#### Review Paper

# Development and Outreach of Quality Educational Multimedia Content at IGNOU to Meet the NEP 2020 Goals: Challenges and way forward

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#### Abstract

The Indira Gandhi National Open University (IGNOU), a premier ODL university with a national and international reach, follows a multimedia approach for instruction, which includes Audio-Visual (AV) Aids, and social media. The Electronic Media Production Centre (EMPC) at IGNOU is a Centre which extensively uses digital, satellite and Internet based technologies to produce, deliver and disseminate quality educational content to millions of its learners and the masses. It also designs innovative need-based interventions to meet the new and emerging challenges of the new age learners. This paper reviews the preparedness of EMPC in producing and delivering quality educational multimedia content and enhancing outreach in the changing scenario of educational needs of the learners in the light of the NEP-2020. It analyses and identifies the existing challenges in the way of maximizing access and reach of the audio and video (multimedia) content to the learners. The paper further recommends the new way forward with the vision of realizing the vibrant and immersive ODL ecosystem in the country.

**Keywords**: Open and Distance Learning System (ODL), Innovation, Educational TV, Teleconferencing (TC), Educational Radio, Educational Content Production, Instructional Delivery, Audio and Video, Multimedia, Social Media, Outreach, NEP 2020.

#### Introduction

The Open and Distance Education (ODL) system has emerged as a key player in providing quality education to the masses in the post Covid-19 pandemic era. The lockdown period provided an opportunity to this non-traditional education system to prove its mettle in providing anytime, anywhere education thereby establishing itself in the mainstream education delivery system. Giving due recognition to the ODL system, the National Education Policy-2020 has strengthened the role of the ODL system and online learning through the provision in its section 10 (10), which states "Institutions will have the option to run Open Distance Learning (ODL) and online programmes.. to enhance their offerings, improve access, increase GER, and provide opportunities for lifelong learning (SDG 4)". The ODL system and online learning rely heavily on electronic media and Information and Communication Technologies (ICT) to deliver their content. The production of quality electronic content and its delivery using ICT, therefore, assumes much importance.

The Indira Gandhi National Open University (IGNOU) is the premier ODL university in India with a national and international reach. With about 3.5 million students on its rolls, the University follows a multimedia approach for instruction, to cater to the vital need of audio and video media (used

interchangeably with multimedia in this paper) for the distance learners, IGNOU has established a dedicated Centre at its headquarters named the Electronic Media Production Centre (EMPC). The Centre utilizes advanced technology for producing and delivering educational content and delivers the content through electronic channels such as 24x7 Gyan Darshan TV channel, Gyan Vani FM Radio, and various Internet and ICT enabled platforms. The EMPC is actively involved in capacity building and training programmes for the faculty and students. From time to time, it takes initiatives to impart skills to the teachers on topics of media production. It also conducts internship programmes for up skilling students in media studies. Such initiatives are instrumental in providing the learning opportunities to the students who are at a distance from the institution, thereby effectively bridging the crucial gap. Nonetheless, research studies on the usefulness of these interventions, particularly teleconferencing and interactive radio, have indicated a need to put in more efforts to make them more appealing and accessible to the learners<sup>2</sup>. Furthermore, in the emerging scenario of tech savvy gen-next learners having high expectations of a media-driven educational content, the university needs to expand its services and also be equipped with the latest technology driven pedagogy and instructional delivery system.

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In this context, the fundamental research questions that arise are (i) how is the university providing quality multimedia educational content to its learners? (ii) how is the university able to maximize its multimedia delivery outreach for greater inclusivity of its learners? and (iii) are there any impediments in the way of providing quality content, accessibility and outreach though media technology?

**Objectives:** In this review an effort has been made to study and understand the initiatives taken by EMPC, IGNOU with the following objectives: i. To study the preparedness of EMPC in creating quality multimedia educational content. ii. To study the current position of the technological media-based educational delivery methods employed by EMPC. iii. To study the initiatives taken by EMPC to address the challenges of learner outreach. iv. To identify any existing challenges causing impediments in attaining the NEP-2020 goals of improving availability and access, and enhancing learner outreach, to build a foundation for further systemic research thereby improving the services.

#### Methodology

This exploratory study employed a descriptive approach and is based on the secondary resources of data. English language databases were searched, such as ONOS, institutional library eresources, *Shodhganga*, and Google Scholar. The data sources included books, research articles, PhD theses, institutional reports, websites and articles. The data was reviewed and qualitatively analyzed and synthesized to gain insights in alignment with the objectives, and the results and recommendations were presented in the review.

#### Pedagogical Significance of Television, Radio and Internet:

The learner in the ODL system is at a distance from the university and at times faces a lot of encumbrances in communicating their thoughts to the university. Therefore, bridging the gap between the learner and the university through effective communication assumes a significant role. Audio and video are valuable media tools of communication and can play an important role in bridging this communication gap. The ODL system imparts education through various media, such as print, audio and video to enable the learner to gain access to knowledge. Educational Radio and Television have been the mainstay of the ODL system worldwide. However, the ICT revolution has brought in the elements of the Internet and social media, which have catapulted the ODL system into the larger and unchartered domains of content development and delivery.

The pedagogy of multimedia learning is based on the fact that a person learns by the way of cognition through both auditory and visual channels. According to educational psychologist Richard Mayer, "humans possess separate channels for processing visual and auditory information". The first is the visual–pictorial channel, which processes images seen through the eyes (including words displayed in print or on a screen).

The other channel is the auditory-verbal channel, which processes spoken words<sup>3</sup>.Richard Mayer's research proved that people learn deeply from words and pictures. Therefore, for optimum facilitation of the audio-visual learning needs of the distance learners, the ODL system mandatorily employs radio and television to disseminate educational content. Furthermore, the radio and television are cost-effective media that have an easy access for learners, a wide reach, including remote areas, and have several pedagogical advantages<sup>4,5</sup>.

Radio has been found to be effective in a variety of instructional design contexts that enables delivery of course content, group support, and learner's reaction and feedback. Radio enables learners to access the content and tutorials, sometimes even in their own native languages, making it very easy for them to understand the concepts<sup>6</sup>. The interactive radio programmes, with their two-way communication enable the learners to ask questions and clarify their doubts on a specific topic. Radio has been found to be very effective in counselling of the ODL learners<sup>7</sup>. Similarly, the television has been found to be an effective educational medium. The learners find the medium interesting and therefore prefer watching the educational programmes.

Television fulfils a wide variety of educational needs, such as (i) supporting and enhancing teaching; (ii) dealing with topics that are cryptic, such as a demonstration of the biological process of respiration, or topics that are difficult to reproduce in the real world, for example a demonstration of a nuclear explosion; (iii) counselling and (iv) motivation. Television proves to be helpful in understanding abstract ideas as it allows visualizing, and is useful in lessons of geography, which allows to see far flung and inaccessible regions and phenomena<sup>8</sup>.

With the advent of the Internet, the world has opened up for the distance learners. They can access education anytime from anywhere. The Internet has enabled the system of online learning and educational infrastructure is being built around it with new and emerging technologies. A digital media ecosystem is now in place that uses a variety of Web 2.0 applications<sup>9</sup>.

The Internet has also has presented us with online social media networks, such as Facebook, YouTube, Instagram and X (formerly Twitter), which are popular especially with the young student community. Studies indicate that learners use social media in many ways to reinforce their educational activities, communication and collaboration and in attempts to enhance their academic performance <sup>10</sup>. With new and emerging ICT tools, and the technology-enabled innovations they bring into the ODL system, the teaching-learning scenario is observing a sea change. The Web 2.0 tools, coupled with digital radio and television technology and social media, are transforming the ODL scene for the 21<sup>st</sup> century learners.

The Indira Gandhi National Open University offers around 318 Academic programmes through its 21 Schools of Studies.

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There are certain specialized Centres of the University, which also create academic content for the learners. The University follows a multimedia approach for instruction, which comprises Self Instructional Printed Material, Audio-Visual (AV) Aids and Face to Face Counselling 11,12. In this regard, IGNOU has established EMPC, which was set up in 1986 as the Communication Division with the objective of producing and delivering audio and video programmes related to various academic programmes of IGNOU, over the course of time, this facility, bolstered with several improvements especially in postareas of editing and graphics metamorphosed into EMPC. The Centre utilizes advanced technology for producing and delivering educational content across various platforms, including radio, television and the Internet. It also creates awareness programmes, promotional videos and other media initiatives to showcase IGNOU's achievements and educational offerings.

Further, it undertakes various training and orientation programmes for faculty members to facilitate the effective use of electronic media in education. Additionally, the Centre delivers educational content through electronic channels such as 24x7 Gyan Darshan TV channel, Gyan Vani FM Radio, and various Internet and ICT enabled platforms, such as Gyandhara (web-based Radio), YouTube, Facebook and 'X' (formerly known as Twitter). The EMPC at IGNOU holds vital significance in advancing Open, Distance, and Digital Learning (ODDL) in India. It acts as a cornerstone for delivering highquality, inclusive, and technology-driven education across the country. It is significantly contributing towards the educational accessibility across the country and abroad by producing and transmitting curriculum-based content via dedicated educational channels, making education freely accessible to all with India's linguistic diversity. The EMPC is moving towards regional language production, which aligns with NEP-2020 and ensures inclusivity.

Richard Mayer's research and the cognitive learning theories, such as the Dual-Coding theory of Allan Paivioemphasise on the fact the students learn much better when they listen and visualize the content. The students are likely to process the information much easily sincethe well-produced audio-visual aids lessen the cognitive load. Their memory becomes markedly enhanced as theaudio-visual aids help them retain the information for a long period of time. Audio and video programmes can cater to all types of learners with diverse learning styles. Recognising these attributes of the audio and video multimedia content, IGNOU uses these extensively for instructional delivery of its academic programmes.

### Production of audio and video programmes at EMPC

At IGNOU, on an average, audio and video programmes comprise 20 %, of each course 13. Accordingly, the EMPC

produces the curriculum-based audio and video programmes and other relevant multimedia programmes for the learners.

Subject related programmes: The EMPC produceseducational audio and video programmes pertaining to the broad subjects of Agriculture, Continuing Education, Computer and Information Sciences, Education, Extension and Development, Engineering and Technology, Foreign Languages, Gender studies, Humanities, Health Sciences, Interdisciplinary and Trans disciplinary studies, Journalism and New Media studies, Law, Management, Performing and Visual Arts, Sciences, Social Sciences, Social Work, Tourism, Translation Studies, and Vocational Education.

Other Programmes: The EMPC produces a variety of other informative audio and video programmes in addition to the subject-based programmes. In collaboration with the various Centres, Divisions, Cells. Units etc., of the University, the EMPC produces audio and video programmes on innovation and entrepreneurship, disability studies, skill development, etc. Additionally, the Centre broadcasts live programmes on Gyan Darshan TV channel, Gyan Vani FM radio channel the occasion of celebration of special days, convocation, messages from eminent personalities etc. Further, to promote the best practices to reach the unreached by the University, the EMPC produces audio and video programmes that involve eminent personalities. These promotional videos are showcased through Gyan Darshan TV channel, Gyan Vani FM radio channel and also through social media platforms. These programmes contribute to the branding of the University. Since its inception, the Centre has developed thousands of programmes (Table-1).

**Table-1:** Production of Audio and Video Programmes by EMPC since its inception

Years	Audio Programmes (in numbers)	Video Programmes (in numbers)
1987-1996	667	627
1997-2006	728	1531
2007-2016	1175	2507
2017-2025	3700	1900

**Production Process**: The EMPC has been are producing the audio and video programmes in various formats, such as talk and discussion, panel discussion, illustrated lecture, interview, drama, documentary, feature, magazine, talk show, quiz, reports, demonstrations, case study, etc. These diverse formats cater to a wide range of learning needs of the students. The production process involves the three main steps of preproduction, production, and postproduction.

In the pre-production stage, the academic content provided by the schools is suitably modified and designed taking into consideration several instructional design aspects, such as creating the format of the content, scripting, interactivity, pedagogic soundness, etc. In the production stage, the technical aspects on the set, audio studio, lights, sounds, equipment, etc., are optimized and the programme is recorded or broadcast live. Finally, in post-production stage the audio/video is edited suitably to be delivered at the scheduled time of the programme.

## Delivery of educational audio and video programmes

IGNOU uses audio-visual media to deliver academic content to its students across India and abroad. The University extends its educational reach to even those students residing in distant places and remote areas through audio-visual media. Taking forward IGNOU's mandate of reaching the unreached, the First Educational TV (ETV) channel of India, *Gyan Darshan* was launched in January 2000 at EMPC. The very next year in 2001, *Gyan Vani* Educational FM Radio Network was launched with the frequency 105.6 MHz. Since then, the delivery technology has rapidly progressed from tapes, CDs, DVDs, TV, radio to social media 11,12.

Gyan Darshan TV Channel: The Gyan Darshan TV channel telecasts IGNOU's video educational programmes throughout the day. It is a nationwide platform and the programmes reach all the states of India, including the remote parts of the country, where internet connection is limited. In addition to one-way telecasts, Gyan Darshan programmes have Live Interactive Teleconferencing Sessions wherein there is a phone-in facility for the students, thus enabling a two-way communication between the teacher and the student. In a year, on an average, more than 7800 hours of programmes are being telecast through Gyan Darshan. The programmes are viewed by the students from all the states across the country. The schedule of the Gyan Darshan programmes is disseminated mainly through IGNOU's official website or websites of the Regional Centers from where the students prefer to obtain the information.

Gyan Vani: Gyan Vani is a FM Radio Channel, which broadcasts audio educational programmes across the country. In 2024, the Gyan Vani, FM Radio, Delhi broadcast as much as 4758 hours of audio programmes for 13 hours daily. Gyan Vani has the facility of Live phone in Interactive Radio counselling (IRC) Sessions. IRC is a live programme, where the learners dial the studio when the programme is on air, to interact with the subject counsellors. Toll-free telephone facility is available from 80 cities, enabling learners to interact with experts and seek instant clarifications. In 2024, the Interactive Radio Counselling (IRC) sessions were broadcast for 697 hours. The schedule of the Gyan Vani programmes is disseminated mainly through IGNOU's Official Website or Regional Centers Website from where the students obtain the information.

#### **Outreach initiatives of EMPC**

The use of diverse communication tools and social media platforms has revolutionized the way information is disseminated to distance learners with each tool offering unique advantages that cater to different needs and preferences of the learners. Together these tools create a comprehensive communication strategy that supports diverse learning needs. By providing accessible multimedia content, interactivity and realtime learner feedback, these social media platforms enhance learner participation and their learning outcomes. These platforms support distance and blended learning, making education more dynamic and responsive to individual learner needs. IGNOU has suitably customized these communication tools and social media platforms, such as YouTube, Facebook, X, Emails and SMS and is making available the educational content and other relevant information to its learners for anytime, anywhere learning 14 thus ensuring a mechanism to attain maximum outreach.

Table-2 presents an overview of the various activities carried out through emails, SMS and social media platforms to reach its learners in the academic year 2024-25. Millions of learners have been benefitted by the way of obtaining educational content and related information through these activities. Similarly, thousands of learners have been able to interact and provide their feedback. The ICT outreach has undoubtedly improved learner engagement and contributed to their enhanced learning outcomes.

**Table-2:** ICT Activities of EMPC for Learner Outreach in 2024-25

ICT Activities for Learner Outreach	Number
Live Sessions carried on EMPC YouTube Channel	3,068
Hours of Live Sessions carried on EMPC YouTube Channel	1,534
Subscribers of EMPC YouTube Channel	78,061
Viewers of EMPC YouTube channel	22,74,879
Facebook Post views	2,96,723
Posts in EMPC X	2,596
Followers in EMPC X	683
Email sent to the learners	4,92,000
SMS sent to the learners	3,15,441

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YouTube: YouTube is ideal for hosting educational videos and live teleconference sessions that learners can access at the convenience and pace. It supports visual learning and allows users to replay content for better understanding, which is particularly valuable for distance learners, who sometimes cannot attend the live sessions. Recognizing this scenario, EMPC created its YouTube Channel, which is dedicated to provide relevant content for the benefit of the learners in the 2021. Since its inception, the channel has reached over 2.3 million learners across the globe with 800 offline videos and more than 1500 hours of streamed live teleconferencing sessions. In 2024-25 around 100 videos were uploaded. Additionally, YouTube Live Streaming of Teleconference was for 498 hours. The viewership was 8,35,743 in which 66.6% of the viewers were males and 33.4% were females. This channel is mostly being viewed by the learners aged between 18-34 years totaling more than 80.2 % of viewership. This is the testimony of its gainful impact and usefulness among the learners. The channel has a global reach, attracting viewers from various parts of the world including Pakistan, Nepal, Bangladesh, United States, Nigeria and many more.

Facebook: In March 2023, EMPC created its Facebook Page, which serves as the gateway to real-time Live Teleconferencing sessions and video content for the students. It connects the students to a wealth of resources, where they can access the repository of previously broadcast programs, ensuring the comprehensive learning experience for all. Additionally, it includes updates about the schedule of both Gyan Darshan Teleconference and Interactive Radio Counselling available on the Gyan Vani Delhi FM Radio Channel. Students have joined EMPC-Face book to stay informed and engaged with dynamic educational content. The outreach of the official Facebook page of the EMPC in 2024-25 was 1, 92,622 viewers. 35174 learners and other stakeholders had visited the page and the page was followed by 2547 learners, out of which the percentage of males was 72.8% and females was 27.2%. This channel is mostly viewed by learners aged between 25-45 years from different locations such as Delhi, Haryana, West Bengal, Tamil Nadu, Uttar Pradesh, Maharashtra, Bihar and Jammu & Kashmir. This also has international reach in the countries such as Afghanistan, Nepal, Nigeria, Bangladesh, Pakistan, Saudi Arabia, Qatar, United Arab Emirates and Ghana.

X (Formerly called Twitter): X is highly effective for concise updates and fostering real- time discussions. The EMPC at IGNOU utilizes its official Twitter handle now known as 'X' to share information about LIVE schedule of the Interactive Radio Counselling (IRC) and Teleconference (TC) sessions on a day-to-day basis. Followers can tune in to these live broadcasts for real time counselling on curriculum-based programmes and student related queries.

**Email**: Email is an essential tool for Distance Learners due to its capacity for detailed communication attachments and threaded conversations. To ensure effective communication and further better outreach of the Programmes on air, the team at

EMPC sends regular multiple emails detailing the schedules for upcoming live Interactive Radio counselling (IRC) sessions and Teleconference Sessions along with the nicely created flyers prepared by Graphics Unit. This approach keeps learners informed and gainfully engaged allowing them to plan in advance and participate actively in the sessions. The regular emails are sent by EMPC after obtaining and segregating the relevant data collected from the Student Registration Division (SRD). This personalized touch reinforces our commitment to their success, making learning accessible and more organized.

Short Message Service (SMS): Multiple SMS is widely accessible and provides instant communication to mobile users. SMS services are proving extremely useful for urgent and quick reminders about the important updates, news and forthcoming counseling sessions well in time. This approach ensures that all enrolled learners, even those with limited internet access, stay informed and engaged with their studies. The effective use of this technology helps bridge communication gaps and keeps students connected with the institution. This targeted approach helps in providing timely and relevant information to the learners enhancing their participation and engagement with the upcoming content-based delivery.

Technological innovations to enhance access: With emerging skill needs of the learners as well as the industry, the EMPC has designed and developed innovative practices. Some of these innovative practices pertain to the creation and delivery of new content based on industry needs, while other practices pertain to branding, promotion of IGNOU programmes, university outreach initiatives and technological innovations. These innovations, beyond doubt, have proved to be an enhancement over the existing systemic practices. A couple of the noteworthy innovations are described as follows: i. Simultaneous live broadcast through Gyan Vani and Gyan Darshan during Covid-19 times: During the Covid-19 Pandemic when all the educational institutions across the India were closed due to lockdowns, the role of EMPC became very crucial. At this time Gyan Darshan and Gyan Vani played a significant role in ensuring the continuity in learning. The EMPC designed an innovative technique in which simultaneous live telecast through Gyan Vani and Gyan Darshan studios were designed for maximum efficiency. In this way one programme could serve for both the TV viewers and radio listeners. These TV and radio channels aired subject specific lectures, interactive sessions and General enrichment programmes related to health, stress management and literature. The EMPC's proactive measures during the pandemic had not only helped manage the crisis but also set the stage for more resilient and adaptable future. ii. Hybrid mode interactivity though Internet and Television: The EMPC designed and developed an innovative mechanism of integrating Internet technology with television. This enabled a two-way audio-video interactivity of the experts sitting in the TV studios in IGNOU headquarters with the learners sitting in the Regional Centres across the country. Learners from various IGNOU Regional Centres join the

session virtually, creating a truly inclusive and nationwide learning experience. The innovation is fast easy to deploy and is cost-effective as no expensive dedicated hardware is needed at the remote site. It is accessible as learners can join from any device. The innovation supports interaction and the two-way communication allows live Q&A or follow-up questions. This initiative reflects a significant step towards leveraging digital and satellite-based technologies to bridge the educational divide empowering the learners with direct access with the experts sitting in the video studio.

Challenges: This review identified the underutilization of the television and radio programmes as the main challenge, which is impeding the delivery of quality educational services. Several research studies conducted in the past few years have highlighted the challenge of underutilisation and the underlying reasons thereof<sup>2,15-18</sup>. These reasons are extracted below: i. Uninformed learners: A majority of the learners are not informed of the television and radio the programmes broadcast through Gyan Darshan and Gyan Vani. This indicates that the penetration of the information on the content and broadcast schedule is not uniform. A potentially significant number of learners are missing out on valuable resources that could enhance their learning. ii. Lack of audio-video content: Many academic programmes, especially short-term programmes, have not produced their audio-video educational content. Even short audio-video modules could offer clarity of the concepts thereby enhancing learner engagement and motivation. iii. Unseemly pedagogy of the audio-video content: In many cases, the audio video programmes are uninteresting and unappealing to the learners due to their unsuitable format. Usually, the content comprises a lecture by an expert, which fails to hold the attention of the viewer for a long span of time. Video clippings, animation sequences and illustrations make the programmes interesting and lively. Additionally, many teachers lack the necessary capacity to incorporate appropriate pedagogic principles in the design and development of the audio video content. iv. Lack of interactivity: The time allotted for the talkback is found to be sessions is very less or nil. Since the learners are more interested in live sessions and interactivity, the learners feel demotivated as their queries and doubts are not resolved in real time. v. Supplementary nature of audio-video content: The mainstay of the academic programmes is the printed self -learning materials. The audio-video educational content is supplementary, which means it is not mandatory for the students to utilize them. The learners, therefore, take a laidback approach towards the audio-video content. vi. Lack of viewing/listening facilities in the Regional Centres and Study Centres: Study Centres and Regional centres lack the infrastructural facilities that allow the learners to spend some time to view or listen to the audio-video programmes. vii. Absence of feedback mechanism for quality assurance: There is a lack of periodic mechanisms to obtain feedback from the learners about the quality of the audio-video content offered by the university.

These issues are crucial, which when suitably addressed and resolved will considerably enhance the utilisation of the multimedia educational content offered by IGNOU.

**Recommendations:** The findings of this study highlight several problem areas that need deeper exploration and refinement. The following recommendations are expected to promote a better understanding of the problem and aid in the analysis of the root cause in order to develop effective solutions. i. Generating awareness about the television and radio programmes: First and foremost, the common prospectus of IGNOU should prominently carry information about the multimedia content offered to the students through television, radio and Internet media. Second, the websites of IGNOU, both at the headquarters and Regional Centres should prominently display the EMPC services. Third, the Academic Counsellors at the Study Centres should acquaint the students with the IGNOU multimedia educational content during the orientation and counselling sessions. Finally, the Regional Centres and Study Centres should be upgraded with the latest equipment that facilitate the learners to listen to and view the multimedia content. ii. Designing engaging multimedia content: To capture the learner's attention, it is important to develop attractive multimedia content. Understanding the learner's preferences plays a crucial role to make the content more relevant to the target audience, and accordingly the content should be developed weaving together various media elements. Latest social media trends need to be emulated to provide bite-sized educational content to the learners as per the new generational preferences. The production of the learning components needs to be more technology enabled by suitably making use of virtual reality (VR), augmented reality (AR), and interactive video formats to make learning more immersive and engaging. Capacity development workshops of the IGNOU teachers should conducted from time to time to train them to design and develop pedagogically sound audio video content. iii. Ensuring easy accessibility of audio-video content: The audio-video content of each and every academic programme should be made readily accessible to the learners through social media platforms. Learner analytics of students accessing the content should be put in place. The EMPC content may also be promoted on digital platforms such as SWAYAM, DIKSHA, and MOOCs to enhance visibility and accessibility. iv. Making audio-video content mandatory: The importance of audio-visual learning is well established. Therefore, wherever possible, the academic programmes should offer the audio-video content as mandatory for the learners and due academic credits may be awarded to the learners. v. Content in regional languages: Audio-video content in regional languages having focus on emerging and interdisciplinary subjects needs to be developed and offered to the learners to support inclusivity and outreach in line with NEP 2020. vi. Conducting surveys and feedback studies: Periodic nationwide viewership and listenership surveys need to be conducted to assess the relevance and utility of the television, radio and social media channels among the learners.

#### Conclusion

This study has made an effort to understand not only the preparedness of IGNOU in creating and delivering quality multimedia educational content, and its ongoing efforts to maximise learner outreach, but it has also highlighted the existing challenges causing impediments in attaining the NEP-2020 goals of improving the availability and access. The study analyses the existing research and identifies the gap areas. It further suggests the way forward to make concerted efforts towards systemic re-engineering to enhance the learner-friendly, immersive and engaging multimedia interventions offered by IGNOU.

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