



Impact of Mass Media-Based Educational Communication on Learner Engagement and Academic Achievement in Distance Education: A Study of IGNOU Learners.

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Abstract

Mass media have emerged as an important component of contemporary distance education by facilitating the dissemination of educational content beyond conventional classroom boundaries. The present study examines the role of mass media-based educational communication in promoting learner engagement and academic achievement among learners of Indira Gandhi National Open University (IGNOU), New Delhi. The study was conducted on a sample of 300 distance education learners. A descriptive survey method was employed, and data were organised through frequency and percentage analysis. Two major dimensions were examined: the level of learners' exposure to mass media-based educational communication and the level of learner engagement and academic achievement. The findings indicate that a substantial proportion of learners reported a high level of exposure to educational communication through television, radio, video lectures, digital educational programmes, and online media. The distribution of learner engagement also indicates a predominance of the high category. The findings suggest that mass media-based educational communication provides learners with flexible access to instructional resources and can facilitate continuity, reinforcement, and participation in distance learning. The study concludes that systematic and learner-centred utilisation of mass media can strengthen the communicative environment of distance education and support learners' academic participation and achievement.

Keywords: Mass Media, Educational Communication, Distance Education, IGNOU, Learner Engagement, Academic Achievement, Educational Media

1. Introduction

Distance education has progressively expanded through the integration of communication technologies that enable learners to access educational resources without continuous physical interaction with teachers. Unlike conventional classroom education, distance education requires effective communication between the learner, teacher, institution, and instructional material. Consequently, communication media constitute an essential component of the distance-learning process.

Anderson and Dron (2011) explained that distance education has evolved through different pedagogical generations, with increasing emphasis on social interaction, learner participation, and networked learning. Their analysis indicates that contemporary distance education increasingly incorporates multiple technological and communicative possibilities rather than depending upon a single instructional medium.

Mass media-based educational communication includes educational television, radio, recorded lectures, audio programmes, video content, web-based educational programmes, podcasts, and



other mediated instructional resources. Such media can make educational material available to learners who are geographically separated from educational institutions.

Garrison, Anderson, and Archer (2000) emphasised the importance of teaching presence, social presence, and cognitive presence in computer-mediated educational environments. Their framework suggests that meaningful learning involves more than the transmission of information; it requires instructional guidance, interaction, and cognitive engagement.

In distance education, therefore, educational media can perform an important communicative function by connecting learners with instructional content and academic support. Shea and Bidjerano (2010), in their study of online and hybrid learners, further highlighted the importance of learner self-regulation and learning presence in technology-mediated educational environments.

Mayer (2021) has also emphasised the significance of multimedia learning, particularly the manner in which learners process information presented through words and visual representations.

In the Indian context, Indira Gandhi National Open University provides an important setting for examining mediated educational communication because its distance-learning environment serves learners from diverse geographical and educational backgrounds. The present study therefore focuses on the role of mass media-based educational communication in learner engagement and academic achievement among IGNOU learners.

Review of Literature

The expansion of open and distance education has been closely associated with the development of educational communication technologies. In contemporary distance education, mass media-based educational communication has evolved from conventional radio and television broadcasting to an integrated communication environment comprising educational television, radio, audio-video programmes, web-based learning resources, social media, learning management systems, recorded lectures, interactive multimedia and digital platforms. In this context, learner engagement and academic achievement have emerged as important indicators for evaluating the effectiveness of mediated educational communication. The following review synthesizes significant studies published between 2015 and 2026.

Martin and Bolliger (2018) examined learner engagement in online learning environments and emphasized the importance of interaction, collaboration, and meaningful learning activities. Their work indicated that engagement in online education is multidimensional and is influenced not merely by access to technology but also by the quality of interaction between learners, instructors, learning materials, and peers. This perspective is particularly relevant to distance education institutions where mediated communication constitutes an important component of learner support.

Kahn et al. (2017) investigated student engagement in fully online postgraduate programmes and highlighted the importance of learners' reflexivity in shaping engagement. The study demonstrated that engagement should not be understood simply in terms of participation or frequency of access; rather, it involves the learner's active interpretation of and response to the learning environment.



Redmond et al. (2018) proposed an online engagement framework for higher education that conceptualized engagement through multiple dimensions, including social, cognitive, behavioural, collaborative, and emotional aspects. Their framework is significant for the present study because mass-media-based educational communication can potentially influence several dimensions of engagement simultaneously through audio-visual content, discussion opportunities, interaction, and learner participation.

Bolliger and Halupa (2018) examined the relationships among online student engagement, transactional distance, and learning outcomes. Their findings indicated that students reported relatively high engagement and positive perceptions of learning outcomes, while engagement and transactional distance were significantly related. The study reinforces the importance of communication and interaction in reducing the psychological and instructional distance experienced by online learners.

Yılmaz and Keser (2017) investigated the effects of interactive learning environments and metacognitive support on academic achievement and transactional distance among online learners. Their experimental study involving 127 students indicated that synchronous interactive environments could reduce perceived transactional distance. The findings suggest that communication technologies become more educationally effective when they facilitate interaction rather than merely transmit information.

Dunn and Kennedy (2019) examined technology-enhanced learning in higher education by distinguishing technology usage from actual learner engagement. Their findings showed that engagement with technology, rather than simple frequency of technology use, was associated with academic achievement. They further reported that intrinsically motivated students were more likely to engage meaningfully with technology, while particular forms of social-media activity were predictive of grades.

Ergün and Kurnaz (2019) investigated e-learning styles and academic achievement among 501 distance learners. Their findings indicated that online-course participation and watching recorded videos, along with active and independent learning styles, predicted academic achievement. The identified variables collectively explained approximately 7% of the variance in achievement. This finding is particularly relevant to the present study because it provides empirical support for examining educational video and mediated communication as components of distance learners' academic experiences.

Alfify (2020) examined the effects of interactive video length within e-learning environments on cognitive achievement, retention, and cognitive load. The study demonstrated the educational significance of interactive video design and highlighted the need to consider not only whether learners receive media-based content but also how such content is structured and presented.

Schmid et al. (2020) concerning multimedia tools in teaching and learning identified multimedia technology as an important mechanism for expanding educational access and supporting learning processes. The review emphasized the potential of multimedia technologies to improve learning experiences and educational performance, particularly where conventional educational resources are limited.



Soffer and Cohen (2019) investigated engagement characteristics among students enrolled in online courses and examined their relationship with course success and completion. Their research demonstrated that engagement-related characteristics could differentiate successful course completers from non-completers. The findings support the proposition that learner engagement represents an important intermediate mechanism connecting educational communication with academic outcomes.

Broadbent and Poon's work on self-regulated learning in online higher education also established the importance of learning strategies such as time management, effort regulation, and metacognitive regulation for academic outcomes. This line of research is relevant because mass-media communication does not operate independently of learner characteristics; the educational impact of mediated resources is partly dependent upon learners' ability to regulate their learning activities.

Jeno et al. and related research on technology-supported learning further established that learner motivation, autonomy, and perceived usefulness influence participation in technology-mediated learning. These findings suggest that the effectiveness of educational communication depends on the interaction between media characteristics and learner dispositions.

Broadbent and Fuller (2019) examined learning strategies and academic performance among 758 distance education students. Their findings showed that management of time, place, and effort was the strongest predictor of academic performance, followed by complex learning-strategy use. The study demonstrates that academic achievement in distance education is influenced by learners' capacity to actively manage mediated learning environments.

Yokoyama (2019), through a review of research on academic self-efficacy and online academic performance, reported that self-efficacy represents an important psychological factor associated with learning performance in online and distance environments. The review highlighted the need to consider learner-level variables alongside technological and instructional factors when explaining academic achievement.

Krieg and Henson (2016) examined the subsequent academic performance of students who had taken online prerequisite courses. Their analysis showed that the relationship between online learning and later academic performance can vary according to educational context and learner characteristics. This finding cautions against treating online or mediated education as uniformly beneficial or detrimental and highlights the importance of examining specific learning environments.

Ragusa (2017) investigated technologically mediated communication among 289 distance education students and emphasized that access to technology does not automatically translate into effective online learning. Learners require appropriate technological, pedagogical, and communication capabilities to participate successfully in technology-mediated education.

Trespacios and Perkins (2016) examined the relationships among sense of community, perceived learning, and academic achievement in an online graduate course. Their findings showed a significant relationship between perceived learning and community connectedness, although community connectedness did not demonstrate a significant relationship with the discussion-based achievement measure. The findings illustrate the complex nature of social communication and academic outcomes in online learning.



Kuzminykh, Ghita, and Xiao (2021) investigated the relationship between learner engagement and academic performance using learning-platform activity data such as content views, forum participation, assignments, and video viewing. Their findings indicated a positive association between engagement and academic performance. This is particularly relevant to the present research because mass-media-based educational communication generates observable forms of learner interaction, including content consumption and participation.

Yotyodying et al. (2022) investigated educational use of Facebook among distance university students and its relationship with academic achievement. The study examined the mediating role of basic psychological needs and demonstrated the importance of socially mediated communication in distance learning contexts.

6. Technology Quality, Instructor Support and Learning Outcomes

Bossman and Agyei (2022) examined technology and instructor dimensions, e-learning satisfaction, and academic performance among 388 distance-learning students in Ghana. Their findings indicated that technology quality, course quality, instructor factors, ease of use, and technology anxiety were associated with e-learning satisfaction and learning outcomes. Learner satisfaction mediated relationships between several technological/instructional factors and performance. The study demonstrates that communication technology is most effective when supported by appropriate instructional design and learner support.

Huang and Wang (2023) examined teacher support, academic self-efficacy, student engagement, and academic achievement in emergency online learning. Using structural equation modelling with 651 university students, the study examined student engagement and academic self-efficacy as mechanisms connecting teacher support with academic achievement. This provides evidence for considering learner engagement as an important pathway through which educational communication and instructional support may influence achievement.

Sharif Nia et al. (2023) investigated student satisfaction and academic efficacy during online learning across multiple countries, specifically examining student engagement as a mediating variable. The study reinforces the interconnectedness of satisfaction, engagement, and academic efficacy in technology-mediated learning environments.

Zeng et al. (2023) investigated the relationship between online-class enjoyment, learning motivation, learning engagement, and academic achievement. Their findings, based on a multi-chain mediation model, demonstrated the relevance of emotional and motivational processes in explaining academic achievement in online learning.

The COVID-19 period substantially accelerated the transition from conventional distance-learning media to digitally mediated and online educational communication. However, the literature indicates that increased technological access did not automatically result in increased engagement or academic achievement.

Motz et al. (2021) examined the rapid transition to remote instruction and reported that increased online coursework following the transition could be associated with reduced academic achievement under certain circumstances. Their findings demonstrate that merely increasing the quantity of online educational activity does not guarantee improved learning outcomes; instructional quality and appropriate workload remain important considerations.



Akpen et al. (2024) conducted a systematic review of 18 studies examining online learning, student engagement, and academic performance. The review found mixed effects: some studies reported improved academic performance because of flexibility and accessibility, whereas others identified reduced interaction, isolation, and engagement challenges. The authors emphasized interactive elements, multimedia resources, and instructor–student interaction as important conditions for improving engagement and performance.

A meta-analysis of the relationship between learning engagement and learning outcomes in online higher education synthesized 34 studies and 175 samples. The analysis identified a small-to-moderate relationship between learner engagement and learning outcomes, with an overall effect size of approximately $g = 0.430$. The study also indicated that behavioural, cognitive, emotional, and general forms of engagement can contribute to learning outcomes.

Hu and Xiao (2025) conducted a systematic literature review of 55 empirical studies on factors influencing online learning engagement. The review identified Community of Inquiry Theory, Self-Determination Theory, Social Cognitive Theory, Transactional Distance Theory, and the Technology Acceptance Model among the frequently used theoretical approaches. The study also emphasized the association of engagement with persistence, satisfaction, and academic performance.

Osiesi et al. (2025) examined the relationships among online learning engagement, readiness, attitudes toward online learning, and academic achievement among university students. Their findings indicated high levels of engagement, readiness, and positive attitudes and emphasized the interconnected nature of learner readiness and engagement in technology-mediated higher education.

Jarrah et al. (2025) examined synchronous online learning and university students' classroom engagement. Their work reflects the continuing movement from passive digital content consumption toward more interactive forms of online educational communication. The study is relevant to the present research because it highlights the role of synchronous communication in shaping learner participation.

Fuentes and LaBad (2025) synthesized 34 empirical studies published between 2015 and 2025 concerning digital learning tools, student engagement, and academic achievement in higher education. The review reported that interactive digital technologies can support learner autonomy, collaboration, motivation, participation, and academic performance.

A 2026 temporal meta-analysis examined online learning and academic achievement across pre-pandemic, pandemic, and post-pandemic periods. Based on 34 primary studies and 45 effect sizes, the study reported a positive overall effect of online learning on academic achievement, while also finding substantial variation across time periods and educational levels. The findings indicate that the effectiveness of online learning is context-dependent and that post-pandemic implementation may differ considerably from emergency remote teaching.

9. Relevance of the Literature to IGNOU

The literature is particularly relevant to the Indira Gandhi National Open University because IGNOU's distance-learning architecture incorporates multiple forms of educational communication. IGNOU's Educational Communication Technologies curriculum explicitly



recognizes audio, video, computer, satellite, digital-content, and new information technologies as components of educational communication in distance education. It also emphasizes the creation of engaging, collaborative, reflective, and authentic learning environments.

IGNOU's instructional ecosystem has historically combined self-instructional print materials with audio-video resources, counselling, educational broadcasting and other mediated learning facilities. IGNOU's electronic-media learning resources have included educational television and radio services such as Gyan Darshan and Gyan Vani, demonstrating the institutional significance of mass media within Indian open and distance learning.

More recent developments demonstrate the continuing transformation of educational broadcasting. Yadav (2026), for example, examined educational radio and Gyan Vani FM within India's contemporary higher-education ecosystem, highlighting the continuing relevance of radio as an accessible educational communication medium in open and distance learning.

2. Statement of the Problem

Impact of Mass Media-Based Educational Communication on Learner Engagement and Academic Achievement in Distance Education: A Study of IGNOU Learners.

3. Objectives of the Study

1.To assess the level of mass media-based educational communication among learners of Indira Gandhi National Open University.

2.To examine the level of learner engagement and academic achievement among IGNOU learners in relation to mass media-based educational communication.

4. Methodology

4.1 Research Method

The study adopted a **descriptive survey method**.

4.2 Population

The population comprised learners enrolled in distance education programmes of Indira Gandhi National Open University, New Delhi.

4.3 Sample

The study included **300 IGNOU learners**.

4.4 Sampling

Learners were selected through a purposive sampling procedure.

4.5 Data Collection

Data were collected through a structured questionnaire covering learners' exposure to educational mass media, participation in mediated educational activities, learner engagement, and perceived academic achievement.

4.6 Statistical Technique

Only **frequency and percentage analysis** were used for presenting the findings.

5. Results and Interpretation

Table 1 Level of Mass Media-Based Educational Communication Among IGNOU Learners.

Level	Frequency	Percentage
Low	27	9.0%



Moderate	87	29.0%
High	186	62.0%
Total	300	100.0%

Interpretation

Table 1 indicates that **62.0%** of the learners reported a high level of exposure to and utilisation of mass media-based educational communication. A further **29.0%** reported a moderate level, whereas **9.0%** reported a low level.

The findings indicate that mass media constitute an important source of educational communication for a considerable proportion of IGNOU learners. Educational television, radio, video lectures, digital educational programmes, and online instructional resources provide learners with alternative avenues for accessing academic content.

The finding is consistent with the broader development of distance education described by Anderson and Dron (2011), who highlighted the increasing role of networked and technologically mediated pedagogies in distance education.

Table 2 Level of Learner Engagement Among IGNOU Learners

Level	Frequency	Percentage
Low	30	10.0%
Moderate	96	32.0%
High	174	58.0%
Total	300	100.0%

Interpretation

Table 2 demonstrates that **58.0%** of the learners reported a high level of engagement with the learning process. Approximately **32.0%** demonstrated a moderate level of engagement, whereas **10.0%** demonstrated a low level.

The predominance of the high category indicates that a considerable proportion of learners actively participate in distance-learning activities. Regular access to educational media may provide learners with opportunities to revisit instructional content, maintain academic continuity, and supplement their self-directed learning.

Shea and Bidjerano (2010) emphasised the importance of learner self-regulation and learning presence in online and technology-mediated learning environments.

Table 3 Level of Academic Achievement Among IGNOU Learners

Level	Frequency	Percentage
Low	36	12.0%
Moderate	102	34.0%
High	162	54.0%
Total	300	100.0%

Interpretation

Table 3 shows that **54.0%** of the learners were classified within the high academic-achievement category. **34.0%** demonstrated moderate academic achievement, while **12.0%** were placed in the low category.



The distribution indicates that more than half of the respondents demonstrated a comparatively high level of academic achievement. Access to supplementary educational communication through multiple media channels may provide learners with additional opportunities for conceptual clarification, revision, reinforcement, and independent study.

Academic achievement is a multidimensional outcome and may also be influenced by learner motivation, prior academic preparation, study habits, self-regulation, instructional quality, and institutional support. Therefore, the present findings should be interpreted as a descriptive representation rather than evidence of a direct causal effect.

6. Discussion

The findings demonstrate that mass media-based educational communication has become an important component of the distance-learning experience of IGNOU learners. The predominance of learners in the high category indicates considerable utilisation of mediated educational resources.

The educational significance of mass media can be understood through their capacity to provide instructional information through different modes. Audio and video resources can supplement textual learning material, while digital platforms can facilitate flexible access to educational resources.

Anderson and Dron (2011) argued that contemporary distance education increasingly incorporates social, constructivist, and networked pedagogical approaches.

Similarly, Garrison et al. (2000) emphasised teaching, social, and cognitive presence as important dimensions of meaningful learning in mediated environments. Thus, educational communication becomes more pedagogically meaningful when it supports learner participation and cognitive engagement rather than merely transmitting information.

Shea and Bidjerano (2010) also highlighted the significance of self-regulation and learning presence in online learning.

From the perspective of multimedia learning, Mayer (2021) explains that appropriately designed combinations of verbal and visual representations can support learning processes.

Therefore, the present findings support the view that mass media can function as an important educational communication mechanism in distance education, particularly when instructional content is accessible, relevant, systematically organised, and aligned with learners' academic requirements.

7. Findings

62.0% of the 300 learners reported a high level of mass media-based educational communication.

29.0% reported a moderate level of educational-media communication.

Only 9.0% reported a low level.

58.0% of the learners demonstrated a high level of learner engagement.

32.0% demonstrated moderate learner engagement.

54.0% demonstrated a high level of academic achievement.

The findings indicate the substantial presence of mass media-based educational communication within the learning experiences of IGNOU learners

8. Conclusion



The study concludes that mass media-based educational communication constitutes an important component of the contemporary distance-learning environment at IGNOU. A substantial proportion of the 300 respondents reported high exposure to educational media, high learner engagement, and high academic achievement.

The findings indicate that mass media can extend the reach of educational communication and provide learners with flexible opportunities to access, review, and reinforce academic content. Nevertheless, the effectiveness of educational media depends upon the quality of instructional content, accessibility, learner participation, pedagogical relevance, and institutional support. mass media should be regarded not merely as technological channels but as pedagogically significant instruments for strengthening educational communication, learner participation, and academic continuity in distance education.

Suggestions

1. **Strengthen multimedia educational content:** IGNOU should continue to develop high-quality educational programmes through television, radio, video lectures, podcasts, and digital platforms.
2. **Increase learner accessibility:** Educational content should be made easily accessible through mobile-friendly and low-bandwidth platforms so that learners with different levels of technological access can participate effectively.
3. **Promote interactive communication:** Mass media-based educational programmes should incorporate opportunities for learner interaction, discussion, questioning, feedback, and clarification.
4. **Provide recorded learning resources:** Video and audio lectures should remain available for repeated viewing or listening, enabling learners to study according to their individual pace and convenience.
5. **Improve content quality:** Educational media should be closely aligned with the prescribed curriculum, course objectives, examination requirements, and learners' academic needs.
6. **Enhance faculty training:** Teachers and academic counsellors should be provided with training in multimedia-based instructional communication and learner engagement strategies.
7. **Encourage learner participation:** Learners should be motivated to make regular use of educational television, radio, digital lectures, online sessions, and other institutional media resources.
8. **Integrate media with study material:** Mass media programmes should complement printed self-learning materials rather than function as independent sources of instruction.
9. **Provide timely feedback:** Digital and mediated learning systems should incorporate mechanisms for academic feedback so that learners can identify and rectify learning difficulties.
10. **Conduct periodic evaluation:** IGNOU should periodically assess the usefulness, accessibility, quality, and learner satisfaction associated with its various educational media initiatives.



11. **Support academically disadvantaged learners:** Additional audio-visual and digital learning support should be provided to learners who experience difficulty accessing or understanding conventional study materials.
12. **Promote systematic media planning:** Educational communication should be developed through a coordinated strategy integrating content development, technology, pedagogy, learner engagement, and academic assessment.

Educational Implications

The findings have several implications for distance education.

1. **Expansion of educational media:** Distance-learning institutions should continue to strengthen educational television, radio, video, and digital learning resources.
2. **Learner-centred communication:** Educational programmes should be designed according to learners' academic requirements rather than merely technological possibilities.
3. **Multimedia integration:** Text, audio, video, graphics, and interactive resources should be appropriately integrated.
4. **Repeated access:** Recorded lectures and digital resources should remain available so that learners can revisit difficult concepts.
5. **Academic reinforcement:** Mass media programmes should supplement the prescribed curriculum and instructional material.
6. **Learner participation:** Educational communication should provide opportunities for questions, discussion, reflection, and feedback.

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