well as general for faculty members from any colleges held in association with the respective Resource Institutions already identified. Dr. Saji Gopinath, the VC of the DUK delivers the keynote address explaining the context of online education and the immense scope of techno pedagogical tools and various innovative approaches for the contemporary and future trends in higher education.



Dr Saji Gopinath, Hon'ble VC, Digital University of Kerala

After the official launch of the programme the Council has

associated with such three technical centres for the conduct of the training programmes. A master's training programme was held for the selected experts from different institutions.

In addition to this, for technical education/engineering education, a special masters training was held using the facility of College of Engineering Trivandrum (CET). The major collaborating centres for the training activity are:

Team I. University of Calicut (Department of Computer Science):

The Council has conducted several Online Hands-on FDP on Learning Management System (Moodle) and Educational Video Content Development with its experts from the Educational Multimedia Research Centre (EMMRC) & Department of Computer Science. As the COVID-19 has resulted in the closing of schools and colleges all across the world, teaching is undertaken remotely on digital platforms. During the Lock down period, the teaching, learning and assessment activities of the University teaching Departments and the affiliated colleges are partially disrupted and it may led to postponement of University Examinations and eventually led to the rescheduling of the academic calendar. So the council has identified that to consider the alternatives for the conduct of classes and assessments supported by the technology enabled platforms such as learning management systems (LMS). Ensuring clarity, quality and attractiveness to online class are also having same importance as producing and disseminating it. This online course, as two major parts, offer training to college teachers to develop best educational video programmes and to use the LMS, especially the Moodle, to effectively handle their online classes. The classes are mainly organised and led by Dr. Lajish V.L.

No Topics

Resource Persons

1	General Context and	Dr.Lajish V.L.	
	LMS	Associate Professor, Department of Computer Science &	
		Director, Calicut University Computer Centre, University of Calicut	
2	Getting started with	Dr. Ramesh A. R.	
	Moodle. Moodle	Asst. Professor, Dept. of	
	Course Creation	Chemistry, Govt. Victoria	
		College, Palakkad	
3	Moodle Resources	Dr. Ashkarali P.	
		Asst. Professor, Department of Electronics, Govt. College, Thanoor	
4	Assignment, Rubrics	Dr Biju K	
	&. Forum Discussion	Asst. Professor, Department of Education, Central	
		University of Tamil Nadu	





Dr.Lajish V.L

Assistant Professor & Head, Department of Computer Science, University of Calicut, Kerala - 673635 INDIA Malappuram, Kerala, India

Ashkarali Puthiyedath, PhD

Assistant Professor of Electronics at Collegiate Education Kerala, India & Founder of e-learning platform keralamoocs Ernakulam, Kerala, India

Team	· -	Fraining	Programmes
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No	Programme	Beneficiary Group	Period		
1	Let's Go Digital – KSHEC- LMS- (Moodle)- Institution Level Training (One week) 5 days online Institutional Training RP: Dr. Lajish V.L. K & Team	Institutions from various places No. of Participants:124	6-9 March 2023 6.00 pm to 8.00pm		
2	Let's Go Digital – KSHEC- LMS- (Moodle)- Institution Level Training (One week) 5 days online RP: Dr. Lajish V.L., University of Calicut and Team	Institutions from various places No. of Participants:100	15-21 July 2022 3.00 pm to 5.00pm		
3	Let's Go Digital – KSHEC- LMS- (Moodle)- Institution Level Training (One week) 5 days online RP: Dr. Lajish V.L. University of Calicut & Team	Institutions from various places No. of Participants:175	6-10 March 2023 6.00 pm to 8.00pm		
4	Lets Go Digital - FDP on Learning Management Systems conducted by the KSHEC KSHEC in association with the Department of Computer Science, University of Calicut. Organised Dr. Lajish V. L., Training Centre: KSHEC	Faculty from state universities and affiliated colleges Venue: Online No. of Participants: 130	26-7-2021 to 30-7-2021 Duration of sessions: 10.00 am to 4.00pm		
5	Lets Go Digital - FDP on Learning Management System (Moodle) and Course Designing conducted by the KSHEC in association with the Department of Computer Science, University of Calicut. Organised Dr. Lajish V. L., Training Centre: KSHEC	Faculty from state universities and affiliated colleges Venue: Online No. of Participants: 200	09-8-2021 to 13-8-2021		

No	Programme	Beneficiary Group	Period
6	Let's Go Digital – KSHEC- LMS- (Moodle)- Institution Level Training Coordination by Dr. Lajish V.L. and Team	Institutions from Malappuram, Kozhikode & Palakkad districts No. of Participants: 260	13-9-2021 to 17-9-2021 3.00 pm to 7.00pm
7	FDP in LMS and Course Design (For all Disciplines) Resource Persons: Dr. Lajish V.L.,	Faculty members from various colleges affiliated with the state universities Venue: Online No. of Participants: 100	19-10-2020 to 23- 10-2020
8	FDP in LMS and Course Design (For all Disciplines) Resource Persons: Dr. Lajish V.L., Calicut University and Team	Faculty members from various colleges affiliated with the state universities Venue: Online No. of Participants: 100	30-11-2020 to 03- 12-2020

Team II. Learning Centre, SNGS Pattambi: Sree Neelakanda Government Sanskrit College

A group of experienced faculty members of the Institutions is highly proficient in Moodle LMS and its operationality. The team led by Dr. H.K. Santhosh has made tremendous effort in handling various training schedules in association with the KSHEC. These hands-on-trainings are very helpful for the basic learners as well as advanced learners. They provide extensive support in implementation stage as well.

The training for advanced learners includes the following components:

- Installing Moodle, Set up, Site administration, Changing site information, Advanced features, Competencies settings, Message setting, User Registration, Cohorts, Bulk User registration, Roles and permissions, Admin, Manager, Guest etc. Setting Category and Courses Course Formats.
- Site Features. Customization of site, Installation of themes, Theme selection and customization, Site Lay out & Design Themes Fordon Adaptive Moove Trevea, Front page setting, Blocks, Adding additional Plug ins and activity modules, Mobile app Configuration, Setting up repositories, Admin level server configuration
- Course Settings, OBE based Course designing, Writing Course outcomes, Learning plan templates, Different Course Formats, Course Lay Out and Design, stealth activities, Tree format, Text Editor plug ins Atto HTML editor, TinyMCE HTML editor, Labels, Forum, Attendance, Feedback. Grading and Evaluation, Glossary, Grade Book Settings, Advanced Grading Methods, Scales, Competency Framework
- Advancing with Moodle An Overview of available Activities and Resources in Moodle. Advanced Evaluation techniques in Quiz, Workshop, Assignment Activities. Question Bank management. Adaptive learning in Moodle – Lesson, Database

- Advancing with Moodle 2 Tools & Techniques: H5 P, Live Interactive Classes- Bigbluebutton, Jiitsi and Google Meet Integration in moodle, Blended Learning techniques - Reflective Practices & Flipp learning, Video editing and streaming, Podcast
- Creating SCORM package, IMS Package, Content Page and Integration with moodle. Reports generation, Completion tracking, Course back up, Site back up. Course Certificate Generation Moodle Community, Online supports

For Basic Learners, following session contents are provided:

- Techno Pedagogy and LMS, Moodle pedagogic Philosophy & Features, Getting started with Moodle.
- Moodle Settings, Category & Courses creation, User Registration, Doubt Clearing, Cohort
- Course Settings, Adding Resources, File, Folder, URL, Page, Adding More Resources, & activities Book, Label, Forum, Choice, Attendance
- Doubt Clearing, OBE & Moodle, Grade Book set up, Adding Activities & Assignment Submission, Collaborative Activities, Glossary, Database, Workshop, Chat

Resource Persons:

- Dr. H.K. Santhosh, Associate Professor, Malayalam, SNGS Pattambu
- Dr. Abdul Rasheed V. T., Assistant Professor, SNGS Pattambi
- Sri. Kaladharan P.V., Assistant Professor, KKTM College Pullut
- Sri. Alikutty C., Assistant Professor, SNGS, Pattambi
- Sivasankar S., Assistant Professor, SNGS, Pattambi



Santhosh Hk

Head of the Department of Malayalam, SNGS College, Mele Pattambi

Academic and Administrative Quality Auditor Higher Education Institutions. Moodle based LMS System developer and Educator. Training Programmes are conducted for UGC HRDC and Higher Education Council. Member, State Level Coordination Committee Let us go digital Mission, Govt. of Kerala.

Team II: Training Programmes

N	0	Programme	Beneficiary Group	Period
1		Let's Go Digital – KSHEC- LMS- (Moodle)- Institution Level Training (One week) 5 days online	Faculty Members from various institutions	18-23 May 2023 6.00 pm to 8.00pm

No	Programme	Beneficiary Group	Period
	Basic Learners RP: Dr. Santhosh H.K & Team	No. of Participants:120	
2	Let's Go Digital – KSHEC- LMS- (Moodle)- Institution Level Training (One week) 5 days online Advanced Learners RP: Dr. Santhosh H.K & Team	Faculty Members from various institutions No. of Participants:117	3-9 May 2023 6.00 pm to 8.00pm
4	Let's Go Digital – KSHEC- LMS- (Moodle)- Institution Level Training (One week) 5 days online Institutional Training RP: Dr. Santhosh H.K & Team	Institutions from various places No. of Participants:117	13-17 March 2023 6.00 pm to 8.00pm
5	Let's Go Digital – KSHEC- LMS- (Moodle)- Institution Level Training (One week) 5 days online RP: Dr. Santhosh H.K. and Team	Institutions from various places No. of Participants:429	11-17 May 2022 5.00 pm to 7.00pm
6	Let's Go Digital – KSHEC- LMS- (Moodle)- Institution Level Training (One week) 5 days online RP: Dr. Santhosh H.K. and Team	Institutions from various places No. of Participants:300	23-29t June 2022 6.00 pm to 8.00pm
7	Let's Go Digital – KSHEC- LMS- (Moodle)- Institution Level Training (One week) 5 days online RP: Dr. Santhosh H.K & Team	Institutions from various places No. of Participants:265	13-17 March 2023 6.00 pm to 8.00pm
8	Let's Go Digital – KSHEC- LMS- (Moodle)- Institution Level Training Coordination by Dr. Santhosh H.K., and Team	Institutions from Idukki, Kottayam, Pathanamthitta districts & Govt. College, Tirur No. of Participants: 320	14-9-2021 to 18-9-2021 5.00 pm to 7.00pm

Team III. Training & Corporate Services, IPSR solutions (Marian College Kuttikkanam

The programme titled as "Best Practices for Online Teaching: Classrooms, Courseware and Tools" handled by able resource persons led by Dr. Mendez Jacob, Former Head, Department of Mathematics, M.G. University Kottayam. The main Outcomes on completion of this programme that the participants will be able to demonstrate following skills:

- Apply the various Moodle functionalities and competencies in online learning.
- Apply Pedagogical approach in online learning
- Use Moodle platform for course designing, set effective assessments and fostering student-teacher interaction.
- Integrate various learning and technological support systems with Moodle.
- Operate Moodle with a higher level of proficiencies by knowing its limitations and possibilities.
- Modules include:

- Moodle site creation,

 Accounts Management,
 Sharing resources Book, File, Folder, Page, URL, Video,
 Assignment activities,
 Course design and its pedagogical approach,
 Quiz
- Discussion forums, Workshop, Peer Evaluation,

 Video Content Creation, Editing and Optimization,
 YouTube channel creation and content promotion
- Blogs, Chat,

 Attendance Management,
 Lesson Activity,
 Creating Wiki,
 Database creation,
 Log Management and Grade Book,
 Feedback and Certificate,
 Learning Technology
 Integrating Moodle with Mentimeter, Padlet, Big Blue Button etc.
- Google Tools,

 Other Educational Tools,
 Way forward and Case studies, Trainers Training Programme - Online Faculty Development Programme, Best Practices for Online Teaching: Classrooms, Courseware and Tools,
- Mode of Delivery, The entire FDP will be a hands-on programme, where the participants will undergo an online training,, where they will experience live online sessions backed by activities and assessments through the Learning, Management Portal (LMS).

This way, the participants will equip themselves in conducting online training sessions for their students as well as in imparting similar skills to their peer teachers.

Team	Team III: Training Programmes					
No	Programme	Beneficiary Group	Period			
1	Let's Go Digital – KSHEC- LMS- (Moodle)-Institution	Institutions from	1-7			
	Level Training (One week) 5 days online	various places	February 2023			
	RP: Dr. Mendez Jacob and Team	No. of Participants:200	3.00 pm to 5.00pm			
2	Let's Go Digital – KSHEC- LMS- (Moodle)-Institution	Institutions from	11-17			
	Level Training (One week) 5 days online	various places	May 2022			
	RP: Dr. Mendez Jacob and Team	No. of Participants:380	5.00 pm to 7.00pm			
3	Let's Go Digital – KSHEC- LMS- (Moodle)-Institution	Institutions from	11-17			
	Level Training (One week) 5 days online	various places	May 2022			
	RP: Dr. Mendez Jacob and Team	No. of Participants:169	5.00 pm to 7.00pm			
4	Let's Go Digital – KSHEC- LMS- (Moodle)-Institution	Institutions from	1-7			
	Level Training (One week) 5 days online	various places	February 2023			
	RP: Dr. Mendez Jacob and Team	No. of Participants:200	3.00 pm to 5.00pm			
5	FDP in Trainers Training Programme- (Moodle-LMS) (For all Disciplines) Resource Persons: Dr. Binu Thomas, Marian College, Kuttikkanam Dr. Mendus Jacob, Marian College Kuttikkanam	Faculty members from various colleges affiliated with the state universities Venue: Online -Webex No. of Participants: 290	08-07-2021 to 14-07-2021			
6	Let's Go Digital – KSHEC- LMS- (Moodle)-Institution Level Training Coordination by Dr. Mendez Jacob and Team	Institutions from Thiruvananthapuram, Kollam districts No. of Participants: 280	22-9-2021 to 27-9-2021 5.00 pm to 7.00pm			

Resource Persons:

1) Dr. Binu Thomas

Associate Professor at Marian College Kuttikkanam (Autonomous)

Joint Director of Marian Institute for Innovative Teaching-Learning and Evaluation (MIITLE)

Head - Quality Assurance Cell, Marian College Kuttikkanam (Academician with 20 + years of experience)

2) Dr. Mendus Jacob,

Director of MCA Programme at Marian College Kuttikkanam (Autonomous)

Former Director of School of Applicable Mathematics, M.G. University

(Academician and Entrepreneur with 30+ years of experience)

3) Dr. Sunil Job K. A

Adjunct Faculty and formerly Principal in-charge, M.G. University College of Teacher Education

Specialist in Outcome-Based Education (OBE), Bloom's Taxonomy, Data Analytics and Visualization, Machine Learning, and Research Methodology
(PhD in Mathematical Education, Academician with 25+ years of experience)
4) Dr. Brijesh George John,

Associate Professor and Corporate Relations Manager at Marian College, Kuttikanam

Chairman of Placement officers Consortium, Kerala, International career consultant, soft skills trainer and Youtuber (Academician with 20+ years of experience)

5) Ms. Kochumol Abraham, MCA, M. Tech (IT), M Phil (CS),

Working as Assistant Professor, P G Department of Computer Applications, Marian College, Kuttikanam (Autonomous), Kerala. 15 years of teaching experience. She has several paper, publications in National and International Journals and one UGC funded research project. Area, of Interests: Artificial Intelligence, Machine Learning and Data Science.



Dr Mendus Jacob



Dr Sunil Job K A



Kochumol Abraham

Besides the above, the Council had initially organised Masters Training for Trainers in which advanced Moodle Management was presented. The Department of Computer Science and Engineering of the College of Engineering Trivandrum (CET) led the training programme with its expert faculty members. They have extended this course for the Polytechnic Colleges under the Directorate of Technical Education (DTE)

No	Programme	Beneficiary Group	Period
1	FDP in Edu-Tech Hands-On Training (Moodle-LMS) (For all Disciplines) Resource Persons: Dr. Ashkarali, Gov.t College Tanur Dr. Ramesh A.V., Govt. Victoria College, Palakkad Dr. Biju K., Central University of Kerala Dr. Santhosh H.K., Govt. Sanskrit College, Pattambi	Faculty members from various colleges affiliated with the state universities Venue: Online -Webex No. of Participants: 192	23-06-2021 to 28-06-2021

No	Programme	Beneficiary Group	Period
2	Let's Go Digital -Moodle Trainers Team (MTT) @ Kerala State Higher Education Council The same will be conducted in association with KSHEC at CET Trivandrum Dr. Sumesh Divakaran & working group members as resource persons. Training Centre: CET Trivandrum	Participants: selected faculty from CET and arts and science colleges (handpicked) who have already acquired adequate basic knowledge on MOODLE tools No. of Participants:115	22-07-2021 to 27-07-2021 (3.00 pm to 5.00pm)
3	Lets Go Digital - KSHEC-Using Moodle as a Learning Management System - Training for CET faculty In association with KSHEC at CET Trivandrum Organised by Dr. Sumesh Divakaran & existing working group members as resource persons. Training Centre: College of Engineering Trivandrum	Participants: faculty from CET alone, who have already acquired adequate basic knowledge on MOODLE tools No. of Participants: 250	29-07-2021 to 03- 08-2021 3.00 pm to 5.00pm
4	Lets Go Digital KSHEC-Using Moodle as a Learning Management System - Training for the faculty of Govt. Brennen College, Thalasserry In association with KSHEC at CET Trivandrum Organised by Dr. Dileep R. & existing working group members as resource persons. Training Centre: Govt. Brennen College, Thalasserry	Participants: faculty from Govt. Brennen College, Thalasserry No. of Participants: 130	05-8-2021 to 10-8-2021 5.00-7.00pm
5	Let's Go Digital – KSHEC-FDP on Learning Management System (Moodle) and Course Designing Conducted by KSHEC: Existing working group members and those from resource pool will be the resource persons. Training Centre: KSHEC	Participants: faculty from state universities and affiliated colleges who needs basic training on MOODLE tools No. of Participants: 136	01-9-2021 to 06-9-2021 10.00 am to 4.00pm

Educational Video Content Development

The video/e content preparation by teachers involves the creation and development of instructional videos to support the learning process of their students. These are typically used as supplemental materials to traditional classroom lectures or as standalone resources in online or blended learning environments. There are some important benefits of doing this.

- 1. Pedagogical Goals: educational videos with specific pedagogical goals can include explaining complex concepts, demonstrating practical skills, providing additional examples, or presenting real-world applications of theoretical knowledge.
- 2. Content Selection: Teachers can carefully select the appropriate content to be included in their videos, considering the curriculum, learning objectives, and the needs of their students. They often break down complex topics into smaller, more digestible segments to enhance understanding.

- 3. Scripting and Storyboarding: Before recording, teachers often script their videos to ensure clarity and organization. They outline the main points, transitions, and examples they want to cover. Storyboarding may also be used to plan visuals, animations, or demonstrations that will accompany the narration.
- 4. Visuals and Multimedia: Teachers can incorporate various visual aids, such as slides, diagrams, charts, or animations, to enhance the video's effectiveness. They may use multimedia tools or video editing software to create engaging visuals that support the learning objectives.
- 5. Instructional Design: Instructional design principles to structure their videos in a way that promotes learning, can be included. They may use techniques such as

chunking information, providing context, using repetition, and incorporating formative assessments to reinforce understanding.

- 6. Production and Editing: Teachers record their videos using cameras, microphones, or screen-capture software. They ensure good audio and video quality, paying attention to lighting, sound, and clarity. Post-production editing involves trimming, enhancing visuals, and adding captions or subtitles for accessibility.
- 7. Accessibility and Inclusivity: Such videos must be accessible to all students. They may provide transcripts, closed captions, or audio descriptions to accommodate

once the videos are ready, teachers can upload them to Moodle-LMS, institutional websites, or video-sharing platforms for students to access. The Council has also made a special platform for hosting such online econtents for every programmes

learners with disabilities or those who prefer alternative modes of accessing content.

- 8. Platforms and Distribution: Once the videos are ready, teachers can upload them to learning management systems (LMS-MOODLE), institutional websites, or video-sharing platforms for students to access. The Council has also made a special platform for hosting such online e-contents for every programmes. They may also integrate the videos with other course materials, assignments, or assessments.
- 9. Evaluation and Feedback: Teachers assess the impact and effectiveness of their videos through student feedback, analytics from LMS platforms, or other assessment methods. They use this information to refine and improve their future video content.
- 10. Continuous Improvement: It is better to engage often in ongoing professional development to enhance their video creation skills, stay updated on emerging technologies, and explore new strategies for effective instructional video production.

In general, educational video content preparation by teachers involves careful planning, pedagogical considerations, technological proficiency, and a commitment to enhancing the learning experience for their students.

In connection to this training, there is a need for preparing and conducting successful online video classes using simple audio – video equipments, even from their homes. It is expected that,

- By the completion of this session, teachers will be able to independently handle various basic audio
 video equipments and software as part of their educational video content production.
- The participant will get proper guidance to prepare and deliver online classes effectively using various online platforms.
- Teachers will become self-sufficient in educational video content production and dissemination.

Digicol: Opening up of server facility for selected colleges

The Hon'ble Minister of Higher Education Dr. R. Bindu has officially launched the programme by enrolling 12 institutions in to the separate instances made at the central server facility enabling them to access the same through their networks or access devices at individual levels. This will ensure seamless and continuous operation of Moodle in their institutions. The function was held 0n 1-12-2021 in which the primary partner of this programme, the Digital University of Kerala (DUK) represented by its Vice Chancellor Dr. Saji Gopinath and other dignitaries including the Vice Chairman of the Kerala State Higher Education Council Prof. Rajan Gurukkal etc. were present.

The Institutions which are already trained as part of the Institutional Training for LMS have been allotted



the space and access for LMS during the occasion. Hon'ble Minister has also launched the website <u>https://digicol.kerala.gov.in</u> which facilitate the access for colleges enrolled in to this service. Official location letter to every enrolled college has been handed over to the respective Heads of the Institutions during this occasion.

Subsequent to this, those institutions already trained and are getting ready to enroll in to this scheme can be allowed as per their request. Head of the Institutions for Digicol service shall designate two Nodal Officers from Faculty members to be in charge of implementation of this scheme in their colleges. This will enable the implementation and running of courses on Moodle platform in colleges in a smooth and sustainable

Programme Schedule

1st December 2021, Wednesday at 4.00 pm

Venue:

Kerala State Science and Technology Museum Campus, Thiruvananthapuram

Welcome: Dr. Rajan Varughese, Member Secretary, KSHEC

Chair: Prof. Rajan Gurukkal, Vice Chairman, KSHEC

Inauguration of the DIGICOL scheme and release of logo:

Dr. R. Bindu, Hon'ble Minister for Higher Education & Social Justice

Keynote Address; Dr. V. K. Ramachandran, Vice Chairman, Kerala State Planning Board

Felicitation: Dr. V. Venu I.A.S. Additional Chief Secretary, Higher Education Department

About the Project: Dr. Saji Gopinath, Vice Chancellor, Digital University of Kerala

Felicitation: Dr. J. Rajan, Executive Member, KSHEC

Vote of Thanks: Smt. Vanaja P.S., Registrar, KSHEC

manner.



Dated:

Dear Principal,

DigiCol, a resource frugal project for the digital enablement of Colleges in Kerala, has been under way as a joint venture of the Kerala State Higher Education Council and the Kerala University of Digital Sciences and Technology as a part of *Let's Go Digital* under the Chief Minister's 100 days Programmes.

Digital enablement is about helping institutions cope with the global higher education transformation altering the concept, design, function, role, and responsibility of institutions, teachers, and students.

Colleges are required to provide a digitally equipped environment for teaching and learning. Teachers' role is to teach how to learn oneself using digital technology, and the students' responsibility is to do self-learning under the ICT environment.

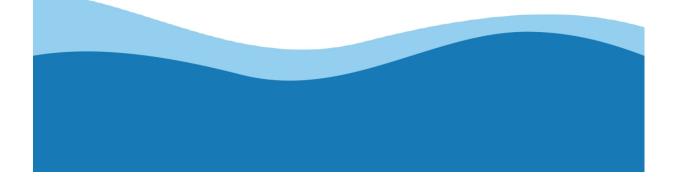
It is pleased to inform you that <u>Maharajas (Autonomous) College, Ernakulam</u> (name and address of institution) has been provided with DigiCol access with a Digital Learning Management System (LMS) customised in an open-source platform called Moodle.

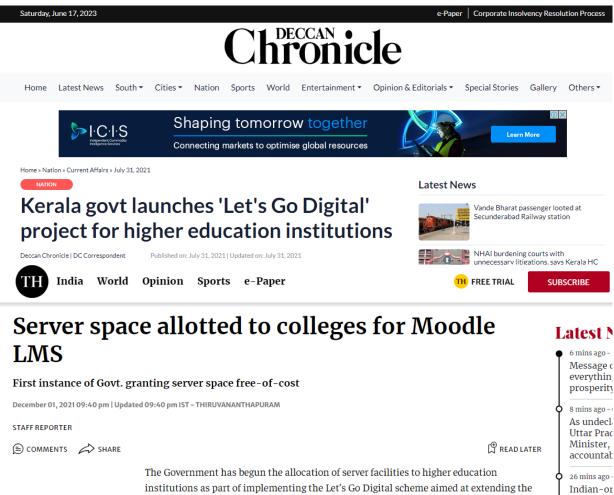
Member Secretary

The Kerala State Higher Education Council



A joint initiative of the Kerala State Higher Education Council & Digital University of Kerala





use of Moodle learning management system (LMS).

After the pilot project successfully implemented in Government Brennan College Thalassery in September 2021, other colleges enrolled in Digicol has become operational under this scheme which are being used widely by students and faculty members. The admin control is allotted to the respective colleges. Controls like Site Administration, User Management, Course Management, Plugins and Extensions etc. are allotted

"The Government has begun the allocation of server facilities to higher education institutions as part of implementing the Let's Go Digital scheme aimed at extending the use of Moodle learning management system (LMS). Higher Education Minister R. Bindu formally inaugurated the 'Digicol', a programme designed to provide centralised server space and LMS to colleges here on Wednesday. The project is being jointly implemented by the Kerala State Higher Education Council (KSHEC) and the Digital University Kerala"

to the colleges. Since Moodle provides reporting and analytics features that help administrators monitor

profession

first Birth

system usage and track student progress, individual institutions can generate activity and participation reports, view course statistics, and access detailed logs for progress evaluation purposes.

During the course of training, participants are trained to create their own moodle site and create courses and enroll students for which the facility is opened on KSHEC webportal.

Kerala State Higher Education Council	
e-hub	-
Learning Portal from KSHEC	
https://ehub.kshec.kerala.gov.in	

The project is expected to be scaled to all colleges in Kerala within the near future. Even though public cloud provides high level of elasticity to demand, given the high hosting charges and lack of available space in SDC, it is proposed that DUK will setup a dedicated Server Infrastructure with sufficient capacity in DUK Data Centre and will host Moodle instances for various colleges.

CHAPTER IV

⁹DIGITAL ENABLEMENT OF HEIs

Introduction

In the context of space constraints in the State Data Centre (SDC), DUK has initiated steps for establishing a Data Centre in the University. Since KSHEC is working in collaboration with the Digital University in the Digital Enablement Scheme for HEIs, the cost of setting of Server Infrastructure has to be shared with Digital University. In this connection the KSHEC along with the Digital University has worked out the details of the scheme for implementing Moodle LMS in all colleges in the state. A centralised architecture under KSHEC is proposed as the backend infrastructure for the project. In this scheme the basic infrastructure will be provided by DUK and the server cost and recurring cost will be borne by KSHEC. For implementing the project in two Phases (Phase -I & Phase – II) a total expenditure of rupees Rs. 20,000,000/- (Rupees Twenty crore only) is proposed for 2022-23. This infrastructure will be sufficient to support at least 500 HEIs in the state. DUK has promised to provide more facility with the expansion of their data centre.

Implement MOODLE-LMS in Higher Education Institutions in the state by providing free centralised server space in association with Digital University of Kerala. Under this scheme the training of the faculty of the HEIs in the state is being held. Many institutions have transformed to the LMS platform for the conduct of at least a part of their courses as well as the assessment tools through MOODLE based LMS. As part of the Digicol scheme, we have so far provided customised LMS and server facility to 30 colleges. The expansion of server capacity and the corresponding LMS facility to more colleges by the beginning of April 2023. So far more than 100 institutions have been trained under Institutional Training Programme.

This plan is in response to the call of the Government to Go Digital in teaching/learning in higher education at the earliest. The plan is to establish Moodle Learning Management System (LMS) in all the higher education institutions in the state, especially colleges and universities, in 100 days. The Vice Chairman Prof. Rajan Gurukkal proposed implementation of a centralised model, resource-frugal, easier, quicker, and less expensive. The Digital University of Kerala will act as the technical infrastructural support for implementing this project.

The Government sanction has been accorded for nearly Rs.100 Cr for various schemes envisaged under KSHEC for Higher Education Empowerment sector. Of which, Digital Enablement drive attracted significant financial support. Under this circumstance, the activities including training for Moodle LMS and

⁹ Extracts of the original proposal submitted to the Government as part of the HE Empowerment Schemes of the KSHEC

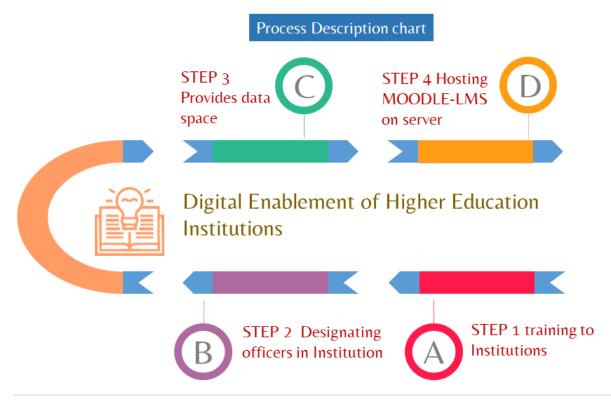
server capacity expansion are mooted. Another step is stakeholders meet and formation of working group groups of teachers and students. Some eighty groups are being formed for field action by teachers and students ensuring institutional preparedness.

Implementation of LMS

As the Digital Enablement of Higher Education Institutions is plan in response to the call of the Government to Go Digital in teaching/learning activities in higher education at the earliest. The plan is to establish MOODLE, a Opensource Learning Management System (LMS) with excellent features used for blended learning, distance education, flipped classroom and other e-learning projects in schools, universities, workplaces and other sectors. To facilitate these steps of action, working group of teachers with LMS proficiency have been formed for field action by teachers and students ensuring institutional preparedness for this initiative. During this period, there are large number of HE institutions managed to run many courses in Moodle LMS, although it hardly hit the enormity of tools available in LMS.

LMS enables teachers to create and deliver engaging online courses, providing students with access to a variety of learning resources, such as multimedia content, discussion forums, and assessments, manage and track student progress, offer personalized feedback, and foster collaborative learning.

A centralized model of hosting of the solution is proposed for the colleges coming under this scheme. In this model, DUK will create separate instances for each college at a central server and colleges can access the same through their networks or access devices at individual level. Each college will have a customized (basic level of customization like name, logo, type of courses etc.) portal of their own. A competent person



from among the college faculty can be entrusted to manage the system. Central management and system administration can be done by KSHEC with the help of Digital University.

Proposal: Setting up Server Infrastructure: Digital University of Kerala (DUK)

The Council has subsequently conducted extensive training of faculty of various colleges on the use of LMS since 2021. Kerala University of Digital Sciences, Innovation and Technology (Digital University) is collaborating with KSHEC in this noble initiative. The open-source platform Moodle is selected as the Learning Management System and Digital University is providing backend technical support for implementing the software. Even though Colleges have resumed offline classes, it is necessary to continue with the project, as LMS is an integral part of the blended learning being implemented in various institutions of higher learning.

Though the LMS is planned to be implanted with a centralized hosting architecture to optimize the usage and to reduce the cost of operations, a few colleges may opt for their own cloud /serve space, and few others may be linked with high performance server space available in a few Universities, majority of the colleges require a centralized hosting architecture to ensure seamless and continuous operation of Moodle.

Resource/Requirements

It is proposed that a central server hosting architecture is developed which will be placed in the data centre being built in Digital University. The basic infrastructure facilities like physical temperature-controlled space, security and authentication facilities, power back up etc, will be provided by DUK in the datacenter being built in DUK campus. Kerala State Higher Education Council can provide the server infrastructure, specifications of which is given below, which will be managed in the DUK data centre. The server will be dedicated for the purposes of KSHEC and the individual colleges will be given access to virtual containers being built within this server. The central hosting infrastructure with high availability would ensure 24x7 access to LMS to all students and faculty

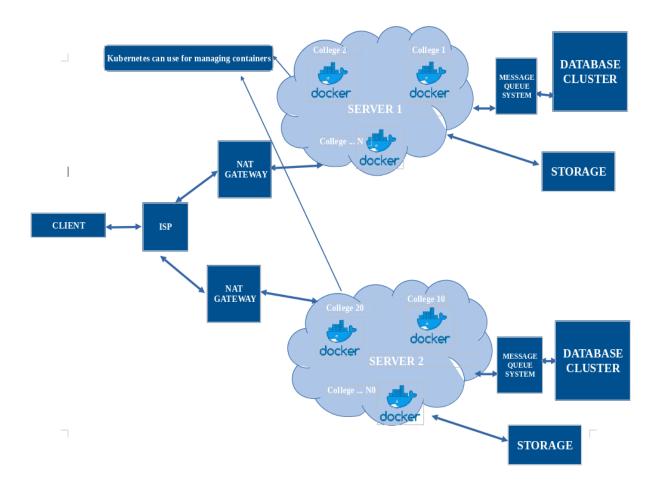
The ¹⁰requirements of the hosting architecture required for 500 colleges with 300000 students is given below.

No	Server Infrastructure required
1	 Server Infrastructure with Virtualization Environment Processors with latest generation processor -Total Usable cores should be 2500 cores for the setup Total usable RAM should be 5 TB with latest technologies (DDR4 or above) Usable Storage space of 125 TB -Virtualization Software with unlimited VM -Backup Software with Back up Appliance
2 3	Man Power for Central Management. (2 numbers) Communication Charges (high speed bandwidth for seamless access)

¹⁰ Extracts from the proposal of DUK

It is important to note that DUK will provide the basic infrastructure including weather-controlled hosting infrastructure, load balancers, firewall, security architecture etc. in its data centre. KSHEC shall procure the server as per specifications which will be configured and managed by DUK. Two full time employees on contract with at least 5 years of experience in managing data centres is proposed to manage this infrastructure. There is also a need to have dedicated communication infrastructure. The annual cost of communication (depends on extent of use) is estimated to be Rs 80 lakhs.

As per the proposal, there is an one time cost of Rs 9 Crores¹¹ and a recurring cost of around 1 Cr per year. This will work out to be around 2 lakh per college as one time expense and an annual expense of around Rs 20,000. It is pertinent to note that, if external cloud solutions are adopted the annual cost per college will work out to be around Rs 3-5 lakhs depending on the usage. Further such a solution will necessitate the storage in third-party facilities which may have data security issues. In view of the above, the current proposal provides substantive cost advantages as well as data security.



Proposed Hosting Architecture

¹¹ This is estimated for around 500 colleges. This can be set up in a modular fashion based on actual demand

Budget Requirement

The budget requirement of the project involves three components, namely the infrastructure cost for basic facilities, infrastructure cost for server space and manpower cost for management. The approximate cost for 2022-23 is given below:

No	ltem	Nature of Cost	Approximate Amount	Source	Remarks
1	Basic Hosting infrastructure	One time	Not budgeted as it will be provided free by DUK in its Data center	DUK	
2	Serve Infrastructure including storage	One time	Rs 900,00,000 (approximate)	KSHEC based on actuals	This will suffice for 500 colleges
3	Manpower & Support cost	Recurring	Rs 20,00,000 for 2022-23	KSHEC	
4	Annual Communication Expenditure	Recurring	Rs 80,00,000 (approximate) for 2022-23	KSHEC based on actuals	
	TOTAL		Rs10, 00,00,000	KSHEC	

Closure

As a part of implementing Let's GO DIGITAL project for enabling Higher Education Institutions for developing and using digital content, KSHEC along with Digital University has worked out a scheme for implementing Moodle LMS in all colleges in the State. A centralized architecture under KSHEC is proposed as the backend infrastructure for the project. This proposal gives details of such a back end infrastructure. It is proposed that the basic infrastructure will be provided by DUK in its data centre while server cost and recurring cost of management and communication will be borne by KSHEC. An one time cost of Rs 10 cores is proposed for 2022-23. The annual cost for subsequent years will be around Rs 1

Crore. This infrastructure will be sufficient t support at least 500 HEIs in the State.



Govt nod for projects worth 100cr

TNN / May 30, 2022, 08:18 Thiruvananthapuram: Higher education minister <u>R Bindhu</u> has said the government has given administrative sanction for projects worth Rs 99.95 crore for the higher education council. Another Rs 20 crore will be utilized for the digi-call project which will ensure digital education facilities in all the institutions. Facilities for open source learning management system and servers will be ensured in all the institutions. A digital-enabled higher education is the focus of the project which will ensure that teaching, learning, assessment and examination are brought under the digital platform, the minister said.

CHAPTER V

PROGRESS ACHIEVED

As the Faculty Development Centre (FDC) of the Kerala State Higher Education council has been entrusted to organise & provide conduct Institution Level Training (ILT) for the entire faculty of Universities & Colleges in the state, the council has launched this training in cluster mode involving 10-15 colleges in each training. The institution level training was officially launched by the hon'ble minister for Higher Education Dr. R. Bindu on 22-9-2021 itself. Training for more than 100 institutions have been completed so far. Since those colleges have completed the training will eventually be provided server space at Digital University of Kerala, colleges have been asked to provide details of two faculty members designated for LMS programme management at their institution. *Let's Go Digital* initiative launched in association with Digital University of Kerala offers a series of training programmes.

A brief account of the above category of trainings held since July 2020 are listed in the Table given below.

A list of cluster level ILTs held during this period is listed in *Appendix Table 2.*, which was oraganised under three clusters so far. Institutions will be clustered accordingly for convenient & effective administration of training programmes.

The Council has so far trained about 5800 teachers in MOODLE-LMS under the Let's Go Digital banner.

No	Type of Training	No
1	Total No. of Training Programmes held for MOODLE-LMS	23
2	No. of Institution wise training held (CLUSTER I to VII)	17
3	No. of Open training for Individual faculty	4
4	No. of Training for Online Education	2

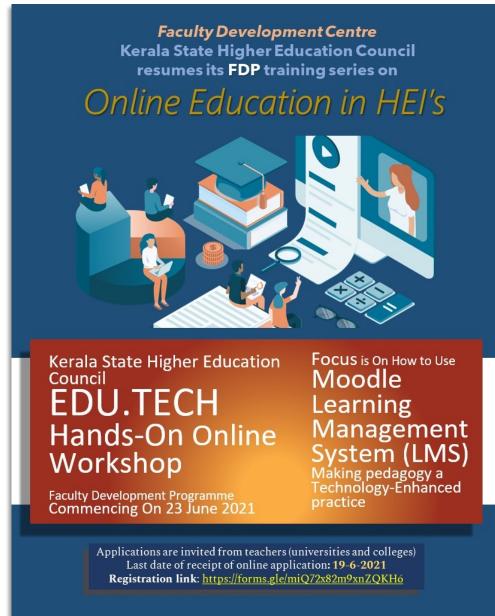
In addition to the above, a detailed account of the institutional training including the list of institutions covered are provided in Appendix Table 3, 4, 5 & 6 for institutions independently and as clusters. The list of groups leads by resource persons *(Appendix Table 7)* to be handled these training programmes include the faculty from different HEIs in the state and the council is building such groups of experts for handling the training in the future. Appendix Table 8 shows the district level participation of institutions for this training.

Current Status

KSHEC has trained more than 5800 teachers since the commencement of this scheme in 2020 until now. There are 100 colleges are currently received training from KSHEC for their entire faculty members. This has equipped them to implement LMS in such institutions and a pool of resource persons with high proficiency in Training & Administration of MOODLE-based LMS.

30 institutions have been already enrolled in to this project by availing the server infrastructure facility currently set up by the Digital University, which propose to accommodate 100 colleges at the first phase.

Every time, the Council receives requests from various institutions for availing the training facility under this scheme and also to involve in the digital enablement drive of the government in availing the server facility for installing MOODLE-LMS platform for their institutional use.



www.kshec.kerala.gov.in



Kerala State Higher Education Council

Moodle-Learning Management System

The Kerala State Higher Education Council organises hands-on workshops on MOODLE-based Learning Management System (LMS) on the online mode for the faculty members of the higher education institutions in the state. Institutions and Individual teachers can avail of this opportunity.

5 days program 2 hrs/day





KSHEC announces the training call on time to time basis

request can be sent to msheckerala@gmail.com

www.kshec.kerala.gov.in

In general three types of training programmes are necessary to address different sectors of stakeholders:

(1) Let's Go Digital -Moodle Trainers Team (MTT)

[eg. From 22-07-2021 to 27-07-2021]

Participants: selected faculty from CET and arts and science colleges (handpicked) who have already acquired adequate basic knowledge on MOODLE tools

The same will be conducted in specific interval, which was originally organized by KSHEC in association with CET Trivandrum led by Dr. Sumesh Divakaran in which the existing working group members have been the resource persons. [Duration of sessions: 2 hours per day]

(2) Lets Go Digital - Using Moodle as a LMS - Training for CET[eg. From 29-07-2021 to 03-08-2021]

Participants: faculty from CET alone, who have already acquired adequate basic knowledge on MOODLE tools: The same will be conducted in association with KSHEC at CET Trivandrum organised by Dr. Sumesh Divakaran in which the existing working group members will act as resource persons. Training Centre: College of Engineering Trivandrum [Duration of sessions: 2 hours per day]

(3) Lets Go Digital - FDP on Learning Management Systems conducted by the KSHEC
 [eg. From 26/07/2021 to 30/07/2021]

Participants: faculty from university departments and affiliated colleges who needs basic training on MOODLE tools

The same will be conducted in association by KSHEC in association with the Department of Computer Science, University of Calicut. [Duration of sessions: 2 hours per day]

In the case of Institutional Training programmes, all teaching faculty of the participating College should be attended. The HOI will have to submit the request to the Memer Secretary along with the details (Name, Department, Email, Mobile No.) of the teachers. After the completion of the training, a declaration in the form I has to be submitted by the coordinator at the respective Institution.

PART III **APPENDIX TABLES** KERALA STATE HIGHER EDUCATION COUNCIL Moodle-LMS Training (Institutional/Open) Form-I

Details to be submitted by the Participating Institution

		Yes:
No	Subject Item	Details
1	KSHEC-Notification No. & Date	
2	Scheme under which the collaboration granted	Let's Go Digital-DIGICOL
3	Name & Address of the attending institution	
4 ¹²	Coordinator I	Name:
		Designation:
		Department
		Mobile No.:
		Email:
	Coordinator II	Name:
		Designation:
		Email:
		Mobile No.:
		Email:
5	Duration of the Programme (days)	5 days (Online/Offline)
	Period of Training (date)	fromto
6	Timing of the Training Programme	to
7	¹³ Total No. of faculty members attending	
8	List ¹⁴ of faculty members attached or not	Yes/No
9	Whether Moodle-LMS is already in operation or	Yes/No
	not?	
10	If yes, how many courses are engaged with LMS	
11	Whether training for advance learners in LMS is	
	required for the institution	
12	Name of faculty who is proficient in LMS-Moodle	
	and willing to be resource Person for KSHEC-LMS	
	training programme	

Signature of the Coordinator

Signature of the HOD/Institution Head

Institution Seal

¹² Two officers must be designated as coordinators/nodal officers by the Head of the Institution for training and implementation of MOODLE-LMS in the respective institution

¹³ Institution training programmes are intended to cover entire teaching faculty of the participating institution ¹⁴ List must include Name, Department, Email, Mob No.

Institutional Training, I: Best Practices for Online Teaching: Classrooms, Courseware and Tools IPSR, Dr. Mendez Jacob & Team, Marian Autonomous College, Kuttikkanam

& The Kerala State Higher Education Council

Institutional Level Training Programme on Moodle Learning Management System

PROGRAMME SCHEDULE

on Moodle Learning Management System (LMS) by The Kerala State Higher Education Council Workshop on Best Practices for Online Teaching:		Resource Team; Dr. Mendus Jacob, Dr. Sunil Job K. A. & Ms. Kochumol Abraham Mr. Mr. Jaimon Kuriakose	
Day /Session	Торіс		
1	Inaugural Function	Inaugural Function	
01 Feb '23 02:00 - 04:00 PM IST	Moodle Administration and Account Creation		
2 02 Feb '23 02:00 - 04:00 PM	User Management and Course Creation in LMS		
3 03 Feb '23 02:00 - 04:00 PM	Management of Learning Resources and Activities		
4 06 Feb '23 02:00 - 04:00 PM	Interactive tools for LMS, LTI and Workshop Activity		
5 07 E-h (22	Lesson Activity in Moodle		
07 Feb '23 02:00 - 04:00 PM	Valedictory Function		
 Live sessions through Webex platform Hands-on Activities through LMS LMS login credentials will be received in your registered email 			

- Recordings of the live session will also be provided in the LMS
- Participation E-Certificate from The Kerala State Higher Education Council

Training Outcomes:

On completion of this FDP, the participants will be able to demonstrate following skills

- Apply the various Moodle functionalities and competencies in online learning.
- Apply Pedagogical approach in online learning
- Use Moodle platform for course designing, set effective assessments and fostering student-teacher interaction.
- Integrate various learning and technological support systems with Moodle.
- Operate Moodle with a higher level of proficiencies by knowing its limitations and possibilities.

Mode of Delivery

- The entire FDP will be a hands-on programme, where the participants will undergo an online training, where they will experience live online sessions backed by activities and assessments through the Learning Management Portal (LMS).
- This way, the participants will equip themselves in conducting online training sessions for their students as well as in imparting similar skills to their peer teachers.

Institutional Training, I: Best Practices for Online Teaching: Classrooms, Courseware and Tools

Learning Centre, SNGS College Pattambi

& The Kerala State Higher Education Council

Institutional Level Training Programme on Moodle Learning Management System

PROGRAMME SCHEDULE

Day/Session	Торіс
Course hosted by LMS Team SNGS College, Pattambi	Resource Persons Dr. Santhosh H.K, Dr. Abdul Rasheed V.T., P.V. Kaladharan, & Shivsankar
Session1: 06.00 PM- 06.300 PM	Inaugural Session & Course Introduction
Session 2: 06.00 PM - 06.30 PM	Techno Pedagogy and LMS Moodle pedagogic Philosophy & Features
Session 3: 6.30 PM - 07.30 PM	Getting started with Moodle, Course Settings, Adding Resources, File, Folder, URL, Page
Session 4: 7.30 PM – 8.00 PM	Practice Session
Session 5: 05.30 PM - 06.00 PM	Doubt Clearing & Discussion
Session 6: 06.00 PM - 06.30 PM	OBE & Moodle: Grade Book set up, Adding Activities Assignment Submission
Session 7: 6.30 PM - 07.30 PM	Adding More Resources, & activities, Book, Label. Forum, Choice, Attendance, Glossary
Session 8: 7.30 PM – 8.00 PM	Practice Session
Session 9: 05.30 PM - 06.00 PM	Doubt Clearing & Discussion
Session 10: 06.00 PM - 06.30 PM	Blended Learning with MOOC Reflective Journal
Session 11: 6.30 PM - 07.30 PM	Activities in Moodle, Quiz & Database
Session 12: 7.30 PM – 8.00 PM	Practice Session
Session 13: 05.30 PM - 06.00 PM	Doubt Clearing & Discussion
Session 14: 06.00 PM - 06.30 PM	Collaborative Activities, Wiki, Workshop, Chat, Big blue Button
Session 16: 7.30 PM – 8.00 PM	Practice Session
Session 13: 05.30 PM - 06.00 PM	Doubt Clearing & Discussion

Day/Session	Торіс
Session 14: 06.00 PM - 06.30 PM	Advancing with Moodle, Adaptive Learning with Lesson, Content
Session 15: 6.30 PM - 07.30 PM	Page, SCORM, Pod Casting, Report Generation Course Management & Back up
Session 16: 7.30 PM – 8.00 PM	Feed back & Valedictory Session

Centre for e-Learning, University of Calicut

& The Kerala State Higher Education Council

Institutional Level Training Programme on Moodle Learning Management System

PROGRAMME SCHEDULE

Five Day Online Hands-on FDP on Learning Management System (Moodle)

Session/Time	Topic of session	Resource Person	
Session 1: Day		Inaugural Function	
Introduction to the Course: Pathways to Tech Enabled Teacher Leaders		Dr. Lajish V.L Associate Professor, Department of Computer Science & Director, Calicut University Computer Centre, University of Calicut	
Getting started with Moodle. Moodle Course Creation		Dr. Ramesh A. R., Asst. Professor, Dept. of Chemistry, Govt. Victoria, College, Palakkad	
Session 2 Day 2 Moodle Resources		Dr. Ashkarali P., Asst. Professor, Department of Electronics, Govt. College, Thanoor.	
Session 3Assignment, Rubrics &.Day 3Forum Discussion		Dr Biju K, Asst. Professor, Department of Education, Central University of Tamil Nadu	
Session 4 Day 4 Online Examination		Dr. Ramesh A. R.	
Session 5 Day 5	Course Administration	Dr. Ashkarali P.	

CHAPTER V ANNEXURES

This section contains the details of training programmes in which institutions have been participated on regional scale. A number of Cluster Level Institutional Training Programmes have been held since its commencement in 2021. Altogether the Council has organised 10 cluster level training programmes for MOODLE-LMS during this period. Through these programmes nearly 4500 faculty members from various subject domains representing 102 colleges & university departments have been benefitted about Moodle based LMS software. Here are the list of such clusters and the no. of faculty from the corresponding colleges & departments.

INSTITUTIONAL TRAINING PROGRAMMES

MOODLE LMS

SPECIAL BATCH OF INSTITUTIONS

CLOSTERT				
No	Name of College	No. of Teachers	Date of Training	
INO	6	NO. OF TEACHERS	U	
1	College of Engineering (CET) Trivandrum	300	21 to 29 July 21	
2	Government Brennen College, Thalassery	150	5-10 Sep 21	
	Total	450		

CLUSTER II

LIST OF COLLEGES & DETAILS

No	Name of College	No. of Teachers	Date of Training
1	PTM Govt. College, Perinthalmanna	37	13-17 Sep-21
2	Government College, Chittur	96	13-17 Sep-21
3	Government Victoria College, Palakkad	59	13-17 Sep-21
4	St. Mary's College, Sulthan Bathery	81	13-17 Sep-21
5	C.K.G Government College, Perambra	32	13-17 Sep-21
6	College of Applied Science, Vadakkencherry	18	13-17 Sep-21
7	EMEA College of Arts and Science, Kondotti	62	13-17 Sep-21
8	Govt. Engineering College, Kozhikode	18	13-17 Sep-21
9	TEMU-Malayalam University, Vacode, Thiroor	34	13-17 Sep-21
	Total	437	

CLUSTER III

No	Name of College	No. of Teachers	Date of Training
1	College of Applied Science (IHRD) Marayoor	17	14-18 Sep-21
2	College of Applied Science (IHRD), Ayroor	4	14-18 Sep-21
3	College of Applied Science, Kanjirappally	7	14-18 Sep-21
4	College of Applied Science, Thodupuzha	13	14-18 Sep-21

5	College of Applied Sciences (IHRD) Kaduthuruthy	9	14-18 Sep-21
6	Government College, Kattappana	40	14-18 Sep-21
7	NSS College, Rajakumari	27	14-18 Sep-21
8	St. Thomas College, Kozhencherry	90	14-18 Sep-21
9	Thunchan Memorial Govt. College, Tirur	39	14-18 Sep-21
10	College of Applied Science, Mallappally	12	14-18 Sep-21
11	College of Applied Science, Nedumkandam	9	14-18 Sep-21
12	College of Applied Science, Puthuppally	17	14-18 Sep-21
13	St. Thomas College of Teacher Education, Pala	16	14-18 Sep-21
14	Pavanathma College, Murickassery	32	14-18 Sep-21
	Total	332	

CLUSTER IV

LIST OF COLLEGES & DETAILS

No	Name of College	No. of Teachers	Date of Training
1	Government Arts College, Thiruvananthapuram	53	22-27 Sep-21
2	Government College, Malappuram	68	22-27 Sep-21
3	KMM Govt. Women's College, Kannur	47	22-27 Sep-21
4	Govt. Arts and Science College, Kulathur, Neyyattinkara	18	22-27 Sep-21
5	TKM College of Arts and Science, Kollam	55	22-27 Sep-21
6	College of Applied Science, Kodungallur	13	22-27 Sep-21
7	Maharaja's College, Ernakulam	178	22-27 Sep-21
8	College of Applied Science, Kundara	17	22-27 Sep-21
9	Govt. Sanskrit College, Thiruvananthapuram	30	22-27 Sep-21
10	Gregorian College of Advanced Studies, Sreekaryam	21	22-27 Sep-21
11	St. Stephen's College Pathanapuram	43	22-27 Sep-21
12	Government College, Attingal	41	22-27 Sep-21
13	Government College, Thalassery, Chokli	15	22-27 Sep-21
14	M.G. College, Kesavadasapuram, Trivandrum	90	22-27 Sep-21
	Total	689	

CLUSTER V

No	Name of College	No. of Teachers	Date of Training
1	Catholicate College, Pathanamthitta	89	11-17 May-22
2	College of Applied Science, Thamarassery	24	11-17 May-22
3	Farooq Training College, Kozhikode	13	11-17 May-22
4	Henry Baker College, Melukav	24	11-17 May-22
5	MES College, Erumely	51	11-17 May-22
6	Safa College of Arts and Science, Edayur, Valnacheri	61	11-17 May-22
7	NSS College for Women, Neeramankara	51	11-17 May-22
8	Sa-adiya College of Arts and Science, Kasaragod	29	11-17 May-22
9	St. Pius College, Rajapuram	38	11-17 May-22
	Total	380	

CLUSTER VI

LIST OF COLLEGES & DETAILS

No	Name of College	No. of Teachers	Date of Training
1	KKTM Govt. College, Pullut	50	23-28 June-22
2	Bishop Moore College Mavelikkara	60	23-28 June-22
3	KUFOS, Kochi	41	23-28 June-22
4	Christian College, Kattakkada	38	23-28 June-22
5	College of Applied Science, Pinarayi	12	23-28 June-22
6	Nirmala College, Muvattupuzha	139	23-28 June-22
7	St. Dominics College, Kanjirappally	89	23-28 June-22
8	College of Applied Science, Kuzhalmannam	6	23-28 June-22
9	Santhom Malankara Arts and Science College, Edanji	13	23-28 June-22
10	Govt. College Madappally	8	23-28 June-22
11	Christian College, Chengannur	15	23-28 June-22
12	CAS Pattuvam	12	23-28 June-22
13	St. George College, Aruvithura	29	23-28 June-22
14	CAS Ayallur Thrissur	14	23-28 June-22
15	KE College, Mannanam	105	23-28 June-22
	Total	631	

CLUSTER VII

LIST OF COLLEGES & DETAILS

No	Name of College	No. of Teachers	Date of Training
1	NSS College Pandalam	90	15-21 Jul- 22
2	College of Applied Science, Mavelikkara	42	15-21 Jul- 22
3	College of Applied Science, Payyannur	14	15-21 Jul- 22
4	C. Achutha Menon Govt. College, Thrissur	55	15-21 Jul- 22
5	S.N. Womens College, Kollam	78	15-21 Jul- 22
6	Govt. Arts and Science College, Pathirippala	10	15-21 Jul- 22
7	Carmel College Mala	11	15-21 Jul- 22
8	NMSM Govt. College Kalpetta	43	15-21 Jul- 22
9	Mar Dayonisius College Pazhanji	49	15-21 Jul- 22
10	Prajyothi Nikethan College Pudukkad	25	15-21 Jul- 23
	Total	417	

CLUSTER VIII

No	Name of College	No. of Teachers	Date of Training
1	Malabar College of Advanced Studies, Vengara	7	1-7 February 23
2	Ambedkar College of Arts and Science, Wandoor	20	1-7 February 23
3	SN College Chempazhanthy	79	1-7 February 23
4	Govt.Law College, Ernakulam	24	1-7 February 23
5	AKMAS College, Punalur	16	1-7 February 23

No	Name of College	No. of Teachers	Date of Training
6	Alphonsa College, Pala	77	1-7 February 23
7	Govt KNM College Kanjiramkulam	32	1-7 February 23
8	K.G. College, Pampady	40	1-7 February 23
9	Kerala Health Science University	50	1-7 February 23
10	MSM College, Kayamkulam	95	1-7 February 23
11	Aligarh University Malappuram Centre	11	1-7 February 23
12	SN College, Nattika	18	1-7 February 23
13	KPPM College of Teacher Education	6	1-7 February 23
14	Mannania College of Arts and Science, Pangode	2	1-7 February 23
15	Institute of Advanced Study in Education, Thrissur	14	1-7 February 23
	Total	491	

CLUSTER IX

LIST OF COLLEGES & DETAILS

No	Name of College	No. of Teachers	Date of Training
1	Govt. College, Koduvally	14	6-10 March 23
2	Baselius College, Kottayam	62	6-10 March 23
3	Sree Narayana Trust Arts and Science College, Pambanar	17	6-10 March 23
4	Providence Women's College, Kozhikode	76	6-10 March 23
5	CMS College Kottayam	14	6-10 March 23
6	Pazhassiraja College, Pulpally	47	6-10 March 23
7	NSS College, Ottappalam, Palakkad	85	6-10 March 23
8	Department of Instrumentation, CUSAT	5	6-10 March 23
9	Musaliar College of Engineering, Chirayankeezhu	7	6-10 March 23
	Total	327	

CLUSTER X

No	Name of College	No. of Teachers	Date of Training
1	Al Shifa College of Arts & Science, Perinthalmanna	22	13-17 March 23
2	NSS College, Parakkulam	18	13-17 March 23
3	Jamia Nadwiyaa Arts and Science College, Edavanna	31	13-17 March 23
4	Governemnt College, Kozhinjampara	20	13-17 March 23
5	Keralavarama College, Thrissur	87	13-17 March 23
6	Titus II Teacher College, Thiruvalla	7	13-17 March 23
7	Unity Women's College, Manjeri	42	13-17 March 23
	Total	227	

In addition to the Institutional training, the Council in association with the Resource Support team organise training for teachers who can enroll for the training as their own. Such independent training sessions are widely appreciated by the teaching community. As part of the Digicol scheme, the following institutions have been enrolled in to it, by which they have been allotted the LMS facility with all access to the required server space as per their demand.

	LIST OF COLLEGES ALLOTED LMS UNDER DIGICOL SCHEME		
	Name of the Institution	Туре	District
1	College of Engineering Trivandrum (CET) Trivandrum	Engineering	Thiruvananthapuram
2	PTM Govt. College, Perinthalmanna	Arts and Science	Malappuram
3	Government College, Chittur	Arts and Science	Palakkad
4	Government Victoria College, Palakkad	Arts and Science	Palakkad
5	St. Mary's College, Sulthan Bathery	Arts and Science	Wayanad
6	College of Applied Science (IHRD) Marayoor	Arts and Science	Idukki
7	College of Applied Science (IHRD), Ayroor	Arts and Science	Pathanamthitta
8	College of Applied Science, Kanjirappally	Arts and Science	Kottayam
9	College of Applied Science, Thodupuzha	Arts and Science	Idukki
10	College of Applied Sciences (IHRD) Kaduthuruthy	Arts and Science	Kottayam
11	Government College, Kattappana	Arts and Science	Idukki
12	NSS College, Rajakumari	Arts and Science	Idukki
13	St. Thomas College, Kozhencherry	Arts and Science	Pathanamthitta
14	Thunchan Memorial Govt. College, Tirur	Arts and Science	Malappuram
15	Government Arts College, Thiruvananthapuram	Arts and Science	Thiruvananthapuram
16	Government College, Malappuram	Arts and Science	Malappuram
17	Krishna Menon Memorial Govt. Women's College, Kannur	Arts and Science	Kannur
18	Govt. Arts and Science College, Kulathur, Neyyattinkara	Arts and Science	Thiruvananthapuram
19	TKM College of Arts and Science, Kollam	Arts and Science	Kollam
20	College of Applied Science, Kodungallur	Arts and Science	Thrissur
21	Maharaja's College, Ernakulam	Arts and Science	Ernakulam
22	Govt. Brennen College, Dharmadam, Thalassery	Arts and Science	Kannur
23	TEMU Malayalam University, Tirur	Arts and Science	Malappuram

DUK has shifted all the services of Digicol to a new server as per the architecture that was proposed earlier. The new server setup includes

- Two application servers which can host maximum 30 colleges
- Two MySQL Clusters that can handle up to 4000 concurrent sessions in each cluster
- One NFS Server for data storage

Over these period, the KHEC has achieved the following outcomes as part of the Digital Enablement drive which include Let's Go Digital & Digicol schemes.

Work Completed	Proposed
 Developed Digital Platform-DIGICOL for colleges Trained 4500+ faculty members of university departments and colleges by the Faculty Development Centre, KSHEC Trained entire faculty of 102 colleges in the state as part of Institutional Training Programme Provided Server Space facility for 22 colleges at DUK Expert trainers for handling MOODLE-LMS training Familiarity in Digital pedagogy & outcome-based framing of courses are being offered Development of e-contents is a part of the training programme Post training technical support to all faculty /institutions Most institutions have started offering hybrid learning once they are trained Students are also getting familiarised with Moodle-LMS 	 500 Colleges on MOODLE-LMS Digicol platform Utilisation of <i>Coursera, edX, Udacity, Future Learn, Canvas</i> etc. <i>Virtual Labs</i> of MHRD, <i>Merlot, Siemens</i> etc Training for 500 colleges Facilitate Blended learning/Flipped classroom/online teaching learning evaluation Bridging Digital Divide



MOODLE-LMS Faculty Training by KSHEC

KSHEC organises the institutional training programme on **MOODLE-**LMS for the entire faculty members of participating institutions. In case of interest, head of the Institutions can avail this opportunity for their teaching faculty by sending a mail with list of faculty members to <u>mskshec@gmail.com</u>(The Member Secretary, Kerala State Higher Education Council).

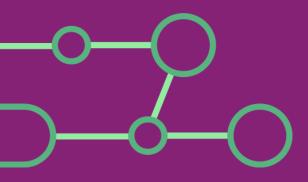
Training will be online mode for one week duration (evening two hours/day) For details contact **7561018708**

https://www.kshec.kerala.gov.in https://digicol.kerala.gov.in

The server space at the centralized cloud space of Digital University of Kerala based on the technology of Virtual Machines Docker Containers System (VMDCS), requires only minimum number of actual machines providing each college/university its own dash board to manage its activities through LMS. It can provide each university and college its own Moodle portal giving access to all students and faculty to use them to supplement their teaching and learning. <u>FDC of the council is actively organizing training programme on MOODLE-LMS meeting the long-term objective of completing the training and implementation of LMS in entire HEIs in the state.</u>

<u>Colleges enrolled in to the Digicol service are operating LMS for their course delivery and other utility of</u> tools. Their administration control have been assigned to the nodal officers designated by the Principal/HOI The list is given in the following table.

No	Name of the Institution	Nodal Officer	Designation
_	College of Applied Science (IHRD)	Sri. Jees George	Assistant Professor of Computer Science
1	Thodupuzha	Sri. Eugin Lopez	Assistant Professor of Computer Science
2	College of Applied Science (IHRD)	Smt. Sigi Thomas	Assistant Professor of Computer Science
	Kanjirappally	Smt. Anu Mathew	Assistant Professor of Commerce
		Dr. Abdul Jaleel T.	Assistant Professor of Arabic
3	Thunchan Memorial Govt. College, Tirur	Mr. Badusha V.	Assistant Professor of Commerce
	Maharaja's College, Ernakulam	Dr. Priya P Menon	Associate Professor of Statistics
4		Dr. Noushad P M	Assistant Professor of Arabic
5	College of Applied Science (IHRD) Kodungallur	Sri. Ajikumar.V.P.	Lecturer in Computer Science
		-	
		Sri.Saseendran K.K	Lecturer in Computer Science
6	St. Mary's College, Sultan Bathery	Sri.Sunil John	Assistant Professor of Physics
		Dr. Bhagyaraj C.	Assistant Professor of Physics
7	KKM Govt. Women's College, Kannur	Smt. Afra M.K.	Assistant Professor of Computer Science
		Dr. V.C.Saheer	Assistant Professor of Chemistry
8	TKM College of Arts and Science, Kollam	Dr. Finser K. Muhammed	Assistant Professor of Islamic History
		Dr. Mohammed Salim	Assistant Professor of Physics
9	St. Thomas College, Kozhenchery	Mr. Ajith Thomas	Assistant Professor of Commerce
		Mr. Ligin P Mathew	Assistant Professor of Mathematics
10	NSS College, Rajakumari	Dr. Saritha M.	Associate Professor of Electronics
		Dr. Biju Kumar S.P.	Assistant Professor of Computer Applications
11	Government Brennen College, Thalassery	-	
12	Government College, Kulathoor, Neyyattinkara	Minu V.	Assistant Professor of English
4.2	Government Victoria College, Palakkad	Dr. Suresh V.	Assistant Professor of Botany
13		Manoj G.	Assistant Professor of Geography
	College of Applied Science (IHRD), Ayroor	Anaghalekshmi	Assistant Professor of Computer Science
14		Sukanya Devi S.	Assistant Professor of Commerce
15	Government Arts College, Thiruvananthapuram	Dr. Vikas L.S.	Assistant Professor of Physics
		Dr. Vishnu V.S.	Assistant Professor of Chemistry
16	Government College, Kattappana	Dr. Krishnaprasad P.S.	Assistant Professor of Physics
		Sreekanth K.C.	Assistant Professor of Chemistry
17	Government College, Malappuram	Sulaiman M.K.	Assistant Professor of Physics
		Dr. Venugopal E.	Assistant Professor of Physics
18	College of Applied Sciences (IHRD) Kaduthuruthy	Mathew M	Assistant Professor of Computer Science
		Gayathri Pradeep	Assistant Professor of Computer Science
19	College of Applied Science (IHRD) Marayoor	Sri.Munish Kumar M.	Assistant Professor of Commerce
		Sri.Victor Decouth	Assistant Professor of Computer Science
20	PTM Govt. College, Perinthalmanna	Asha P.	Assistant Professor of Computer Science
		Najeem M.S.	Assistant Professor of Mathematics
	Government College, Chittur	Narayanaprasad M	Assistant Professor in Mathematics
21		Dr. Reji T	Associate Professor in Mathematics.
22	TEMU, Tirur	Dr. Smitha K. Nair	Director, Bhashasasthra School
		Dr. Hakkim K.S.	Assistant Professor, Sociology
23	KKTM Govt. College, Pullut	Binumol T.V.	Assistant Professor of Computer Science
		Dhanya Mohan O.	Assistant Professor of Computer Science





Lets Go Digital & Digicol Scheme

REPORT MOODLE-LMS TRAINING PROGRAMME

July 2023

The Kerala State Higher Education Council Science and Technology Museum Campus, Vikas Bhavan P.O., Thiruvananthapuram-695033, Kerala State, India www.kshec.kerala.gov.in