Scoping Study on Open Educational Practices at Vardhman Mahaveer Open University

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1. Executive Summary

Open distance learning (ODL) refers to a flexible mode of education that allows learners to study remotely, leveraging various technologies for communication and interaction. Open universities (OUs) adopt ODL to provide accessible and flexible educational opportunities to diverse learners. Open educational resources (OER) are freely accessible educational materials that can be used, shared, and modified by educators and learners. While ODL allows open universities to provide flexible and accessible education by accommodating learners' needs and circumstances, OER can offer freely available, high-quality learning materials, reducing financial barriers, and enabling customization. These resources, such as textbooks, videos, and simulations, are made available under open licenses, reducing reliance on proprietary resources. Open education practices (OEP) involve the use of OER along with open pedagogies, methodologies, and technologies to enhance teaching and learning. They complement ODL and OER by encouraging collaboration, knowledge sharing, and the adoption of innovative pedagogies. These practices foster a community of educators, allowing them to collectively enhance the quality of education, share best practices, and continuously improve teaching and learning experiences.

This report documents the scoping study conducted by IT for Change in collaboration with the Commonwealth Educational Media Centre for Asia (CEMCA) and Commonwealth of Learning (COL) on the open educational practices currently in place at Vardhman Mahaveer Open University (VMOU) in Kota, Rajasthan. It also suggests some possible strategies for collaboration and support between VMOU and CEMCA.

The study was designed to assess the current state of OEP/OER policies and practices and identify possibilities for collaboration between VMOU and CEMCA for supporting OEP implementation. Members from IT for Change visited Vardhman Mahaveer Open University (VMOU) between 17th to 19th May 2023 for conducting the study and interacted with participants including the Vice-Chancellor, faculty members, administrative staff and functionaries from various departments at the university. Data collection was done through desk research, focus group discussions, and direct interactions.

This report presents a phased plan of action for the collaboration between CEMCA and VMOU to incorporate open educational practices (OEPs) and leverage ICTs to enhance access to quality learning materials. The initial scoping study revealed that the university possesses a high-tech resource creation facility, but there is a need for capacity building of staff on OEP and OER and finding suitable alternatives for the proprietary software wherever feasible. The suggestions include familiarizing staff with OEPs, enhancing OEP implementation, upgrading the resource creation facility, policy development, ongoing faculty support development, establishing communities of practice and implementing feedback and support mechanisms. Recommendations include policy development, raising awareness, conducting training programs, mapping existing resources, and initiating pilot projects. These actions can help create a foundation for OEP integration and facilitate staff engagement in open education practices. These actions aim to establish a supportive environment, foster collaboration, and ensure the university's policies align with its vision of open education.

Successful implementation of the plan will enable the university to optimize its high-tech resource creation facility, utilize free and open-source software, and develop a robust OER repository over

time. By embracing open education practices, the university can enhance access to quality learning materials, improve teaching and learning outcomes, and create a culture of open collaboration. This report emphasizes the importance of collaboration between CEMCA and the university's administration, faculty, and staff. A mechanism for getting regular feedback from stakeholders will ensure the plan's effectiveness and enable necessary adjustments to align with the university's specific goals and resources.

By leveraging the expertise of CEMCA and implementing the suggested plan of action, VMOU can enhance its educational offerings, and contribute to the broader goal of increasing access to quality education through open educational practices.

2. Objective

This study was aimed at understanding the status of the OEP at the institution, identifying gaps (if any) and informing the way forward. Specifically, it aimed to:

1. Assess the current state of OEP/OER policies and practices. This includes OER policies and practices, competencies of the faculty members on OEP, available infrastructure and management support.

2. Identify areas that need support.

3. Recommend the way forward through an institution-specific road map for supporting OEP implementation and as a part of this, to identify areas of collaboration between the institution and CEMCA.

2.1 Scope of the study

The following areas were covered during the study:

1. The Open Educational policies and practices currently in place at VMOU.

2. Status of OEP implementation and the extent to which the stated objectives have been achieved.

3. Integration of digital technologies in the OEP with respect to:

    a) faculty professional development

    b) creating, adapting and publishing OER

    c) designing and transacting courses

4. Capacity building initiatives by the institution for the faculty on adopting and promoting OEP.

5. Enabling and disabling factors, associated with implementation of OEP, including potential areas of improvement.

3. Agenda

The purpose of this study was to develop an initial understanding of the knowledge of/ awareness towards OEPs, as well as to identify ways to support the university in adopting them. The study included an analysis of institutional policies, technological facilities, resource repositories, and other relevant records. A multi-method, multi-audience approach was adopted that collected both qualitative information and quantitative data from the key stakeholders at the institutions including management, faculty members, support staff and others. Through this process, significant aspects in terms of knowledge, skills, practice and attitudes of the stakeholders, as well as the institutional support were intended to be captured.

3.1 Study activities

The major activities planned under the study were:
1. Desk research regarding the university (faculty members, staff, infrastructure, programs offered, student strength etc.)
2. Reviewing documents on Open Educational Resources and/ Open Educational Practices from the university.
3. Developing specific evaluation questions informed by the desk research and initial interactions with faculty members.
4. Developing suitable assessment tools that can aid in capturing necessary data elements.
5. Designing and carrying out questionnaires to collect quantitative data pertaining to different aspects of the OEPs.
6. Conducting in-person focus group discussions and direct interviews with select key informants to gather required data (quantitative and qualitative).
7. Analysing the data collected and sharing insights derived from it with the program team.

4. Data collection tools for the study

Specifically for this study, the following tools were created and administered for information gathering:

1. Desk Research
   The objective was to develop an initial understanding of the vision and mission of the university, its background and related particulars by going through the university website and additional documents. This was done by the research team with some inputs from the university.

2. Online Survey
   A short online survey was designed and circulated among the faculty members. This survey included some basic questions to understand the faculty members' familiarity with/awareness of and usage of OER and their technology habits. The online survey link was made available by the research team and was circulated among the faculty, admin team and support staff.

3. Direct Interactions with Stakeholders
   During the visit to VMOU, the team interacted with key stakeholders across senior leadership, management and faculty. These select face-to-face interactions were designed to provide

insights into the effectiveness of the OEP initiatives by understanding experiences and perspectives of the stakeholders. Interactions were conducted with the Vice Chancellor, Deputy Registrar and the Director (School of Education) of the university.

4. Focus Group Discussions
   The Focus Group Discussions (FGD) were conducted in-person with faculty members, administrative staff, library staff, and the technical support team in homogeneous groups. This allowed for open discussions amongst participants. The idea was to interact with as many faculty, admin and staff members as possible, with no more than 6 participants per discussion group.

4.2 Broader itinerary of the study

The research team, comprising of two members from IT for Change conducted in-person direct interactions and focus group discussions on 17th and 18th May. These interactions were scheduled in coordination with the university as per the availability of stakeholders on these dates. Two direct interactions were also conducted on 19th May.

The link for the online survey form, along with a pre-drafted message, was shared by the research team on 17th May for circulation among the faculty, admin and staff members. The research team also explored the OEP-related facilities at the university (such as the electronic media centre, laboratories, library, server room, etc.)

5. Key findings

5.1 Desk research

Vardhman Mahaveer Open University (previously Kota Open University) was established under the Vardhman Mahaveer Open University, Kota Act (1987) with the amalgamation of two institutes of correspondence courses viz. Institute of Correspondence Studies and Continuing Education, Jaipur and (College of Correspondence Studies), Udaipur to strengthen and achieve proper coordination among the scattered vast distance education resources and to serve as an instrument of democratizing education and to augment opportunities for higher education to widen access to and promote a flexible, innovative and cost-effective system of education. There are a total of 33 departments in the university including the School of Commerce & Management, School of Continuing Education, School of Education, School of Science & Technology, School of Humanities & Social Science, as well as Examination & Degree, Material Production & Distribution, and Information Technology & Electronic Media Reproduction Centre etc. There are 18 permanent faculty members for the 5 Schools. The university runs the courses in 2 cohorts – January and July, the total enrollments for which were 1,52,349 for the academic year 2021-2022. The university offers 1061 courses in distance learning mode, the breakdown for which has been provided below:

- Management Programmes – 1
- Education Programmes – 1
- Master Degree Programmes – 27
- Bachelor Degree Programme – 35
- Diploma Programmes – 8

- Certificate Programmes – 9
- Lateral Entry Programmes - 25

The website does not mention anything about an OEP policy.

5.2 Online Survey

Although the online survey was shared with the participants for circulation, the sample size of completed responses was insufficient for proper statistical measurement. This information will be more relevant later when a program of capacity building is planned with the faculty.

5.3 Direct interactions with stakeholders

These interactions were conducted face-to-face with key stakeholders across senior leadership, management and faculty, such as – the Vice-Chancellor, Director (Centre for Internal Quality Assurance), Director (School of Education) and Deputy Registrars, and provided valuable insights into their experience, on the functioning of the university, and challenges being faced.

Image 1: Members of the research team interacting with Dr. Kailash Sodani, Vice-chancellor, VMOU.

1. Of the total participants in this category, a few were unfamiliar/could not speak in detail about OER and OEP currently in place at the university. This was attributed to the '*Draft OEP Policy*' not having been finalised.

2. Some participants highlighted the integration of digital technologies using OEP in the university processes:

   (a) In terms of staff's professional development, the participants stated that a few capacity building sessions on OER and a few digital software were conducted in the past. Some of these were conducted internally while others were done in collaboration with other organisations, including one with CEMCA. It was mentioned that more such sessions are necessary to strengthen understanding.

   (b) In terms of creating, adapting and publishing OER, the university has a well-equipped Educational Media Production Centre where the faculty has been creating video sessions

for various topics. These videos are uploaded to YouTube on the official university account.

(c) The university has purchased the Google Suite and uses the same on an everyday basis. For example – using Google Meets for online meetings, Google Scholar for research, etc.

(d) The platform *One View* is used to manage courses and keep a track of course progress, subjects, examinations, study material etc. by the students as well as the university.

3. The university is looking to start some online courses (either by the university or as joint programmes) and is open to collaboration and receiving pedagogical and technological support for the same.

4. An *All India Open University Vice-Chancellors' Conference* was organised by the Vice-Chancellor, VMOU in April 2023 in Jaipur, which helped in drafting a list of suggestions to provide universities with more opportunities for smooth and barrier-less functioning. The stakeholders requested that more such meetings or conferences be held (at district/ state/ national or international level) with department heads or subject heads from other open universities so that sharing of ideas, resources and best practices can be facilitated.

5. The participants acknowledged the issue of staff shortage and mentioned that they are yet to design a comprehensive orientation program/ module for newly appointed members so that it is available for posterity.

6. The participants also spoke about the Self-learning Material on the website and acknowledged the need for updation to make it more accessible and inclusive.

7. The university also plans to set up a dedicated studio/ centre for creation of audio resources and has requested assistance with the same.

The participants also mentioned that a lot of the planned projects by the university had been put on a hold in order to complete the NAAC accreditation process. The university will be completing these pending projects in the coming months – one of which involves installing and implementing the technology infrastructure being procured.

5.3 Focus group discussions

The focus group discussions were conducted with members from the following departments:

- Information Technology and Electronic Media Production Centre
- Central Library
- Examination and Degree
- Material Production and Distribution
- Grievance Cell
- School of Education
- School of Science and Technology
- School of Humanities and Social Science

The findings from these discussions are as follows:

1. All the participants agreed that capacity building programmes/ workshops/ seminars are needed to increase awareness amongst the faculty and staff on OER and OEP. The participants stated that an outcomes-based model, which involves developing an online course and offering it as an OER, will be beneficial for the faculty and the university.

2. Sessions on digital literacy were also requested to familiarise the staff members with maintenance and basic troubleshooting for the resources at the university.

3. While creation of audio-visual resources by the faculty is ongoing, some faculty members have been more active and enthusiastic than others. The participants spoke about a slight reluctance to integrate ICT into teaching among certain staff members. Existing workload was reported as a possible reason.

4. The *Students' One View* portal has been designed to manage most of the course transaction related processes such as – managing student profiles, admissions, examinations, grievance redressal, tracking printed course material, etc.

5. The SLMs (Self-learning materials) available on the website for various courses offered require updation. Participants mentioned that a review is necessary to ensure quality is maintained. Another concern is making the SLMs more inclusive and accessible to the students. For example, currently some SLMs include scanned pages which do not allow *text-to-speech* option. The faculty also wish to make the content more interesting by introducing a variety of images, graphics, hyperlinks and opportunities for discussion.

6. The faculty also asked for suggestions on how to make the Counseling process smoother and more accessible to students.

7. While the university staff is keen on following OEP, high workload resulting from shortage of staff and other administrative responsibilities have been a major challenge towards taking it up.

8. Personnel from the technical team also raised some concerns about server space, and maintenance and updation of the existing technology infrastructure. More recent versions of software and operating systems need to be installed on the existing systems.

9. The university had previously appointed an OER Coordinator to help facilitate creation of resources (among others), but that position currently stands vacant.

5.4 Other observations from the field

The technical resource personnel have been involved in digitising and updating the data and resource management tools for several departments at the university. '*Student-One-View*' is an online platform that works as a tracking system for everything – right from the application for admission process to the distribution of certificates post course completion. It is integrated as a part of the university website. The platform was developed in-house and customised. Part of the objectives here was to make the admissions process smoother and 'paperless'.

A Dell server with 5 TB of capacity, already containing 10+ years of data, functions excellently. For most of the administrative work, the university uses MS-SQL and MySQL for smaller requirements. The Electronic Media Production Centre (EMPC) studio is a department that contributes to the

university with regular resource creation through videos. At present the channel offers over 550 video resources on different themes based on course content offered by the various programmes at the university.

Image 2: Electronic Media Production Centre (EMPC), VMOU

VMOU's YouTube channel has over 2.6 lakh subscribers, and has been recognised with a YouTube Silver Button. Apart from having Windows machines at the lab, they have Xubuntu (lite version) and are using a few FOSS applications. Systems are configured with 1 TB of hard disk, 4 GB of RAM, i3 or i5 processors.

The university has a lifetime subscription to G-suite which they use for everyday work. They go live on YouTube on a few occasions as well. For office related work, they use a licensed version of Microsoft Office. A few of the regional centres use Telegram for communication.

Certain spaces in the university are also undergoing renovation. The university has separate buildings for the Library as well as for the various laboratories, with ample space and resources. The university also contains 2 well-equipped auditoriums, with seating capacities of 200 and 400 respectively.

6. Data analysis

Open educational resources and open education practices are vital in open distance learning for an open university. They facilitate accessibility, customization, collaboration, quality enhancement, lifelong learning, and global impact, ultimately contributing to the mission of providing inclusive, high-quality education to learners worldwide. This report analyses the open educational practices at VMOU under the following parameters:

1. **Accessibility**: The audio-visual content created by the faculty on the university's YouTube channel provides access at a significant scale. However, there is scope for further enhancing the process by creation of videos that are bilingual, multilingual or using other dialects spoken in the state. Creation of resources in other formats (audio files, graphic organisers, podcasts, online discussion forums etc.) is also necessary to promote equal access to education for all, including marginalized communities, individuals with disabilities, and those in remote areas.
2. **Licensing and Copyright**: It is evident that awareness regarding licensing and copyright, specifically in relation to open licenses like Creative Commons is integral to the sustainability of the resource creation process.
3. **Collaboration and Partnerships**: The university and its faculty have expressed an openness towards possible collaborations among stakeholders, including other educational institutions, organizations, and communities. The possibility of conducting a joint study with an

organisation/ institute on identifying the reasons behind low enrollments-to-course-completion ratio was briefly discussed. Such projects can help enhance the resource utilisation at the university.

4. **OEP in Course Design and Transaction**:

   (a) Course design.

       i. The study found that integration of OEP in the course design/ revision process at VMOU needs to be focused on. Although video resources created by the faculty are available online, more strategies to integrate them with the course materials need to be explored.

       ii. The policy should promote the use of open educational practices to help foster active engagement, collaboration, and critical thinking among students. The university management and faculty have already expressed a desire to create online courses as well as to create more interactive and inclusive SLMs. Therefore, a comprehensive outcomes-based capacity building programme that combines awareness of OEP and elements of online course design might be valuable here.

   (b) Course transaction.

       i. The *One View* portal has digitised several course transaction processes and has made learning management smoother for the faculty and staff involved. However, integrating multiple processes on one portal means that the continuous, long term maintenance and updation of the portal will be essential for ensuring smooth functioning.

       ii. Additionally, many students, especially those with cognitive disabilities, can learn more effectively using computers. Multisensory information presented by computer programmes is stimulating and can offer a way to teach students who have limited reading ability.

5. **Quality Assurance**:

   The university has a dedicated department called *Centre for Internal Quality Assurance (CIQA)* for the review, evaluation, and continuous improvement of content, instructional design, and assessments. The team found that the QA guidelines were being followed by departments such as the IT and EMPC as well as Material Production and Distribution.

6. **Technology Infrastructure**:

   Although there were mentions of the technological infrastructure being insufficient and not being up to date, we understand techhnology infrastructure upgradation is in progress. Thus, as of now, the study is unable to comment on this matter. A needs-assessment post the upgradation may be necessary.

7. **Capacity Building**:

   The need for capacity building among faculty, administrators and support staff was evident in the discussions with stakeholders. Only 28% of the participants were familiar with OER and only 17% were aware of OEP. Participation of key stakeholders in the policy development process might impact adoption and integration of OEP in the university processes. The capacity building will need to happen in paraellel with creation of OER as well as course design, as technology is best learnt by doing.

8. **Assessment and Recognition**:

   There still remains scope for recognising the learning outcomes that can be achieved through OEP. Mechanisms for recognition of learning through OER and OEP can assist the quality assurance process and develop best practices.

9. **Research and Innovation**:
    Since the OEP policy has not yet been finalised and circulated, it was difficult to gauge to what extent research and innovation on OEP has been encouraged by the university. Provisions that support research initiatives, collaboration with researchers, and the dissemination of research findings will need to included in the policy to contribute to the growth of the open education ecosystem.
10. **Sustainability**:
    The OEP policy is necessary to assess how long-term sustainability of open education practices might be promoted by the university. Additionally, provisions for funding, resource allocation, and institutional support will also be considered to determine continuity and growth of open education initiatives.

7. Recommendations

The interactions with the Vice-chancellor, heads of departments, faculty, members of the administrative staff as well as the support staff helped identify several areas for strengthening OEP at the university. The graphic below provides an overview of the scope for collaboration between CEMCA and VMOU.
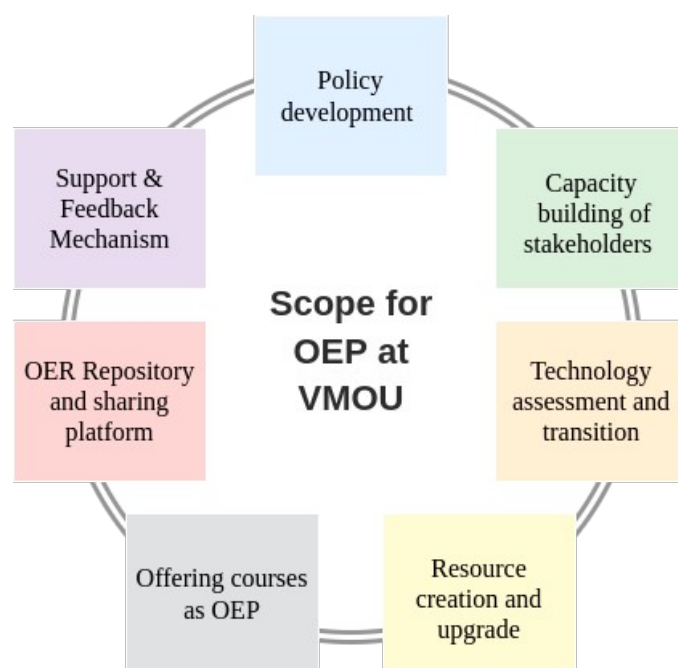

Figure 1: Scope for collaboration between CEMCA and VMOU.

1. **Policy development and implementation**
    CEMCA can continue providing their support in helping the university develop their OEP policy and ensure that it aligns its visions and goals. Involving key stakeholders in the policy development processes will be key in ensuring its integration into institutional practices.

2. **Resource Mapping and Inventory**
    Existing resources can be further assessed and potential areas for OEP integration can be

identified, in collaboration with the university. Creating an inventory of available OERs, free and open-source software and multimedia resources can also help identify areas where OEPs can be integrated. Helping establish a centralized OER repository where staff can share, access, and collaborate on the development of OERs might also be helpful.

3. **Capacity building of faculty and staff members**
   The university's policy on OEP should encourage the use, creation, and sharing of OER while respecting copyrights and ensuring appropriate attribution. Establishing a sustainable program for faculty development including workshops, webinars, seminars and mentoring opportunities might help strengthen the understanding and implementation of OEP. This can include:

   (a) Conducting introductory workshops on OEPs, open licenses and the benefits of OERs can be the first step in facilitating their implementation. This can include highlighting the potential of ICTs, audio, video, multimedia, and online technologies in enhancing access to quality OER and learning materials.

   (b) Organizing training sessions to familiarize staff and help them transition to free and open-source software alternatives, if any.

   (c) Professional development focused on '*learning by doing*' i.e.integrating OERs into the technological, pedagogical and content aspects of designing and transacting distance learning or online courses.

   (d) For faculty members in particular, the 'Technological Pedagogical Content Knowledge (TPCK) framework1 can also be covered. It focuses on technological knowledge (TK), pedagogical knowledge (PK), and content knowledge (CK) and offers a productive approach to many of the dilemmas that teachers face in integrating digital resources in teaching-learning processes.

      i.   Online platforms that use free and open source software (FOSS), like Moodle, can be used to establish online courses that can be useful and inclusive for VMOU's students.

   (e) Providing mentorship opportunities, peer-to-peer learning, and creating online communities of practice which can help foster collaboration and knowledge sharing.

   Although the traditional method of conducting capacity building workshops can be effective, online and blended courses (MOOC model), online resource repositories including stories, activities, assessments, common queries and FAQs, as well as building and strengthening professional learning communities are methodologies that can help provide faculty and new joinees with continuous support and the facilitation required to smoothen OEP implementation.

4. **Pilot projects**
   Initiating small-scale pilot projects in select departments or programs can also be used to showcase the benefits of OEPs. Exploring 'The use of OERs to increase student engagement and interaction in a course offered' or 'Ways to increase student engagement during Counseling sessions' are examples of projects that can be taken up. Adequate support and resources can be provided to these pilot projects and their impact evaluated over time.

Providing guidelines for licensing, attribution, and quality assurance can help ensure the repository maintains high-quality resources.

5. **Scaling up OEP Implementation**
   Gradually scaling up the integration of OEPs to all departments and programs will be practical. Departments can be encouraged to develop their own strategies for OEP implementation, aligned with the university-wide policy. This will include adding online and blended programs into the institution's portfolio, for which an online LMS (such as Moodle) will be required.

6. **Community of Practice**
   Creating a community of practice within the university will help bring together staff members interested in open education and encourage knowledge sharing, peer support, and collaboration among community members to foster the development and adoption of OERs and OEPs.

8. Conclusion

The collaboration between CEMCA and the university, guided by the recommendations outlined in this report, can help pave the way for integration of open educational practices. By leveraging ICTs, audio, video, multimedia, and online technologies, the university can increase access to quality learning materials and create an environment that encourages collaboration, innovation, and lifelong learning. Implementing OEPs will position the open university at the forefront of open education initiatives, benefiting both the institution and its stakeholders. Continuous evaluation, feedback mechanisms, and adaptability are essential to ensure that the plan of action remains aligned with the university's evolving needs and goals.

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Ehlers, Ulf. (2011). *From open educational resources to open educational practices*. Elearning Papers. 23. 1-8.

9. Annexure

1. The tools prepared for the study can be found here.
2. The broad research plan for the study can be found here.