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COURSE INTRODUCTION

MNM036 Digital Media Literacy (DML) is an extension of our earlier course, MNM35 Media and Information Literacy (MIL). In MIL, we discussed media and information systems' exploring, engaging, and empowering dimensions, which help us understand how to access media, critically analyse media contents, and responsibly participate in society-wide communication. As an extension of the MIL course, this course will examine the application side of media literacy, especially in the context of digital communication platforms. There are four Blocks and 16 Units in this course, through which you will understand the dynamic interactive platform.

Block 1: Media Transition. Throughout this Block, we will learn about the ever-evolving landscape of media in the digital age. In Unit 1, "Reading Media and Information Texts," we will understand the complexities of media literacy. From dissecting traditional advertising on television to navigating social media, we equip ourselves with the critical tools needed to discern truth from misinformation. Unit 2, The Medium and the Message, further explores the symbiotic relationship between media forms and their messages, focusing on news dissemination. By understanding the nuances of different media platforms, we enhance our ability to consume and analyse news content effectively, fostering news literacy. Unit 3, "From Traditional Media to Digital Media Technologies," we trace the transformative journey of media technologies, exploring their societal impacts and the emergence of digital inequalities. In Unit 4, "Uses of New Media Technologies for Society," we explore the transformative influence of digital media on society, empowering learners to critically engage with and harness the potential of new media technologies for societal empowerment and engagement.

Block 2: Internet Opportunities and Challenges. In this module, we embark on a journey through the dynamic landscape of digital learning, exploring its vast array of possibilities and complexities. Unit 5 delves into "Uses of Interactive Multimedia Tools," where we unravel the intricacies of interactive learning formats, from text to digital games, and their role in education. We'll dissect the significance of free and open-source software in content creation and distinguish between educational and entertainment games. Moving forward to Unit 6, "Young People in the Virtual World," we traverse the historical evolution of communication technologies and their impact on generational learning. By examining the virtual world's influence on digital natives and participatory culture, we uncover its advantages and risks. Unit 7, "The Concept of Security in Cyberspace," urges us to understand the virtual realm's complexities before delving into cyber security. We'll explore the landscape of evolving threats and the necessity for robust defences and legal frameworks. Finally, in Unit 8, "Promotion of Alternative Media through Digital Media," we shine a light on the transformative power of digital technology in media communication. By critically assessing ownership, content creation, and audience engagement, we'll gain a deeper understanding of alternative media's essence and its challenges in promoting inclusivity and participatory democracy. Join us as we navigate the opportunities and challenges of the digital age.

Block 3: Digital Information Literacy. This module delves into the multifaceted world of information literacy, a crucial skill set in today's digital age. Unit 9 starts our exploration by delving into the core concepts, theories, and models underpinning Information Literacy (IL). We will examine various definitions and models, including the SCONUL 7 Pillars of IL, UNESCO IL Standard, and Swiss Standards for Information Literacy. Understanding these frameworks will equip you with the foundation to navigate the information landscape confidently and critically. Moving on to Unit 10, we focus on the practical applications of information literacy. In a world inundated with information, mastering the skills to locate, evaluate, and utilise information effectively is essential. By understanding the significance of information literacy, you empower yourself to make informed choices and contribute meaningfully to discussions. Unit 11 welcomes you to the transformative realm of online learning, emphasising the crucial role of information literacy in virtual environments. As we navigate this digital landscape, we will explore self-regulated learning and the evolving role of libraries in providing access to knowledge. Finally, in Unit 12, we delve into digital information processing, unravelling its structure, processing mechanisms, and ethical considerations. By the end of this module, you will not only grasp the fundamentals of digital information but also cultivate the necessary skills to navigate the digital landscape with prudence and proficiency.

Block 4 of our course, where we explore the dynamic landscape of **Participation in Interactive Media**. In Unit 13, we will dissect the fusion of media and information systems within the modern 'Information society.' From the traditional mediums to the expansive realms of social media and the Internet, we will explore how these platforms shape our understanding of the world and facilitate the exchange of ideas. We will investigate the evolving role of audiences as active participants, transitioning from passive consumers to prosumers, and the emergence of participatory cultures. Unit 14 will take us into Political Participation and Digital Media. Here, we will understand the diverse avenues through which citizens engage in political discourse, both online and offline. By examining digital media tools, we will uncover how platforms like social media empower individuals to shape political agendas and mobilise communities. Moving forward to Unit 15, we will learn about the captivating world of cinema in Film Genres and Storytelling. We will unravel the intricacies of film production, dissect various genres and their stereotypes and understand the art of scriptwriting and storyboarding. In Unit 16, we will explore Advertising Literacy, dissecting advertising techniques, appeals, and the communication process. By integrating previous coursework insights, you will navigate the advertising landscape adeptly, fostering a deeper appreciation for its societal impact. Throughout this Block, we will emphasise critical analysis skills, ethical responsibilities, and the importance of media and information literacy in navigating the ever-evolving landscape of interactive media participation.

As digital media is being integrated into our lives extensively, we hope that this course will give us a better understanding of how to handle digital media more meaningfully.

Block

1

MEDIA TRANSITION

UNIT 1

Reading Media and Information Texts

UNIT 2

The Medium and the Message

UNIT 3

From Traditional Media to Digital Media

UNIT 4

Uses of New Media Technologies in Society

BLOCK 1 INTRODUCTION

As you may be aware, all media contents are manufactured. The contents of journalism, short films, or commercial full-length movies are manufactured by media institutions. Trained media professionals are involved in it. These professionals come from our social environments, and through media content manufacturing, they reflect the existing social norms, values and beliefs. There are a lot of issues that exist in any social setting because there is an imbalance in any social setting regarding class, race, and ethnicity. The dominant groups or institutions always enjoy more power, and in turn, the same groups or institutions get a lot of benefits. This imbalance is reflected in the media content directly or indirectly.

Besides that, media institutions are mostly commercial and always aim for profit. As a result, they are always close to power centres and rely on corporate sponsors through advertisements. Closeness to power and dependence on corporations influence the media's functions heavily. Many agendas are imbibed into media content, mostly latently. As a common media user, you should be able to read between the lines to understand the varying underlying meanings and hidden agenda behind any communication. This Block particularly explains the nuances of critically understanding the media's contents.

Unit 1: Reading Media and Information Texts. In this Unit, we explore the significance of media literacy in today's digital era. From traditional to social media, we analyse each platform's unique characteristics and evolving trends. Topics include the impact of advertising on television, the rise of social media, and the challenges posed by fake news and paid news. We emphasise the importance of critical thinking and fact-checking skills to discern authentic content from misinformation. Through this Unit, you will develop the ability to consume and share information responsibly, contributing to a more informed and media-literate society.

Unit 2: The Medium and the Message: This Unit explores the dynamic relationship between media forms and the messages they convey, focusing on the news genre. Building upon our previous Unit's exploration of message encoding, we now understand the unique characteristics of different media used for news dissemination. Understanding these media's strengths and limitations is pivotal, as they shape message construction and reception. By dissecting the fundamental codes and conventions employed in print, broadcast, and online news, you'll enhance your ability to produce and analyse news content effectively. This skill is essential for fostering news literacy and critically evaluating news presentations across various platforms.

Unit 3: From Traditional Media to Digital Media: In this Unit, we explore the transformative journey of media technologies, from ancient cave paintings to the digital revolution. We dissect the roles of traditional media, such as the printing press, and analyse the emergence of digital platforms, including social media and mobile telephony. We examine the societal impacts of these technological shifts, from the empowerment of the middle

class to the complexities of digital inequalities. You will understand the symbiotic relationship between traditional and digital media, acknowledging their shared features and unique characteristics.

Unit 4: Uses Of New Media Technologies For Society: In this Unit, we explore the transformative influence of digital media on society, exploring how new media technologies have revolutionised communication dynamics. From the convergence of traditional and digital media to the emergence of participatory culture, we examine the profound shifts in media production, consumption, and societal practices. Through discussions on digital activism, e-governance, and participatory politics, we unravel the socio-cultural and democratic implications of these technological advancements. By fostering an understanding of new media literacy, this Unit empowers learners to critically engage with and navigate the complexities of the evolving media landscape, enabling them to harness the potential of new media technologies for societal empowerment and engagement.

After thoroughly reading this Block, the next time you watch primetime television news, read an editorial, or are glued to a commercial, you will definitely gain more insights while understanding its contents.

UNIT 1 INTERPRETING MEDIA CONTENT

Structure

- 1.0 Introduction
- 1.1 Learning Outcomes
- 1.2 Comprehending the Differences of Various Media
 - 1.2.1 Traditional Media
 - 1.2.2 Print
 - 1.2.3 Radio
 - 1.2.4 Television
 - 1.2.5 Social Media
 - 1.2.6 Special Characteristics of Social Media
- 1.3 Impact of Characteristics of Different Forms of Media
 - 1.3.1 Print
 - 1.3.2 Changing Trends of Print Media
 - 1.3.3 Radio
 - 1.3.4 Changing Trends in Radio
 - 1.3.5 FM Radio
 - 1.3.6 Towards Community Radio
 - 1.3.7 Television
 - 1.3.8 Changing Trends in Television
 - 1.3.9 Impact of Advertising on Television
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 - 1.3.11 Uncharted Growth of Social Media
 - 1.3.12 New Challenges of Media
- 1.4 Authenticity of Media Content
 - 1.4.1 Fake News
 - 1.4.2 Paid News
 - 1.4.3 Convenient Symbolism and its Impact
 - 1.4.4 Nanoisation of Content
 - 1.4.5 Iconisation
 - 1.4.6 Stereotyping
- 1.5 Fact Checking and Self-Driven Code of Ethics
 - 1.5.1 Googling Facts
 - 1.5.2 Checking Websites
 - 1.5.3 Need for Self-Driven Skills
- 1.6 Activities with Friends and Colleagues
- 1.7 Let Us Sum Up
- 1.8 Further Readings
- 1.9 Check Your Progress: Possible Answers

1.0 INTRODUCTION

As you have joined this course on Digital Media Literacy, you may have sometimes wondered how all this will help you in your life. Simply put, how does the literacy of alphabets or numbers help us?! In today's world, media literacy has now become as important as primary literacy.

You have been exposed a lot until now, whether it is Paid News or issues of representation. In this Unit, we will look into some of the nuances of media linked to what you have understood until now. Every form of media has its characteristics that impact how it is used. Every form of media is also a part of changing times. That creates trends and changes in the characteristics. Today, changing media is a volatile scenario to which we must be very sensitive and alert. This Unit is a small step in that direction.

1.1 LEARNING OUTCOMES

After completing this Unit, you should be able to:

- Understand nuanced aspects of various forms of media;
- Develop critical thinking to discern media content; and
- Imbibe basic ability to consume and share information responsibly.

1.2 COMPREHENDING THE DIFFERENCES OF VARIOUS MEDIA

The big challenge today is to fully comprehend traditional media and then grasp parts of new media, known as social media. That is a prerequisite for each of us to become

- critical and sensible consumers of information
- responsible producers / ‘sharers’ of information
- using the appropriate platform of media for sharing information

What do we mean by these two words, traditional and social media? Well, tradition is everything that has been around for some time, and now everything that follows rapidly after that. The important point to remember is that as new forms of media develop, older social media are becoming a part of traditional media! This is a field where definitions and parameters change constantly, and we need to be constantly alert and up-to-date.

1.2.1 Traditional Media

Let us classify some of this to keep the lines clear. We will first look at traditional media, which includes:

- Print
- Radio
- Television

1.2.2 Print

Print includes newspapers, magazines, journals, tabloids and so on. Here, we get short reports, long features, editorial comments and articles with or without pictures. The biggest advantage of print media is that if we do not understand something fully or wish to re-look at a previous reference, the possibility is available. The disadvantage of print is those who are illiterate are deprived of all the information that comes out in print. However, around the world, people have built mechanisms to overcome this. For example, in rural areas, people gather around a person who reads the daily newspaper to them.

1.2.3 Radio

Radio is considered to have the widest reach across boundaries, including that of illiteracy. Radio signals can reach remote areas and are useful for disaster and conflict management. In comparison to print, radio can bring us the voices of people around whom a programme is made. This makes it more personal and, therefore, more appealing than print.

1.2.4 Television

Television has the greater possibility of bringing us images with voices. So, we get the feeling of witnessing an event. Unfortunately, in recent years, like in India, the character of television has become more studio-oriented. We see live footage only of political, sensational, criminal or major disaster occurrences, not news of human interest, innovative practices or alternative interventions that impact climate, etc.

1.2.5 Social Media

A little ahead, we will look at how the basic characteristics of these traditional media, along with other factors, guide and influence the content they carry. Before that, we talked of social media, which is essentially in the virtual world and linked to computers, the Internet, and mobile phones. The most familiar platforms are:

- Facebook
- X (formerly Twitter)
- Instagram
- WhatsApp
- Tumblr
- Flickr
- YouTube

1.2.6 Special Characteristics of Social Media

The word 'social' defines the primary characteristic of these media compared to traditional media. Traditional media is a one-way communication from the writer/speaker to an audience or masses. This is why it is often called 'mass' media. In contrast, social media is in the hands of 'society' – people like you

and me. Anyone can use a social media platform. They do not need a job with a newspaper, radio station or television channel to convey their information.

This primary characteristic gives every individual 'power' like we never had before. This is also why it is critical to use these platforms responsibly. It used to be said that something published in a newspaper or broadcast on radio/television is like a Bible truth. Increasingly, the information passed around on social media is being viewed similarly. Unfortunately, that is a dangerous trend because not all information producers and sharers are careful of their content's veracity.

Check Your Progress: 1

Note: 1) Use the space below for your answers.

2) Compare your answers with those given at the end of this unit.

1. In about 100 words, define what you understand as Traditional Media and Social Media, highlighting one major difference.

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2. Name a few Traditional and Social Media forms and mention which you use daily.

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1.3 IMPACT OF CHARACTERISTICS OF DIFFERENT FORMS OF MEDIA

Now, we look at how the basic characteristics of different forms of media can guide content. We also examine the motivated/commercial/corporate factors that interfere with media content.

1.3.1 Print

A newspaper, magazine, tabloid, etc., has several pages over which content is presented with text and pictures. Additionally, print media can highlight/draw attention to various stories differently. It can be the front page/lead story, editorial/comment page, or specific theme page (world/business/arts/sports, etc.). As a result, print -

- can provide us with a wide variety of content, out of which we can choose to read what interests us
- it can give us combinations of short and long reports on various aspects of a story, with bulleted snippets of information in boxes, pictures that partly visually depict the story
- it gives us the possibility to glance through and focus on or jump to the section that interests us

1.3.2 Changing Trends of Print Media

In the context of the above points, Print Media maintained high professionalism before television, and now social media has become the frontline media platform. Subsequently, competition with other media cornered print media into choices that would help to hold up its readership. Some of those factors that changed the character of print media are

- declining readership meant turning to sensationalism to attract the reader
- needing a higher quantum of advertising to sustain themselves
- Both these factors resulted in a scenario where
- the slant of a story could be ‘twisted’ to grab the reader’s eye, particularly in a headline
- this often results in misconceptions even if the full story subsequently provides the ‘truth.’
- behind-the-scenes ‘relationships’ between the editorial and advertising departments with advertisers give pulls and pushes that affect the representation of a story
- these can even be unconsciously reflected in a story due to undefined peer influence on thoughts that occur in informal associations

Recently, the worldwide phenomenon in media is the deep association of media owners with politicians and industrialists. This has affected print media as much as television. Though print media journalists still carry a lot of credibility, many continue to struggle against lobbies and do their work ethically despite pressures.

1.3.3 Radio

Radio can provide as much diversity as print if running a full-time service. Other factors pre-determine the content of radio.

Stories need to be of two kinds:

- relevant to the immediate environment of the listener because it is usually heard in the personal confines of the home
- informative about the world, particularly for those who do not have access to news due to geographical constraints

For effective radio programming, the presenters and those who are included in interviews/discussions/expert views / etc., need to be people with

- good voices and diction
- clarity of thought to speak 'volumes' in crisp sentences and short expositions/answers
- pleasant to establish a warm relationship through sound waves

1.3.4 Changing Trends in Radio

Unlike print and television, the commercial / advertising sector's impact on radio was, by and large, different. Unless supported by the state or some strong institution, radio stations as we knew them faded out. Those radio stations had well-researched, keenly thought-out, listener-interest-oriented diverse programmes that would inform/educate, entertain, and give continuous descriptive, on-the-spot sports commentaries. The cricket and Republic Day commentaries were perfect examples of crossing borders until television took over.

Even so, the power of radio did not die out. It metamorphosed into a more popular form that became a part of people's daily lives, such as FM Radio. With FM, the 'diversity' of radio is split into sub-sectors. This means we have FM stations for every kind of 'need'. It could be music, sports, cinema, food, a particular location (town/city), elderly, youth, etc. The diversity of FM stations worldwide is immense, and many have been running successfully until now.

1.3.5 FM Radio

Depending on the specific circumstances, FM Radio, even if governed by commercial pressures, is less susceptible to being influenced by lobbies than print and radio. This is usually because FM stations almost invariably have the possibility of phone-ins, and the public can interject and 'expose' facts, which may or may not be acceptable to the ownership. This powerful aspect of radio cannot be undermined because it gives radio a greater democratic character than print and television, with an added dimension of energetic, immediate communication between those who disseminate and those who consume information.

1.3.6 Towards Community Radio

It was natural that some serious social issues would be neglected in such a situation because it had less chance of grabbing a popular listener base. In its organic way, radio developed the concept of community radio, which has become a strong component of radio as we know it today. Governments and the public (community) are struggling with the laws that can give community radio a comprehensive form. When it does, it still has the potential to give more depth and voice to society's concerns than print and television. This is particularly so in climate change, disaster management, grassroots developmental issues and issues linked to vulnerable / marginalised groups/ communities, particularly women.

1.3.7 Television

Due to its popularity essentially based on the power and attraction of moving images, television became the 'first' face of media over print and radio. Its potential to bring the world to our drawing room created an underlying change in people's consciousness. We developed a sense of being global citizens and imbibed diversity due to the various nations and cultures we began seeing on television. This has been the biggest contribution of television.

1.3.8 Changing Trends in Television

Compared to a long history of sustained dependability and appeal of information of print and radio, television lost its credibility in a shorter span of time. In its initial phases, public service was the guiding motto of television. In later years, it was a struggle for states to maintain their public service nature. The competition of private satellite channels quickly changed the character of television worldwide.

1.3.9 Impact of Advertising on Television

Advertising made the greatest impact as it gravitated away from print and radio and toward television. This soon made television more of a business venture than a source of credible information and public service.

As this business component grew rapidly and exponentially, industrialists saw television as a good business proposition. This development led to another quiet, somewhat unhealthy change that insidiously sunk into the television system. The use of television channels for political agendas is now more a norm than an exception.

This impacted print because media moguls also wished to control newspapers. The era when newspaper editors had their journalistic freedom has increasingly become a precious and often rare phenomenon.

1.3.10 Impact of Changing Trends in Traditional Media

The overall impact of the various factors mentioned above is deep and critical. The power of business and media has overpowered the world of public media content. Society

- no longer knows what to believe and what not to believe
- is often deprived of the kind of content they wish to have
- are almost bullied into becoming habitual consumers of skewed or slanted content that is imposed upon them
- have nearly no say in how these circumstances can be changed because they have no powers

This was bound to create turmoil, and society would respond. Technology helped that happen. Social media has become the great media leveller of this century. Media can no longer be defined as content from one source sent to many. It is a two-way communication of content, which can multiply with

shares, forwards, and algorithms. With time, social media has also triggered headline stories in traditional media.

1.3.11 Uncharted Growth of Social Media

At first, this seems to be the perfect solution. After all, what could be better than ourselves being in charge of what we want to read, see and communicate? The catch is right here. At an individual level, almost none of us is equipped to

- research our facts
- write with clarity
- Take pictures/videos that follow the rules for framing, lighting, etc.
- be responsible enough not to share content that can cause any form of unease or disturbance to individuals/groups/communities/society at large
- utilise the correct medium to convey our content

This is the reason why there is a lot of turmoil associated with the use of social media.

1.3.12 New Challenges of Media

The biggest plus point of social media, particularly YouTube and shared videos, is sharing content previously limited to a few people. Today, we learn much more about health, lifestyle, diet, and spiritual matters than in recent years. This enables society to make choices that they may not have been able to without such immense online content.

On the negative side, like traditional media, social media also has ownership, which is almost monopolistic. So, we and all our content on social media are in the hands and power of powerful people whose platforms rule the world. These platforms are heavily driven by advertising, which has its pitfalls. This can prove quite dangerous in a way, as we have seen in the case of the Facebook data breach.

In short, the challenge for traditional media has become credibility, and the challenge for social media is facts and privacy. Societies and governments worldwide need to address both these issues.

Check Your Progress: 2

Note: 1) Use the space below for your answers.

2) Compare your answers with those given at the end of this unit.

1. In 100 words, EACH defines what you understand as print, radio, and television characteristics.

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2. Mention one plus and one minus point for Print, Radio, and Television and their reasons.

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3. Write a short essay of 250 words on why you think Social Media has become popular.

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1.4 AUTHENTICITY OF MEDIA CONTENT

Due to a combination of all the facts mentioned above, the authenticity of media content is our biggest challenge. How do we know that the content we read, hear, and see is true? How do we know that we are not victims of subconscious messaging? How do we know that we perceive content in a particular way because it has been presented in a specific way?

While several points related to this can fill a whole essay or book, we will look at a few that are critical for us to understand as information consumers.

Fake News, Paid News, Iconisation and Stereotyping are some of them.

1.4.1 Fake News

Those who work in or with the media belong to the same society as us and have the same strengths and weaknesses. Fake News is usually a tool used by vested interests (who may or may not have direct links with the media) and consistently wish to harm/demolish/destroy/eliminate an individual/institution. They will use any means to achieve this end, including sting operations that excite us like an investigative, spy-like thriller. Fake News has become a popular element in politics and runs across traditional and social media. It can be a motivating story in a newspaper or on television or content that goes viral on Facebook or WhatsApp.

1.4.2 Paid News

Paid News has a similar 'bad' aura but is often used in more complicated situations. It could influence the government to adopt a particular policy or product. Or it could be used to ensure certain people are placed in the right top positions in major ministries, institutions, and organisations. Paid news can be used by corporations, multinational companies, and politicians to

achieve whatever they wish.

1.4.3 Convenient Symbolism and its Impact

In the media context, nanoisation, Iconisation and Stereotyping are symptoms of today's times.

Increasingly, those working for traditional media face the pressures of

- time
- breaking a story first
- conveying the ‘slant’ of a story in the quickest way

And those who use social media like to use

- short forms of words and bad spellings are becoming a norm
- smileys of all kinds to convey words

Nanoisation, Iconisation and Stereotyping help for all of these.

1.4.4 Nanoisation of Content

What is Nanoisation? Nano is very small. So, while we easily share very long messages others send on WhatsApp, it is not the same when we write original content ourselves. There is a rush to convey information quickly in the shortest time. It suits everybody because attention spans have greatly reduced, and people want to 'get the message' quickly.

1.4.5 Iconisation

What do we mean by Iconisation? Iconisation is the use of a symbol to convey a complete meaning. A cake is an icon for a birthday, or the Eiffel Tower is an icon for Paris / France. This is a technique that was originally adopted by the advertising world. It has now spread to all kinds of content across all media. The result is essentially

- a rapidly decreasing diversity in images that convey specific concepts
- inappropriateness with the real lives of people in many parts of the world

For example, an ad for a shampoo will invariably have a fair woman with long, glossy hair. So, the image of beauty in our mind is perpetually linked to a fair face. An ad for a spice or cooking oil often has a family around a table with eight to ten steaming dishes. So, again, the image of a healthy life is embedded with so many dishes on the dining table. Neither of these applies to the lives of many darker-skinned or poor people in the world.

1.4.6 Stereotyping

Stereotyping carries similar aspects and largely affects how we view women, communities, races, and nations. Projecting images with guns and certain kinds of flags stamps an image of a particular type of people belonging to a particular religion. Depicting women in certain ways creates an image of women as a sexual object. Emphasising a particular colour gives an image a

context of a particular political party or country.

As we can see, it is a real challenge to grasp the authenticity of the content beyond the canonisation, iconisation and stereotyping we receive across various forms of media. The more we learn to research and analyse the content, the better informed we can be. That is a demand of present and future times.

Check Your Progress: 3

Note: 1) Use the space below for your answers.

2) Compare your answers with those given at the end of this unit.

1. What are the challenges related to the authenticity of media content? Write in bullet points.

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2. State one of your examples of each of the following:

Fake News

Paid News

Navigation

Iconisation

Stereotyping

1.5 FACT CHECKING AND SELF-DRIVEN CODE OF ETHICS

It is not easy to authenticate media content. After all, in our busy lives with hectic schedules, it is easy to say: Where do I have the time to research and find the truth? That is true. So, we must learn to restrain ourselves unless we are fully equipped to utilise and share content or create new content.

1.5.1 Googling Facts

There are a few possibilities, and Google is the best way to check facts. It often helps to find the truth quickly. Write relevant words, then a +, and then 'true or false'. This can lead you to hundreds of leads, and your critical thinking will help you find the correct answer.

For example, you come across a story that seems big and involves big names. It is a letter on an organisation's letterhead with address, names, telephone numbers and signatures. It looks authentic, but no news about this has ever come out in the public domain. You can type the name of the organisation + one of the names mentioned + whom it is addressed to + fake news or true.

1.5.2 Checking Websites

Apart from this, what goes viral on Facebook or WhatsApp is often an old story or from a doubtful source. In the case of a doubtful source, it can have impressive initial words, like BBC or TimesNow. Then, there will be some additional words/alphabet, meaning it is a dubious site. Click on the link and look into the 'About' section; the background will be clear. There will always be a lot of difference in the quality and content of a real BBC site and a fake one.

Wikipedia has a list of fake websites:

https://en.wikipedia.org/wiki/List_of_fake_news_websites

1.5.3 Need for Self-Driven Skills

As we become burdened with constant media content, we must develop habits, skills, and competencies that make us responsible consumers, sharers, and content creators. We must remember that the content remains in the virtual world and is the legacy we will be leaving behind for our children and grandchildren. That is a big responsibility, and we must understand it as such.

Check Your Progress: 4

Note: 1) Use the space below for your answers.

2) Compare your answers with those given at the end of this unit.

1. How would you check the authenticity of a message about a health tip you receive on WhatsApp?

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2. What would you do before you share a Facebook post about a particular community / religious group?

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3. What are the three things you would do before posting your own 'story' or 'comment' on a developing riot situation?

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1.6 ACTIVITIES WITH FRIENDS AND COLLEAGUES:

1. Close your eyes and think of a day without access to media. Discuss and make notes.
2. Buy two daily newspapers in English and two languages for each group member. Identify news and ads that have used Iconisation and Stereotyping to convey a story.
3. Create a four-sentence message for WhatsApp and write it in full form using nanoisation. Discuss the two versions.
4. Each person views one English and one language television channel in the evening at prime time. The next day, discuss your views on fake and paid news aspects.
5. Pick a religious issue and discuss how you would NOT present it on Social Media and three reasons for not doing so.
6. Pick one issue and discuss how and why it would be presented differently in Print, Radio and Television.

1.7 LET US SUM UP

We have looked at the characteristics, changing trends and their impact on various forms of media. All these are important components of how you and I perceive media content. Undoubtedly, our own beliefs and life experiences play a role in how we perceive that content. We hope this Unit becomes a part of your life experience as you become critical users, sharers, and creators of appropriate content.

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1.9 CHECK YOUR PROGRESS: POSSIBLE ANSWERS

Check Your Progress 1:

1. Traditional media refers to established forms of mass communication, such as newspapers, television, radio, and magazines. These platforms typically involve one-way communication from the sender (the media organization) to the receiver (the audience). In contrast, social media encompasses online platforms and applications that facilitate interactive and user-generated content, allowing individuals to create, share, and engage with content in a bidirectional manner. One major difference between the two is the level of interactivity and user participation inherent in social media, which is often absent in traditional media.
2. Examples of traditional media include newspapers like The New York Times, television networks such as CNN, radio stations like BBC Radio, and magazines like National Geographic. On the other hand, social media platforms encompass Facebook, Twitter, Instagram, and LinkedIn. A daily user engage with social media platforms like Facebook and Twitter, while also consuming traditional media through online news portals.

Check Your Progress 2:

1. Characteristics of Print, Radio, and Television
 - a. Print: Print media refers to materials that are physically printed and distributed, such as newspapers, magazines, and books. Its characteristics include static content, longevity, and tangibility. Print allows for in-depth analysis, archival value, and a sense of credibility due to its traditional nature.
 - b. Radio: Radio is an auditory medium that broadcasts audio content over the airwaves. Its characteristics include immediacy, intimacy, and accessibility. Radio provides real-time updates, fosters a personal connection with listeners through voice, and is accessible to audiences even in remote areas.
 - c. Television: Television is a visual and auditory medium that broadcasts moving images and sound. Its characteristics include visual impact, immediacy, and widespread reach. Television engages audiences through dynamic visuals, delivers news and entertainment in real-time, and reaches a broad demographic.
2. Strengths and Weaknesses of Print, Radio, and Television
 - a. Print: Plus point: Print offers in-depth analysis and credibility. Minus point: Its distribution can be limited, and it lacks immediacy compared to other mediums.
 - b. Radio: Plus point: Radio provides real-time updates and is accessible. Minus point: It lacks visual content and can be affected by signal issues.
 - c. Television: Plus point: Television engages audiences with dynamic visuals and widespread reach. Minus point: It can be expensive to produce and relies heavily on advertising revenue.
3. The Popularity of Social Media: Social media has become popular due to its ability to connect people globally, facilitate instant communication, and offer a platform for self-expression. With social media, individuals can share their thoughts, experiences, and content in various formats such as text, images, and videos. Its interactive nature encourages engagement, fostering communities and relationships beyond geographical boundaries. Moreover, social media platforms offer personalized content tailored to users' interests, enhancing user experience and retention. Additionally, the accessibility of social media through smartphones and other devices has contributed to its widespread adoption. However, concerns about privacy, misinformation, and digital addiction highlight the need for responsible usage and regulation of social media platforms.

Check Your Progress 3:

1. Challenges related to the authenticity of media content:
 - a. Misinformation: Deliberate spread of false information to deceive audiences.
 - b. Disinformation: False information spread with the intent to

Mobile Transition

- manipulate public opinion or cause harm.
 - c. Manipulated Content: Images, videos, or audio altered to misrepresent reality.
 - d. Echo Chambers: Social media algorithms reinforcing existing beliefs by filtering content.
 - e. Confirmation Bias: Individuals seeking out information that confirms their pre-existing beliefs.
 - f. Lack of Verification: Failure to verify sources or fact-check information before publication.
 - g. Deep Fakes: AI-generated content that convincingly mimics real people, used for deceptive purposes.
2. Examples:
- a. Fake News: A fabricated story claiming a celebrity's death.
 - b. Paid News: A news article promoting a particular political candidate paid for by their campaign.
 - c. Navigation: Biased framing of a news story to influence public opinion on a contentious issue.
 - d. Iconization: Exaggerated portrayal of a public figure as a hero without acknowledging their flaws.
 - e. Stereotyping: Depiction of a certain ethnic group in a film as criminals, perpetuating harmful stereotypes.

UNIT 2 THE MEDIUM AND THE MESSAGE

Structure

- 2.0 Introduction
 - 2.1 Learning Outcomes
 - 2.2 Media Codes and Conventions: Concept and Definition
 - 2.2.1 Defining and Identifying Media Codes
 - 2.2.2 Defining Media Conventions
 - 2.2.3 Relevance of Media Codes and Conventions
 - 2.3 Relevance of Codes and Conventions in the News Genre
 - 2.4 Codes and Conventions for Print News/ Newspapers
 - 2.4.1 Writing Style
 - 2.4.2 Page Layout
 - 2.5 Codes and Conventions for Radio News
 - 2.5.1 Radio News Formats
 - 2.5.2 Codes for Radio News
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 - 2.6 Codes and Conventions for Television News
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 - 2.6.2 Audio Codes in Television News
 - 2.6.3 Conventions in Television News
 - 2.7 Codes and Conventions of News Websites
 - 2.7.1 Codes Used in a News Website
 - 2.7.2 Conventions of a News Website
 - 2.8 Let Us Sum Up
 - 2.9 Further Readings
 - 2.10 Check Your Progress: Possible Answers
-

2.0 INTRODUCTION

In the previous Unit, you learnt how messages are coded in media and information texts. The messages in media texts can have obvious and, at times, connotations. In this Unit, we will focus on the medium and the messages it carries, specifically for the news genre. Here, we will start with the characteristics of the different media forms used to disseminate news. This is very basic yet important in understanding media messages.

The characteristics of the medium influence the message it carries. A medium's strengths and limitations can potentially dictate the framework in which the message is developed. So, every medium has specific ways of developing and codifying a message for easier understanding on the receiver's end.

Hence, this Unit introduces the basic codes and standard conventions used by the print, broadcast, and online media to deliver news effectively to their audiences. We treat news here as a communication of information. A basic understanding of these codes and conventions for preparing and delivering news will help you better create and analyse news stories, which is imperative for news literacy.

2.1 LEARNING OUTCOMES

After completing this Unit, you should be able to:

- Define media codes and conventions
- Identify the codes and conventions of news used in
 - Newspapers
 - Radio
 - Television
 - Websites
- Appreciate the relevance of the codes and conventions of the news genre
- Critically analyse the news presentation in print/TV/Radio/Websites

2.2 MEDIA CODES AND CONVENTIONS: CONCEPT AND DEFINITION

Look around you; don't you find yourself surrounded by media texts? We are soaking in information actively and, yes ... also passively. The photographs in the magazine, the illustrations in the hoardings, the news story in the newspaper, the colours used on a website, the camera angle and frames in a video, the audio in the music, etc., all make you feel or act in a certain way.

A media text is developed using language specific to the medium. This language comprises the codes, conventions, formats, symbols, and narrative structure suitable for the medium. Hence, the associated meanings can sometimes be obvious or not so obvious. Codes and conventions are like the building blocks of the media messages that we receive. An understanding of them helps us code the messages and decode them well.

2.2.1 Defining and Identifying Media Codes

Let's start with an example. You are in a restaurant and need to use the restroom. How do you find out where it is? When you find it, how do you recognise which restroom to use? Look for some indications like the one below.



Image Source: Pixabay.com

No matter where you go, a sign like this signifies the restroom.

Codes are a system of signs which, when put together, create some meaning. A code should have the following attributes to ensure its comprehension. They are:

- Using signs that are easily recognisable at the receiver's end is important.
- It should also have a context. Meaning is derived from a sign when some context is provided to it. For example, a cross can signify Christianity, the medical profession, or addiction. The context in which it is placed imparts meaning to it.

Media codes fall into the following three categories:

- a) **Technical codes:** Techniques used in the creation of the media text.
- b) **Written codes:** Everything that is spoken and written.
- c) **Symbolic codes:** The connotations of the technical and written codes.

2.2.2 Defining Media Conventions

Media conventions are a standard way to use the media codes in the text. This can act as a governing behaviour for media production in the industry. Media conventions followed in developing media text can be as follows:

- a) Form conventions guide the arrangement of codes in media text. This structuring can be achieved through elements of a page layout in print media, sequencing of shots in a movie, etc.
- b) Story conventions: These are narrative structures used when telling a story. It can be built around cause and effect, a point of view, etc.
- c) Genre conventions: These are the repetitive elements, like character, story arcs, etc., that make a work peculiar to a specific genre. For example, sci-fi is a genre that will have characters like scientists.

Codes and conventions are fashioned together in media texts to sell an idea or present something in a desired light to make you feel in a particular way.

2.2.3 Relevance of Media Codes and Conventions

When Marshall McLuhan said, 'The Medium is the message,' he tried to emphasise the symbiotic relationship between the message and its embedded medium. This relationship has a practical and functional aspect.

- a) It is practical because a medium's attributes set the boundaries for creating a message. For example, a newspaper cannot carry audio-video content.
- b) The message is about what is being said and how it is said. How it is said affects how the message is perceived.

A set of codes and conventions works behind it to design messages to communicate the intended meaning.

2.3 RELEVANCE OF CODES AND CONVENTIONS IN THE NEWS GENRE

Codes and conventions offer a pattern and hints to grasp the meaning of the text. The codes and conventions used while designing a message for news media can construct reality, identity, ideology, consciousness, stereotypes, misrepresentation, underrepresentation, etc. An extensive familiarity with these patterns results in a more intricate thought process and interpretations.

1. It can help a journalist to create balanced and fair news reports.
2. It can help the audience critically analyse a news story. Consequently, it is valuable to identify and tackle misinformation, propaganda, stereotypes, etc.

Thus, knowing the codes and conventions used in the news media is imperative to follow the news better, talk about it and write it better. This news literacy will help me understand the news discourse critically.

Before we move ahead to explore the codes and conventions used in print and broadcast news, it is important to keep in mind that the codes and conventions used in a media accordingly adapt to the :

- purpose of communication,
- type of effect that is desired,
- audiences,
- contexts and
- the kind of media used.

For the news genre, the general purpose of news is to inform the audiences objectively. The context is provided in the details of the news. The 'written code' deals with the language style dictated by the journalistic norms for providing objective and unbiased information. These journalistic styles:

- It helps to structure a news story according to the news value.
- It ties in with the existing editing practices in the news industry, considering the news consumption patterns and habits of the readers/ audiences.

The attributes of the news media affect the delivery of the news item and the kind of codes used.

With this understanding, we will now learn the conventions of preparing and delivering a news item using the most suitable media codes according to the attributes of the news media.

2.4 CODES AND CONVENTIONS FOR PRINT NEWS/ NEWSPAPERS

Newspapers have been the most popular and credible source of information in print media. The news items can be categorised into the following

journalistic categories:

- a) **News Stories:** Short and concise facts about a recent event with a news value. It is written in an inverted pyramid style.
- b) **Features:** Provide an in-depth analysis or significance of a news/ human angle story. They are written in a linear or nonlinear standard outline format, usually with a conclusion.
- c) **Editorials:** Fact-based opinions from in-house editors. It objectively explains an issue to oppose or refute it.
- d) **Reviews:** Subjective, honest critique based on opinion. Usually, it has a recommendation for readers.

All of these follow a specific news writing format that follows journalistic guidelines.

Now that you can identify the types of news items in a newspaper, we will explore the basic elements of a news story and how they are structured.

Activity 1: Pick up a daily newspaper and try to identify

News stories

Features

Editorials

Reviews

2.4.1 Writing Style

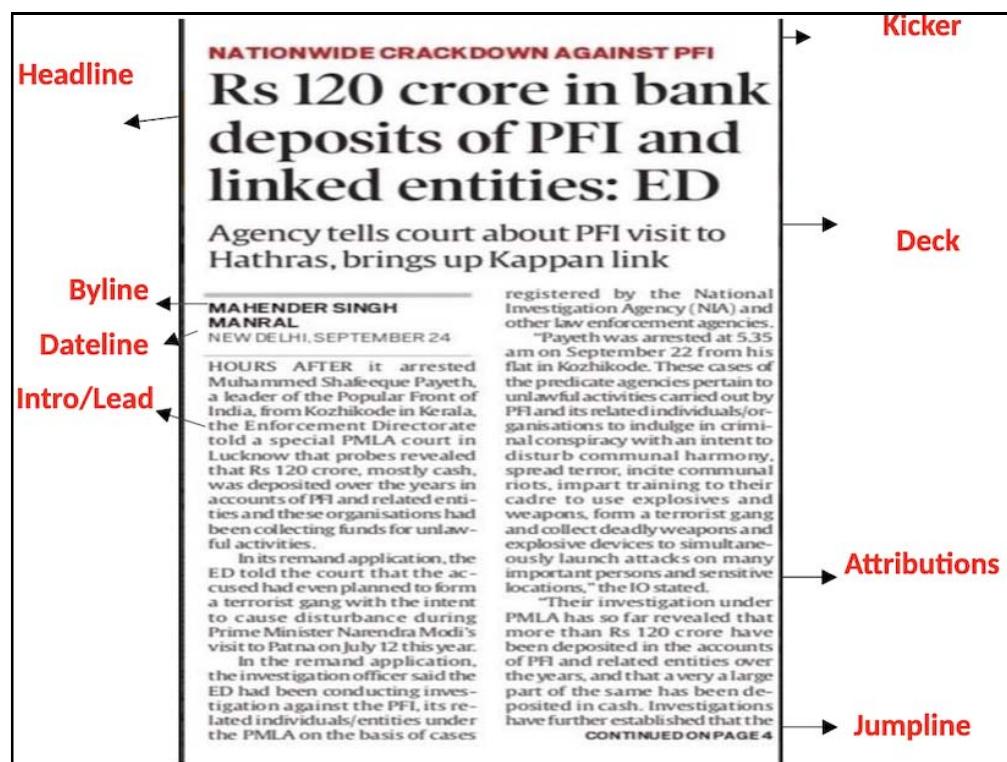
The written code comprises writing style and textual layout.

The Indian newspapers follow the basic news writing conventions of the Press Council of India. The news stories are written to inform about a newsworthy event. It is done in the most concise and informative possible way. To do this, there are certain structural elements of a news story.

- a) **Headline:** A headline is a crisp and concise news story summary. It draws the reader's attention to the story and helps him decide whether to read further details. Headlines can be supplemented with subheads.
- b) **Intro:** The first sentence of the news story summarises the news story. Of the 5W and 1H, you can find at least 3 of them here. The intro is useful because even if the reader leaves the story at this point, he will still have some information about it.
- c) **Body:** The story's further details are written in an inverted pyramid style, with the most important information first and the lesser important details following. This format facilitates easy editing for editors in a space crunch. The readers find the information in a hierarchy of importance.
- d) **Quotations/Attributions:** Sometimes, the news story mentions what was said about the event by a key person related to it. These are

mentioned in quotes. A quotation from a reliable source or an eyewitness increases the credibility of the news story.

These comprise a news story and are placed according to importance. The most important and newsworthy information is provided below the headline as the lead. This is followed by the body, which provides additional relevant details. The story might end with background info or a conclusion; this is the tail. This convention for the written codes followed in news writing is called the inverted pyramid style. It structures the news story based on the newsworthiness of the associated details. It has been developed and is still used because it guides the reader through the details for a better understanding. However, if the reader does not read the story and leaves midway, he still will have the most important information.



Structure elements of a news story written in an inverted pyramid style. (Source: The Indian Express)

A news story always carries the source of the news below the headline. It can be as a *news agency's byline* (name of the correspondent) name. Following it is the dateline, which mentions the place and date of writing. It is always advisable to look for the news source for its credibility.

Activity - 2

Pick up a newspaper and analyse the topmost story to see how it is written. How is it structured?

Can you identify the elements like headline, intro, dateline, and byline?

Does the story have attributions? In which part of the story is it located?

2.4.2 Page Layout

We need to see how these stories are placed in a newspaper. A newspaper's layout uses technical codes and considers the audience's expectations on the page. Knowing its conventions will allow you to interpret it and ensure that the message is decoded as it should be.

Page Layout Considerations

- **Space:** After the ads are placed on a page, the space left is called the *news hole*. This is where the news stories are placed. The news stories are placed in stacks of text called *columns*. The uppermost part is occupied by a *masthead* where you find the newspaper's title. It is the biggest attention seeker on the front page.

Rest space is utilised for news stories according to their value.

Besides this, you can also find blank white spaces between texts, text columns, and other elements used in a news story. This is *white space*. It provides breathing spaces, avoids clutter, and improves readability and comprehension.

A *jump line* is a short phrase appearing at the end of a column. It indicates that the story will continue on a subsequent page. It is used to manage space when a news story does not fit in the space allocated on the front page. It helps to make space for other news stories. Interested readers can navigate to the story for more information.

- **Hierarchy:** The most important stories are placed *above the fold*, while an *anchor story* is at the base to keep the readers on the page for a while. The news stories are placed according to their newsworthiness, even above the fold.

The lead story, Splash, stands out as the most prominent story on the front page. It can be identified by the amount of space it occupies and the font type used. It symbolises the importance of the story.

The second most important story is called the *off lead*, which could be found parallel to the splash but could be identified by the lesser space and font relative to the lead.

Headlines indicate the importance of a story by working with font attributes like size, type, colour, etc. The way a headline is laid also has a purpose, like banner headlines, crossline headlines, flush left headlines, kickers, hammers, etc. Hence, headlines not only introduce the news story but also cues towards the importance of the story.

- **Images & Size:** Images can also be part of the news story. They act as proof of what has happened and supplement what is written. They also break the monotony of the text and make the page attractive and more appealing to the readers. A good picture would be relevant to the context and meaningful.

Apart from images, infographics or other illustrations are also used depending on the story's needs.

Captions are used to describe the images/illustrations used.

The use of images/illustrations with suitable captions helps present the story better, attempts to take the readers to the event scene, and helps them understand it better³.

- **Colour:** The conventional way is dark text on a light background, like black on white. Some newspapers can use colours to enhance their aesthetics and make them more appealing. Coloured headlines can also make a specific story stand out from the rest.

However, the news media is divided on the use of colours in newspapers. You can find newspapers that use colours to aid readership but also mind that it is not getting flashy (losing their serious tone). How a newspaper is perceived depends greatly on the layout and the colours used. It sets a tone for what they stand for. It can be clearly understood from a quote by an editor from The Times:



Page layout elements of the front page of a newspaper (Source: The New Indian Express)

"This is a paper to be read . . . not (just) looked at."

The layout convention followed by a newspaper is called the *house style*. It represents the identity and sets the tone of the newspaper.

Activity - 3

Take a daily newspaper and analyse the layout of its front page

What elements can you identify on the front page?

Does this layout resemble how the inner pages are laid?

Can you make some inferences about the brand identity and tone of the newspaper?

2.5 CODES AND CONVENTION FOR RADIO NEWS

Radio, unlike print and television, relies only on sound. No visual cues can enhance the understanding of the audio message. The content on the radio consists of spoken words, music, and sound effects. Spoken words are central to radio content, and how they are spoken can add a layer of meaning.

Sound is central to all the codes and conventions used to generate radio content. The kind of sound, its combinations, modulation, and even its absence are used to create meaning on the radio and in newscasts.

Before you move to the codes and conventions of radio news, it will be helpful to know that only All India Radio (AIR) has the right to broadcast news in India.

2.5.1 Radio News Formats

The news on the radio is presented in three formats.

- a) **News bulletins:** These are 5— to 10-minute broadcasts with headlines and signature archival music. They are lively, crisp, and concise. An example is the 6 a.m. bulletin on AIR.
- b) **New magazine:** These are the longer newscasts, usually around 30 minutes. They begin with a bulletin and discuss it in detail. They might include talks, interviews, discussions, features, reviews, expert comments, etc. The afternoon news on AIR is an example of a news magazine.
- c) **Newsreel:** These are recorded supplements to the news bulletin. They can be voice dispatches from the correspondent, actuality, comments from key people in the news, analysis, etc. They can be found embedded in news magazines. The News and Radio Newsreel By BBC was a 15-minute newsreel broadcast four times daily.

2.5.2 Codes for Radio News

Written codes: The news script for radio follows the news writing guidelines prescribed by the Press Council of India to uphold journalistic norms. But considering that radio exists in time. A reader cannot go back, nor are there any visual cues to assist comprehension; it is advised to :

- i. Use short and simple sentences.

- ii. Use active voice to describe what the subject is doing/has done.
- iii. Do not use the relative clauses as they can break the flow of the sentence.
Consider the following line from a radio news story.

'A group of Students who are from Central Hindu School won the International Math Olympiad.'

Statements like this should be rewritten by removing the relative clause "who".

Technical codes: These are the technical processes involved in creating content for radio news, like recording, editing, and mixing. The way (news genre convention) these sounds are recorded, mixed, and structured in a newscast creates symbolic codes for the listeners.

Symbolic codes: *Pitch* patterns help listeners identify the beginning and end of the story. They can also inform about the story's length, seriousness, and even credibility. Generally, the newsreader begins a statement on a high pitch and ends on a lower pitch. An exception is an interrogative statement, where the pitch rises at the end of the statement.

Presence, co-presence or absence of sounds are also cues for the listener. For example, a signature tune is played in the background with the headlines but not when the news is read in detail. This background tune instantly reminds us that we are in the headlines without being told.

Music, sound effects, and recorded or live audio clips are also used to provide cues for better understanding.

Check Your Progress: 1

Note: 1) Use the space below for your answer.

2) Compare your answers with those given at the end of this unit.

1. What are the various radio news formats?

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2. Why is it not advisable to use clauses in radio news?

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2.5.3 Conventions in Radio News

You will now see how a radio newscast is structured and delivered using these written, technical and symbolic codes. The basic convention for professional and credible news delivery is to be formal, serious and informative. A radio newscast can have the following elements:

- **Intro:** When a news reader introduces himself, time and the network.
- **Stinger:** It is a short music played at the beginning or end of a report. This can also be used in the headlines segment.
- **SFX:** The music is fading away.
- **Cue:** When the news presenter introduces a report from a correspondent or a sound byte.
- **Actuality:** These are the recordings from the field/interview/speeches. The shorter segments, when picked from it, are called grabs.
- **Atmos:** Ambient sounds from the location where the correspondent is reporting. For example, the sound of people shouting slogans in the background when the reporter is covering a protest.
- **Audio clips:** Pre-recorded interviews, etc., are used in the newscast.
- **Outro:** When the newsreader ends the news broadcast.

Using caps in news scripts is a conventional way of providing cues to the newsreader, and it should not be read. However, it has a purpose, such as segment identification for the newsreader and maintaining pace.

TEMPLATE RADIO NEWS PACKAGE	<i>CONVENTIONS AND ITS RELEVANCE</i>
AIR MORNING NEWS NATIONAL CONFERENCE/UKRAINE/JAPAN/RBI/DELHIRAINS/PM SPEECHES/CRICKET NAME OF THE NEWSREADER DATE [RUNS: 29:54]	<i>Slug Line:</i>
NEWSREADER: ALL INDIA RADIO PRESENTS MORNING NEWS [0.02] SOUNDER [0.09]	<i>Intro</i> <i>A recorded tune used to introduce segments of the broadcast. Here the AIR tune.</i>
HEADLINES[.20]	<i>Introduced in the beginning to get the listener's interest.</i>
STING	<i>The music inserts play in background when headlines are being read.</i>

		<i>The tune distinguishes the headlines segment from the rest of the segments.</i>
NEWSREADER: PRIME MINISTER NARENDRA MODI INAUGURATES THE NATIONAL CONFERENCE OF ENVIRONMENTAL MINISTERS AT EKTA NAGAR IN GUJRAT		
INDIA CALLS FOR IMMEDIATE CEASATION OF HOSTILITY IN UKRAINE		
.		
.		
2 ND T20 INTERNATIONAL BETWEEN INDIA AND AUSTRALIA WILL BE PLAYED IN NAGPUR		
STRINGER FADES		<i>Fading signifies end headlines and beginning of the stories in detail.</i>
CONFERENCE[.59]		[] signifies the run time of the story/segment. Here .59 is the time required to read it which is 59 seconds. Helps in timing the bulletin and maintaining pace.
UKRAINE[1:06]		<i>Actuality: Record sound from a speech/interview. Provides variety to the pace in long news story.</i>
NEWSREADER:.....		
JAISHANKARRUNS:[18]		
OUTCUE: “....OF FOOD GRAINS FERTILIZERS AND FUEL.”		<i>Outcue: Provides a cue to the news reader as where will the sound cut end.</i>
NEWSREADER:.....		
JAPAN [1.29]		
NEWSREADER:.....		
MORNING MATTERS[5.38]		<i>A news reel record with an expert</i>
HEADLINES AND TRAILS[0:24]		

NEWSREADER:.....	
SPOT	<i>Break or the spot reserved for Publ Service Advertisemen Ease of life in India Sound effect</i>
SFX	
NEWSREADER: YOU ARE LISTENING TO MORNING NEWS ON A-I-R	<i>Reminder cue : For time and station</i>
JAPAN[] NEWSREADER:.....	
RBI[] NEWSREADER:.....	
DELHI RAINS[] NEWSREADER:.....	
PM'S SPEECH [] NEWSREADER:.....	
CRICKET[] NEWSREADER:.....	
NEWSPAPER OVERVIEW[] NEWSREADER:.....	
CLOSING HEADLINES[] NEWSREADER: AND WITH THAT WE END THE MORNING NEWS. HAVE A GREAT DAY.	<i>Outro: the last line said by the news reader Signifies the end of the news broadcast</i>

Sounders, actuality, and stingers help the listener identify the segment. The runtime for each segment is recorded and mentioned, helping the newsreader pace the newscast.

Consider the following example to understand how sound clips(music, SFX, actuality) can be placed symbolically in news stories and how they improve listening comprehension and experience. We are using a template script/package of the 'Morning News' presented on AIR.

A basic understanding of these radio news codes and conventions will help you to use them intelligently when creating or analysing radio news.

Activity - 4

Listen to the All India Radio newscast.

Can you identify the radio news format?

What kind of sounds can you identify during the newscast?

What was the outro used by the newsreader?

2.6 CODES AND CONVENTIONS FOR TELEVISION NEWS

Understanding television as a medium will help one grasp the codes and conventions of television news. Television is an audio-visual medium, so using the various technical, written and symbolic codes is easier. These codes provide audio or visual cues or even both. Thus, making the information more presentable makes it easy to understand.

Rather than directly defining the codes and the conventions, here we take the other way around. Let us try to look for the audio and visual cues in television news and their relevance that aim to make comprehension better for the audiences.

2.6.1 Visual Codes in Television News

What do you first observe when viewing a television news report? Visuals...right? This is where a lot of symbolic codes are embedded. What is it that you see on your screen?

- The news presenter presents the news in a specific mode of address,
- The set,
- The animate/animate text on the screen.

Have a close look at the following screenshots from News at Ten on DD News. The opening frame shows the segment's name with the DD news logo and *news scroller* at the bottom, helping to identify the news programme. Coupled with the *sounder*⁵ in the background typography, the red colour establishes its brand identity.

A sequential analysis of the graphics, colour, and images, along with the music, pace, opening camera shot, studio setup, mise-en-scene, and mode of address, helps uncover the symbolically coded brand identity and the expectations created by the news telecast.



The opening frame of the News is at ten on DD news. (Source: DD News)

The next frame has the news presenter who introduces the news stories. The news stories are sequenced in the order of their newsworthiness. Analysing the television news telecast can help you understand the visual and verbal news codes.

1. The number of elements in the frame and their placement comprise the visual codes of composition. For example, the presenter is mostly in the centre of the frame, dressed formally and addressing the camera directly. This connotes authority and seriousness from the source. You can also spot a strapline at the bottom of the screen where you can see the news headlines trails.
2. The movement of the camera and the subject is also part of the visual code. The basic convention is to use an establishing shot, long shot, mid shot, and closeup. The pan movements also incorporate greater details from the event spot.
3. The sequence in which the visual content is structured also adds meaning to what is being said. Here, sequencing deals with editing the visual content to change shots, juxtapose images, and organise them according to what is being said by the news reader or the reporter. A news report can have interviews, vox pop, actual footage from the spot, images, sound clips, animated graphics, etc. A well-judged sequencing of these elements can break monotony and facilitate comprehension for the audience.



Opening frame of The news at 10 (Source: DD News)

2.6.2 Audio Codes in Television News

Remember, television is an audio-visual medium. The visuals can be empowering, but when used wisely, the verbal cues can reinforce, undercut, or modify the visual elements. The verbal cues in the news follow the conventional narrative and journalistic norms of news report writing, which the presenter reads.

- The use of voice-over is a prominent verbal cue used in television news. This is an off-commentary by a reporter that accompanies a sequence of video clips.
- The standard out cue is another verbal cue that suggests that the reporter is signing off when they end the story. For example, ".....Tom Bateman, BBC News Jerusalem".

2.6.3 Conventions in Television News

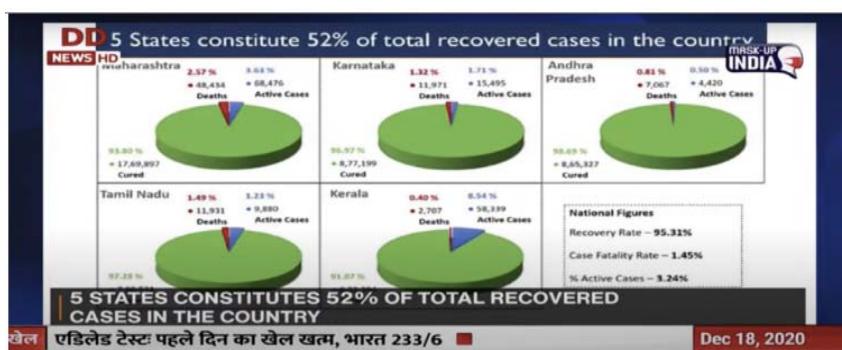
Convention, as already explained, is the standard way to do something. Here, we discuss how television news, consisting of its visual and audio elements, is structured.

Writing a news package is a convention for television news⁶. It lays down how a news story would be told on television. It is similar to a narrative storytelling of what has happened with an intro, details, and an end. It has all the elements like images (moving and still), *bytes*, *VO*, *NATSO*, etc.

The package generally begins with an intro from the in-studio-anchor. This is followed by the package lead, who has a narrative and visual lead.

Like print news, it has a middle with details and an end with a final narrative and visuals. *From the Piece to the camera, actual footage* can connect the audience to the story by providing visuals directly from the field. Sometimes, *infographics* make the information more comprehensive for the audience.

An *anchor tag* concludes the story and provides any other related info that was not in the package.



Activity - 5

Watch a television news broadcast and record

- The duration
- The segments
- The audio cues used
- The video cues used

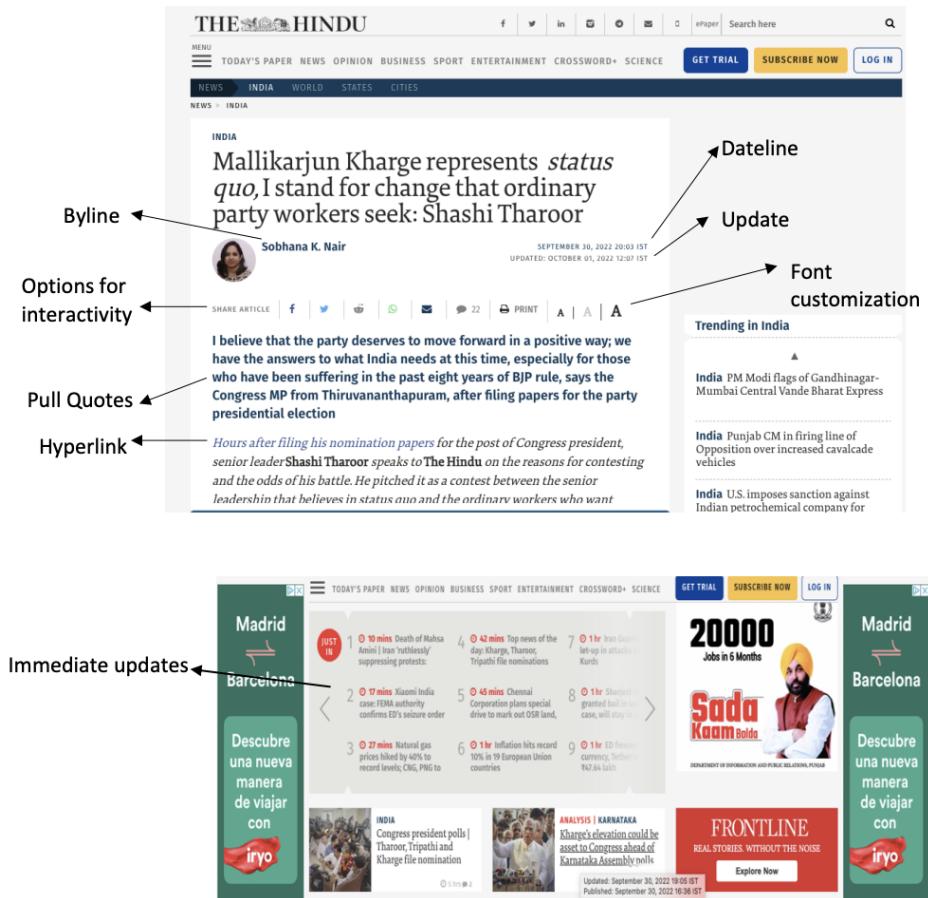
2.7 CODES AND CONVENTIONS OF NEWS WEBSITES

With the change in technology, news moved from print and radio to television and is now available online through our phones and computers. Newspapers have their online editions on their websites. Similarly, radio and television news broadcasters have websites and social media handles.

To understand this convergence of news on the internet, it is important to explore the characteristics of the medium and how it is useful for the audiences and the broadcaster. The internet is:

1. **Hypertextual:** This internet feature helps to interconnect texts through internal and external hyperlinks. This can help the news provider to embed relevant information and background related to the story through hyperlinks.
2. **Multimedia platform:** This can help integrate audio, video, text, images, etc., facilitating innovative ways of storytelling.
3. **Interactive:** The internet is interactive, unlike traditional media. In news genre⁸, websites can have navigational, functional, and adaptive interactivity. The more interactive the website is, the easier it is for the visitor to get involved with the content.
4. **Immediate:** On the internet, there is no lag between the relay of the information and its reception. Considering the timeliness of news, the internet provides a massive advantage in breaking news and updates for a story. The audience need not wait for the news telecast to break a news story or limit themselves to the strapline update of it. It is readily available on the phone app or website. The follow-up is also constantly updated.

Mobile Transition



Now that we know the characteristics of the internet, it is easier to appreciate how it cuts through the limitations of traditional news media. This helps journalists achieve much more through their websites than through conventional media. For example;

- Radio news is devoid of visuals and is aired on a schedule. It needs to catch up in interactivity as well.
- The front page of a newspaper has a space limitation, which affects the number of stories and their length. However, the newspaper's online homepage will have no similar restrictions. Thus, we find more headlines on the webpage than on the front page of the same newspaper. The breaking news section on the webpage cannot be found in its print version. The online version of a newspaper will have interactive elements embedded in the story, which is a limitation of its print version.
- While television news channels have multimedia elements and immediacy, the hypertextuality (for references and additional info) and interactivity that the internet provides through polls and user-generated content such as comments, connections, and sharing through social networks are missing in television newscasts.
- Another attribute is that the stories published on the online version remain, so we can read or even revisit them at our convenience. It's easy to return, which is impossible in broadcast news media.

2.7.1 Codes Used in a News Website

The written code, again, is guided by journalistic guidelines.

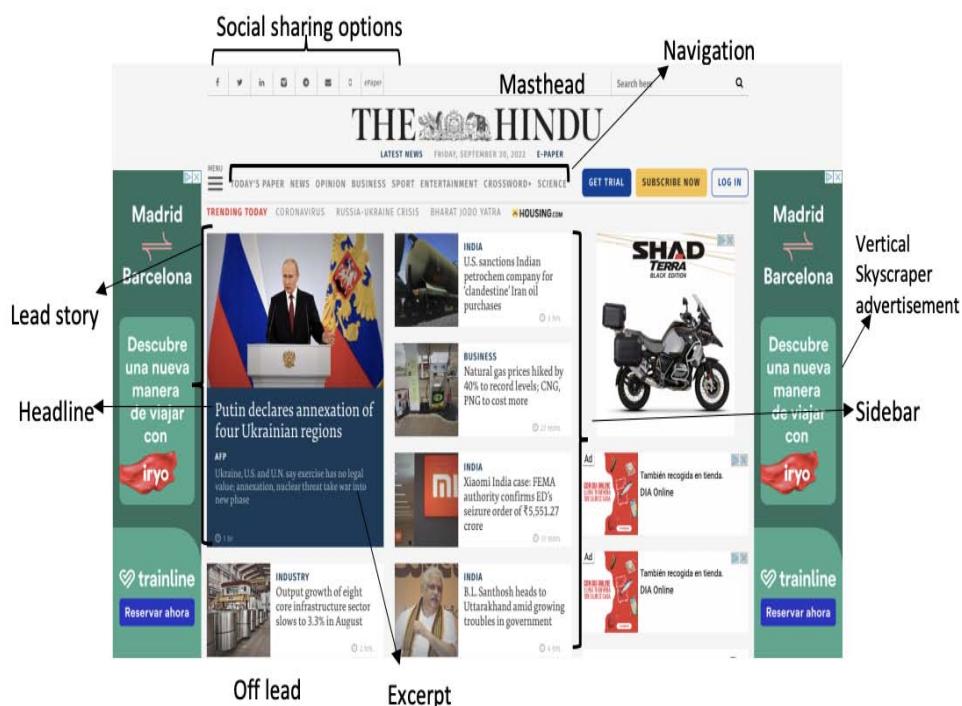
The technical code can be spotted in how a website's news is created and laid out. Similar technical codes might be found in print and television.

Videos and social media handles relevant to the story are commonly found. Other multimedia tools, including timelines, maps, slideshows, word clouds, etc. (BBC, Journalism CCEA), can also supplement the stories.

2.7.2 Conventions of a News Website

Take a good look at the screenshot from a news website below. What do you find?

- The layout of a newspaper website differs prominently from its print version.
- The elements like byline, lead story, headline, images, caption, pull quotes, attributions, etc., are found in the newspaper's online version, similar to its print version.
- The convention differs in the way the news stories are placed.
- The layout is either a grid or a multi-column system⁹. This provides better legibility and a visual cue for seriousness.
- Like the print version, the online versions use black fonts on a white background. Colours can be used in headlines, section names¹⁰, action buttons, or areas that need immediate attention.
- Vertical skyscraper ads are another convention as they stay in sight for longer when scrolling down the page.



Activity - 6

Analyse a news website and answer the following:

What is hypertextuality used for in a news story?

What multimedia tools can you find embedded in a news story?

What are the options available to facilitate interactivity?

How is the layout of the website different from its print version?

Read a news story on a news website and try to rewrite it for

1. Newspaper

2. Radio

Check Your Progress: 1

Note: 1) Use the space below for your answer.

2) Compare your answers with those given at the end of this unit.

1. Describe the codes and conventions of print media?

.....
.....
.....
.....
.....
.....

2. What are the unique features of a news website?

.....
.....
.....
.....
.....
.....

2.8 LET US SUM UP

The communication process uses agreed codes and conventions, which also apply to news genres. These codes and conventions of the news genre are affected by the medium in which they are placed. So, an understanding of the medium helps you create news stories that are easy to understand without compromising professional guidelines. Knowledge of medium-specific codes and conventions helps you find meaning in and through the media texts. Knowing how a message is constructed and presented in the news genre can assist in analysing news and information well.

Technical and written codes vary according to the medium and are connote as symbolic. For traditional news media, the codes were either audio or visual and structured according to the convention to facilitate better presentation and comprehension of information.

Online news websites use multimedia tools to combine all the existing news codes and conventions with interactivity and hypertextuality to present and deliver news more immediately and effectively.

We hope this discussion will enable you to explore various news media platforms and analyse how messages are constructed and presented. Eventually, it will enable you to interpret explicit and implicit narratives.

2.9 FURTHER READINGS

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2. Bruhn, J., & Schirrmacher, B. (2022). Intermedial studies: An introduction to meaning across media (p. 354). Taylor & Francis.
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4. Frau-Meigs, D. (2019). A curriculum for MIL teaching and learning. *Understanding Media and Information Literacy (MIL) in the Digital Age: A Question of Democracy*. Edited by Ulla Carlsson. UNESCO.
5. Fedorov, A. (2015). Hermeneutic Analysis of the Cultural Context of the Functioning of Media in Society and Media Texts on Media Literacy Education Classes. *Journal of International Network Center for Fundamental and Applied Research*, (4), 214-225.
6. Hartley, J. (2013). *Understanding news*. Routledge.
7. Homer, E., & Scarratt, E. (2012). Media Studies GCSE (1): possibilities and practice: Elaine Homer and Elaine Scarratt. In *The Media Teacher's Handbook*. Routledge.
8. Lacey, N. (2018). *Image and representation: Key concepts in media studies*. Bloomsbury Publishing.

Useful Links

<http://culturca.narod.ru/radio.htm>

https://www.thenewsmanual.net/Manuals%20Volume%202/volume2_49.htm

https://www.siu.edu/MASSCOMM/PDFs/radio_news_script.pdf

http://news.bbc.co.uk/hi/english/static/audio_video/programmes/radio_newsr oom/transcripts/18_00hrs.stm#1

<https://medium.com/the-book-mechanic/news-articles-vs-feature-articles-why-you-need-to-know-the-difference-dd758fdcc6be>

2.10 CHECK YOUR PROGRESS: POSSIBLE ANSWERS

Check Your Progress: 1

1. Radio news formats encompass a spectrum of styles tailored to diverse audience preferences. Straight newscasts adhere to a conventional

structure, delivering factual updates efficiently. Feature stories provide in-depth analysis through interviews and investigative reporting. News magazines blend news, features, and commentary, offering a comprehensive overview. Talk shows foster audience engagement, enabling interactive discussions on current events. Each format serves distinct purposes, catering to the dynamic needs of listeners.

2. In radio news, the avoidance of clauses is prudent due to the medium's auditory nature. Clauses can hinder comprehension, leading to confusion or missed information for listeners. By utilising concise, straightforward sentences, clarity is heightened, facilitating better understanding among the audience. Additionally, such a style maintains engagement, as it ensures information is conveyed swiftly and effectively, enhancing the overall listening experience.

Check Your Progress: 2

1. The codes and conventions of print media encompass various elements such as layout, typography, headlines, and visuals. Layouts typically follow a grid system for organisation, while typography is chosen for readability and visual appeal. Headlines are often concise and attention-grabbing, guiding readers to key stories. Visuals, including photographs and illustrations, complement written content to enhance understanding and engagement.
2. News websites offer unique features compared to traditional print media. They provide real-time updates, multimedia content like videos and interactive graphics, and hyperlinks for further exploration. Additionally, news websites often allow user engagement through comments sections and social media sharing, fostering a sense of community and interactivity among readers. These platforms prioritise immediacy and accessibility, catering to the fast-paced nature of digital information consumption.

UNIT 3 FROM TRADITIONAL MEDIA TO DIGITAL MEDIA

Structure

- 3.0 Introduction
- 3.1 Learning Outcomes
- 3.2 Traditional Media Technologies
 - 3.2.1 Transmission of News, Information and Knowledge
 - 3.2.2 The Movable Printing Press
 - 3.2.3 The Emergence of the Press
 - 3.2.4 New-Printing Technology
- 3.3 The Role of Literacy
- 3.4 The Emergence of Technological Elite
- 3.5 The Emergence of the Middle Class
- 3.6 The Emergence of Telegraph, Radio and Television
- 3.7 The Emergence of Digital Media
 - 3.7.1 The Impact of Digital Media
 - 3.7.2 Convergence in Digital Media: Multimedia
 - 3.7.3 Content Management System (SMS)
 - 3.7.4 Search Engine Optimisations (SEO)
 - 3.7.5 Users as Creator
 - 3.7.6 News Gathering in Digital Space
 - 3.7.7 Use of Social Media
 - 3.7.8 Gate-Keeping in the Digital Space
 - 3.7.9 Analytical Profiling of Users
 - 3.7.10 Mobile Telephony
- 3.8 Let Us Sum Up
- 3.9 Keywords
- 3.10 Further Readings
- 3.11 Check Your Progress: Possible Answers

3.0 INTRODUCTION

Technologies have played an incremental role in perpetuating and sustaining civilisations and societies. Their roles have been so defining that the technologies they used or the type of technologies prevalent in those societies became their defining features. You must have heard about the industrial society that formed during the Industrial Revolution in Europe in the 16th and 17th centuries. It was followed by knowledge and digital societies in which network computers, the Internet, the World Wide Web, and mobile telephony assumed greater dominance. When we define human evolution as historical and prehistoric, the demarcation is notably based on the ability,

skill, and technologies of writing and historical record keeping. In communication and mass media, technologies have played equally defining roles. In every era, it adopted the prevalent technologies to reach mass audiences. The earliest cave paintings at Sulawesi in Indonesia, Spain and France are the earliest examples of human desire to reach out to fellow beings and communicate their ideas and perceptions through pictorial depictions.

However, the growth and development of media technologies have never been a linear and monolithic progression. There were many twists and turns regarding who owned the technology, how they used it, and who their earlier adopters were. With it also came the hierarchical and patriarchal society in which new technologies were invariably owned by the elites who could profit from them. At times, technologies were also used to exploit the marginalised people. Media technologies soon became an instrument of authoritarianism to control and shape the ideologies of the masses. These are some of the critical thoughts that you as a learner need to keep in mind while transitioning from one media technology to another, and you should look for other factors similar to the process.

The two media spaces—traditional and new media—are not mutually exclusive. They do not have separate ecosystems. They share many commonalities and overlap their features. While competing with each other, the two media spaces also complement each other. During the initial stages of development, they lived in a symbiotic relationship, helping each other grow and prosper.

While new technology always takes away a part of the business of the earlier technologies, it also creates its own space and captive audience. For example, when TV came, it was thought to wipe out the print media. But as history shows, it didn't happen as feared. A similar doomsday prediction was propagated with the onslaught of digital media against the print. As we know, print media continues despite 20 years of continuous onslaught from the digital space. That's not to say that print media has not been affected. The new media has minimised the profitability of print and has also challenged its dominance in the advertising space.

3.1 LEARNING OUTCOMES

After completing this Unit, you should be able to:

- Explain the development of media spaces and issues associated with it;
- Describe the differences between traditional and new media;
- The main features of the two media spaces; and
- The convergence of print and digital media and its impact.

3.2 TRADITIONAL MEDIA TECHNOLOGIES

Technologies have existed for millennia, and it isn't easy to differentiate the onset and cut-off dates of various technologies that have impacted human

civilisation. But broadly speaking, they are divided based on analogue and digital differentiation. In this sense, newspapers, magazines, radio, and TV were initially analogue mediums powered by mechanical and electrical production. The onset of digital technologies based on binary code came quite late and was responsible for transforming the analogue medium.

In ancient times, papyrus was a popular medium of writing in the Nile region of Egypt as early as 3000 BCE, and it continued until the late 12th century CE. It was a reed plant, which provided a smooth and durable material for writing. The word paper is derived from papyrus. The earliest form of book, Codex, was hand-written on papyrus or parchment and fastened together for future use. In India, *Betula utilis* (Himalayan Birch), popularly called birch bark, was a popular writing material, and the earliest Buddhist and Sanskrit religious texts were written on it. It continues to be used in some parts of India and Nepal to write sacred religious texts among the orthodox sects. These writings were meant to transmit knowledge from one generation to another. But it was confined to a limited group of people who could read and write, especially the priestly and the ruling class.

While much is known about the writing material in the ancient period, there is not much historical and archaeological evidence to suggest the transmission of information from one part of the country to another. The Greeks and the Romans used public places and squares to announce the events and ceremonies. Likewise, during the Mauryan period, Ashoka's edicts were popular means of addressing and communicating with the masses. This was probably the earliest means of mass media in India. In addition to this, the Mauryans also made use of the pigeon postal system as a means of connection with far-flung provinces. During the Mughal period, the *Waqia-Navis* worked as intelligence news gatherers. Mir Bakhshi presented the information received from them to the Emperor. There was yet another group of verbal news-gathering, which *Harkarah did*.

3.2.1 Transmission of News and Information and Knowledge

Mass media content has three ingredients: news, information, and knowledge. Interestingly, people were more desirous of knowledge than news and information in ancient times. It led to the compilation of sacred and secular books, whether it was on papyrus or birch barks. However, only some people could read and had access to these books and manuscripts. In modern times, news and information have assumed centrality in people's lives largely because of the globalisation of business and finances, which are directly linked to people's livelihoods. As literacy spread, more books were written and sold across the countries. These books were written manually by scribes and kept in safe custody. Knowledge production and transmission were limited and confined mainly to aristocratic and religious elite groups.

News was also transmitted through messengers who could travel long distances quickly. Some ancient and mediaeval empires had built a strong network of news carriers who could relay information from one part of the country to another. By this time, the paper was already in use as writing material. Some business communities, like Armenians, had built a robust and

reliable network of news transmission, which they used in their trans-oceanic trade, especially in the Indian subcontinent. When the Portuguese and the British came to India, they had to get help from Armenian traders to make inroads into the hinterland.

3.2.2 The Movable Printing Press

The papermaking technology was known to China in ancient times. Archaeological evidence of the earliest extant paper dates back to the 1st and 2nd BCE. Gradually, papermaking technology travelled to the Arab world during the 8th century and to Europe in the 11th century. Before the advent of paper in Europe, wooden logs and animal skin parchment were used for writing. The writing was done mainly by hand, and it took months to finish one book. The advent of movable printing presses invented by Johannes Gutenberg in Germany in the 15th century revolutionised printing technology, whereby large numbers of books were produced quickly. The first book to be printed was the Bible. As new technology most often faced hostility from the conservative forces, the early printers were quite apprehensive of its acceptance, especially when the letter was printed in black, associated with evil forces during the mediaeval period. To overcome these superstitious beliefs, the printers found an ingenious way in the Bible, which was welcomed and accepted by the masses and the Church.

The new printing technology played an important role in the European Renaissance and the Protestant Reformation, making books easily available to the masses. It also helped to emerge a literate middle class, which would play a significant role in the future. The printing technology was further improved and accelerated by another German printer, Friedrich Koenig, in 1910 when he used a steam engine to speed up the mass production of books. It was the beginning of the industrialisation of printing technology. Earlier, it took one hour to produce 480 pages, which was doubled with a steam engine. The printing process was further improved, with 3,000 pages per hour by the 1930s. By then, the Industrial Revolution had already begun in England, France and other parts of Europe, with people having disposable income.

3.2.3 The Emergence of the Press

The mass production of books and other reading material slowly transformed society with new ideas, values and human business activities. Soon, the sacred and secular knowledge was within everyone's reach. The printing press was a new symbol of the Renaissance, and it mushroomed in every lane and street of the major cities of Europe. It could be compared with the STD booths of the 1990s, cyber cafes and mobile shops of the 21st century, which became a new symbol of connectivity and transmission of information.

Newspapers, often called broadsheets, were slowly emerging from various parts of Europe. They were 29.5 by 23.5 inches in contrast to the tabloid, 17 by 11 inches. They were printed, dated and came out in regular intervals and were either daily or weekly, depending on their periodicity. Before printing came into vogue, hand-written newspapers were circulated in Venice around the 1560s. They mainly covered stories related to politics and wars in Europe

and elsewhere. Popularly called *Avvisi* or *Gazettes*, they were weekly newspapers.

The first mass media in the form of printed newspapers came up only in the early 17th century. Printed by a German named Johann Carolus in Strasbourg, the weekly was called *Relation aller Fürnemmen und gedenckwürdigen Historien*. The first English-language newspaper came out in 1620. It was published in Italy and Germany and was called *Corrant*. Most early newspapers were censored and allowed to carry only foreign news lest they threaten local administration and Imperial authority. In 1695, the British government relaxed the censorship, and as a result, several newspapers flourished in London, Boston and Philadelphia. Unlike today's anti-plagiarism rules, there was close coordination between newspapers, often reprinting articles freely.

In the meantime, transferring print technology from the developed economy to the underdeveloped economy took time and effort. However, the time gap in technology transfer decreased as we moved from the earlier centuries to the present century. The modern newspaper took almost 200 years to reach India after it was first published in Europe. However, the transfer of technology related to radio and TV to India was quick and prompt. In digital media, technology transfer is much quicker. It resulted from globalisation and the interlinking of finances and interdependence between the countries in the late 20th and early parts of the 21st centuries.

In India, the plan to launch an English newspaper was afoot as early as 1766 by William Bolts, a Dutch adventurer. But East India Company soon deported him because of his hostilities against the British officials. Later, in January 1780, James Augustus Hicky published the first English newspaper, *The Bengal Gazette*, from Calcutta. The newspaper was critical of the British administration and accused them and the then Governor General Warren Hastings of corruption and malpractices. The Governor General, in retaliation, prohibited the circulation of the newspaper through the postal system, thus forcing Hickey to come to a compromise. He soon became a supporter of the East India Company government. The 19th century saw the emergence of various regional and English-language newspapers, including *The Statesman*, *The Times of India*, the *Hindu*, and *The Tribune* from various parts of the country.

3.2.4 New-Printing Technologies

As mentioned earlier, German printer Friedrich Koenig used a steam engine to speed up the mass production of printed material. With it began the process of industrialisation of printing technology. In the 20th century, the inventions of typesetting machines and new rotary presses further accelerated the process of mass production by 1912, when there were some 4000 newspapers in Britain alone. The electrically powered printing machine and the introduction of digital technology in typesetting and printing made it possible for thousands of copies to be published in an hour. This considerably reduced the cost of the newspapers, which helped it further increase its circulation. These early newspapers carried only local news. The national

media in various countries were yet to emerge. The development of railways and other means of transport helped the circulation and emergence of national media.

In the meantime, Britain witnessed the emergence of new journalism during the 1890s, which steered away from elitist features and catered to the masses. William Thomas *Stead* took cudgels against the prevailing norms and began investigative journalism to probe child welfare and reformation activities. Establishing 'government by journalism' and influencing public opinion and government policies was important.

In the meantime, the newspaper industry began introducing new elements in its production process, such as illustrations and pictures. It created visual appeal and attracted new readership to its fold. The technology to incorporate photographs in the print began in the late 19th century, transforming the visual appeal of newspapers. It was Matthew Brady who, in 1962, exhibited the photographs of the Battle of Antietam during the US Civil War. It portrayed the dead and wounded soldiers of the war. It shocked the Americans to see the stark reality. Brady brought "home to us the terrible reality of war," noted the *New York Times*.

As newspapers assumed the role of mass media with greater reach and increasing readership, advertising soon became an integral feature and backbone of revenue. Political parties, too, began lobbying with newspapers for support and reaching out to voters in their respective constituent assemblies. Their hobnobbing with newspapers was responsible for division on an ideological basis and played a deciding role in the emergence of mass media. Also, according to media theorist Benedict Anderson, newspapers were the main instruments in spreading nationalism and forging national identity among people of diverse ethnic groups inhabiting a common geographical area. In India, the newspaper was responsible for bringing freedom fighters from various parts of the country together and fighting for a common cause.

As these newspapers expanded their reach and operations and assumed a central role in national politics, they set up networks of bureaus across the country to collect news and generate content for their newspapers. However, as smaller newspapers could not afford the cost of employing a large staff, they mainly relied on news agencies for news. News agencies are mostly privately owned commercial enterprises that provide news on a subscription basis. The newspapers have to pay a monthly/annual fee for the services. Some news agencies formed during the period included Havas in 1859 in France (now called Agence France-Presse. AFP), the Associated Press in the US and Reuters in the UK. These agencies had transnational presence and operations.

The Press, however, was not without its challenges. The emergence of penny papers in the 1830s in the US posed serious threats to daily newspapers, as they were one-sixth of the daily price. While the cost was one factor, it appealed to a larger audience because of its popular and sensational news. In some countries, political changes had a detrimental effect on the growth of

the press as it curtailed freedom of expression. In Nazi Germany, some 1000 newspapers were shut down between 1933-1945. Joseph Goebbels, who was in control of the Press, maintained a strict vigil on the Press and issued directives for its operation, which directly infringed on their freedom.

3.3 THE ROLE OF LITERACY

As discussed, one of the impediments to the growth of early print media was the low literacy rate. However, with a subsequent increase in literacy, the print media began proliferating from the beginning of the 19th century. In England, the concept of Sunday schools run by churches and voluntary and private schools played an important role. According to one estimate, 40 per cent of males and 60 per cent of females were illiterate in 1800. Illiteracy decreased to 33 per cent of males and 50 per cent of females by 1840; by 1870, it dropped to 20 per cent of men and 25 per cent of women. In India, a British colony then, the literacy rate was as low as 3.2 per cent in 1872, which rose to 16 per cent in 1941.

However, the dependency on literacy for media consumption has declined in recent years with the emergence of television, radio and the Internet, which do not need literacy. The audio and video elements have made disseminating news and information easily understandable, even without the ability to read and write. A steady rise in the circulation of newspapers and magazines before the coming of the Internet was a testimony to increasing global literacy.

3.4 THE EMERGENCE OF TECHNOLOGICAL ELITES

New technologies create economic opportunities for entrepreneurs and the early adopters. The same was true with print technology, which benefitted many people. They gradually accumulated wealth, which was disposable for further investment in technological improvement. The media owners soon became part of a larger capitalist group and worked with them to safeguard their interests. They were part of a select group of media barons who continued to dominate the media space for almost two centuries before the coming of the Internet. They also worked in close coordination with political elites and played a vital role in deciding the political destinies of the countries.

Interestingly, the trajectory of media evolution and technology in the 21st century has followed a similar path with the emergence of digital media, especially social media, which is concentrated in the hands of a few powerful elites. Only a handful of corporations control the larger media space, whether it is Facebook, YouTube, Twitter or Instagram. This was quite unlike the traditional print media, known for providing local news and catering to geographically bounded audiences. There was diversified ownership of small and medium newspapers, which have now lost their presence in the largely globalised media space, thus leading to monopolistic practices. It is said that the new class of technological elites, with deep pockets have cannibalised the

smaller and medium media products that formed the backbone of traditional media.

3.5 THE EMERGENCE OF THE MIDDLE CLASS

One of the reasons for the popularity of print media in Europe and elsewhere was the emergence of the middle class in the 18th and 19th centuries. They were a group of people with disposable income and were part of the new workforce of the industrialised economies. They invested in educating their children in private schools and were acutely aware of the change in politics and society. They aped the mannerisms of the elites and were socially upward mobile. Many were traders, merchants, and professionals working in the metropolitan areas. Their appetite for news, information and gossip was vigorous, and they consumed media content voraciously.

Higher literacy at the beginning of the 19th century also played an important role in the dissemination of technological know-how related to new means of media production. Technological innovations travelled seamlessly from one part of Europe to another, with the middle class being its early adopters and carriers. It gave birth to a new class of printer professionals, which included linotype operators and compositors. William Bullock further improved the rotary printing press, which was invented by Richard March Hoe in 1843. Today, the offset printing press uses a lithographic process based on the separation of oil and water, and it uses three cylinders: plate, blanket, and impression.

Check Your Progress: 1

Note: 1) Use the space below for your answer.

2) Compare your answers with those given at the end of this unit.

Choose the correct answers.

1. Which media technology is called digital technology?
 - A. Newspapers
 - B. Radio
 - C. Television
 - D. Websites
2. Betula utilise (Himalayan Birch), popularly called birch bark, is
 - A. A kind of food
 - B. A writing material
 - C. A decorative material
 - D. A medicine
3. Who were Waqia-Navis during the Mughal period?
 - A. Revenue officials
 - B. Police constables
 - C. News reporters

- D. Announcers
4. Papermaking was first invented in which country.
- A. India
 - B. Egypt
 - C. China
 - D. Argentina
5. Name the printer who improved upon the first printing press
- A. Friedrich Koenig
 - B. Johannes Gutenberg
 - C. Thomas Bensley
 - D. Richard March Hoe

3.6 THE EMERGENCE OF TELEGRAPH, RADIO AND TELEVISION

While printing through offset presses continued apace, other technological innovations had far-reaching consequences on media production. The invention of pulp papermaking in the 1840s considerably reduced the cost of newsprint. While the cost of print production was reduced, the speed with which news travelled was still slow and dependent on railways, which could travel 55 km/hour during the early period.

The invention of the telegraph by Samuel Morse with codes of dots and dashes in 1835 accelerated the news gathering and dissemination process. The news can be transmitted instantaneously over long distances through wired telegraphs. By the 1840s, all major cities were interconnected through a network of telegraph wires, which made the transmission of news easy and instant. The geographical distances lost meaning as news from 50 km to 5000 km could travel simultaneously. There were wired networks which could transmit the information. The telegraph was a precursor to what would follow in the coming centuries. It has continued to be used for a long time, and the last telegraphic message was sent to India in 2013.

Wired communication in the 20th century was soon followed by wireless communication, which provided technological support for developing radio, television and broadcast media. It was Guglielmo Marconi who developed the first wireless radio system in 1895. It didn't require much physical apparatus for transmission and was widely used by seamen and defence forces during times of crisis. Radio soon became a popular mass media and was considered more efficient than the telephone in reaching larger audiences. It was also less expensive and was easily accessible. Now, an unlimited number of people can listen to radio programmes while sitting in various geographical locations.

In addition to providing news and information, radio soon became a favourite medium for advertisers during the 1920s and in subsequent decades. Advertisers could now reach many captive audiences without the need for

physical transportation and circulation of advertising materials. Political leaders in the US, like Calvin Coolidge, used it to reach out to mass voters during his pre-election radio speech in 1924. Some 20 million people listened to it. It dramatically impacted listeners as modulation in voice, change in tone, and addition of jingles added pleasing elements to advertising. The visual medium of TV soon followed it in the coming decades. It is popularly believed that the popularity of product advertising led to a spur in mass consumerism that was in no way responsible for triggering the Great Depression of the 1920s.

By the 1940s, radio had complete dominance in the media space. However, after World War II, it was soon overtaken by a new technology, television, which added motion pictures and visual elements to its broadcast. In addition to audio news reading, viewers can see real pictures in real time on live TV broadcasts. There was a television boom in the US and other parts of the world, leading to its massive expansion and news-gathering growth.

As mentioned earlier, it was controlled by only a handful of media barons who guarded their interests vigilantly. The homogenisation and monopolistic practices of broadcast media were widely criticised as they deprived traditional media owners of investing in profitable media ventures. The deregulation of television in the 1980s and 1990s opened doors for other investors, thus adding more channels to the media space. The spread of cable television made it more accessible and geographically diverse regarding reach and impact. The invention of satellite television and Direct to Home (DTH) telecast, based on digitisation of the medium, further improved the speed and quality of the transmission.

As the new mass media technology gained ground, media theorists realised that different mediums were shaping their content uniquely, leveraging the medium's strength and downplaying its weaknesses. This led Marshall McLuhan in 1964 to pronounce the famous line "the medium is the message". The dissemination of news and information was the function of the medium which delivered it. It also shaped the quality of content delivery. From the time of the first printing press to the modern-day World Wide Web, the content of the medium has been transformed in unimaginable ways. Each medium has amplified its unique qualities (USP) in enhancing content delivery, sometimes at the cost of comprehensive and detailed information. For example, TV news coverage is more concerned with Breaking News and flashing sensational crime stories for greater Television Rating Points (TRPs) than covering the news in detail. The emergence of digital media during the last decade of the 20th century and the early 21st century has further reshaped the delivery of media content in its unique fashion.

3.7 THE EMERGENCE OF DIGITAL MEDIA

Technological innovations in media mirror other innovations in various fields. In a way, the media quickly adopted these innovations to suit its purpose. As we discussed, the innovations of telegraph, radio, and television were not initiated by the media itself but by other agencies and individuals to develop faster means of communication, especially for defence and science.

The scientific communities relentlessly attempted to enhance the power of computation and communication networks.

The first such attempt was the invention of the digital programmable 'Difference Engine' and 'Analytical Engine' by Charles Babbage in 1820. It later became known as the computer, which used discrete digits instead of binary digits (bits), as used today. This is why Charles Babbage has been called the father of computers. Ada Lovelace, daughter of English poet Lord Byron, who created the programme for Babbage's prototype computer, is the first computer programmer in the history of computers.

In the meantime, advanced computers came into existence that could do complex calculations and work. However, there was no network through which individual computers could be connected to communicate. The scientists of the Massachusetts Institute of Technology developed a programme for computers to communicate with each other. The new technology enabled a message to be broken down into small packages at the source before being reassembled at the receiving end.

The communication network between individual computers was enhanced to include multiple computers. The Advanced Research Projects Agency Network (ARPANET) in the US further refined the process and made the new technology available to the US military in 1969. They were able to develop multiple communication pathways and ensure that if one route failed to work, the other network (route) could be activated to compensate for the route loss and enable easy information transfer.

The ARPANET made the new communication system available for commercial use in 1976. Queen Elizabeth II sent the first email from one computer to another in 1976 by clicking the send button. A tangible and real progress, however, began in 1989 with the invention of the HyperText Transfer Protocol (HTTP) by Tim Berners-Lee, which made it possible for users to browse the Internet. A year after the popularity of HTTP, the World Wide Web came into existence and connected the world of computers through optic fibres and telecommunication networks.

The Computer-mediated communication system influenced media communication as it demolished the geographical boundaries and physical distribution of newspapers and media products. Now, people in any part of the world can access news and information at the click of a button. It also accelerated the news gathering and dissemination process with less time devoted to the production process. It didn't require a newsprint, printing machine, or staff dedicated to production and circulation, thus reducing the cost of media production considerably. In addition to being an affordable medium, it opened doors for media owners and readers to access and launch new media products, catering to diverse groups.

3.7.1 The Impact of Digital Media

The impact of digital media has been profound and sweeping, affecting all aspects of life, including education, healthcare, banking, commerce and governance. It had a very harmful effect on traditional media as many began

closing their shop because of high production costs. According to a survey, almost two newspapers are shutting down weekly in the US. One of the reasons has been the loss of advertising revenue, which has now shifted to digital media. Now, advertisers focus more on target advertising for higher returns, which is easily traceable on the digital platform. According to one estimate, the digital advertising market in the US in 2021 was US\$155.3 billion and is increasing at a considerable pace. In India, Rs 246 billion was generated from online advertising in 2021.

In addition, there has been a shift in the pattern of advertising platforms with the coming of digital media. However, this does not mean that traditional media are not generating advertising revenue; instead, the growth in the segment either stagnates or does not grow on the expected line. Moreover, traditional media's huge operational and production costs have made it unviable, thus reducing the profit margin. On the other hand, the operation cost of digital media is minimal. However, the cost of news-gathering remains the same for both the media.

3.7.2 Convergence of Digital Media: Multimedia

There are obvious benefits of digital media vis-à-vis traditional media that have made the former popular among the trans-generational audience. In addition to being affordable and accessible from anywhere, it does away with the need to carry the media product physically. The user can save the content on his/her laptop, computer or mobile and access it later at their convenience. Unlike traditional media, which is based on a one-way flow of information from source to end-user, digital media provides instant interactivity between the two. The most significant advantage of digital media is its feature of convergence of various technologies, including print, radio and television, all rolled into one. It can carry pictures, infographics, animations, and interactive features. The convergence of these mediums has often been called 3Cs, meaning Communication, Computing and Content. The scope of convergence has been further expanded to include technological, economic and cultural convergence because of the popularity and reach of the medium.

The platform providing the converged content of various mediums is called multimedia because of its technological prowess. It may include segregated features like online interactive, podcasts, news feeds, blogging and mob file applications. The diversity of the technology and content is part of the inclusive media experience. While the universalisation of technology and content is a given advantage, the medium has also been accused of robbing the individuality of the various mediums. It has painted the diverse medium in one colour, a mosaic, but taking away the beauty of each.

3.7.3 Content Management System (CMS)

The Content Management System of an online news operation is the backend and the backbone of the digital operation. It works like a central nervous system of the human body, which transmits and processes the messages received from various sense organs. It is a central depository where all the information is received, keyed in, and published before it is visible on the

website and accessed by various media. It is the depository and processing centre for receiving news, pictures, audio, and video files edited before publication and broadcast. There is a wide range of format choices available for uploading this content. For example, pictures and images are uploaded in jpg, jpeg, and png formats, audio files in MP3, and videos in MP4 format. The latter provides lots of flexibility for coding. One advantage of digital media is that the content, once published, can be re-edited, and new inputs can be added without disturbing its publishing status. This is quite unlike traditional media, where news cannot be edited once published and broadcast.

3.7.4 Search Engine Optimisation (SEO)

Much like the listenership of radio and TRP of TV news channels, there is still competition among digital content providers to get the eyeballs from the readers. Many news content is accessed through search engines, and there is always a race among digital content providers to appear on the search engines. The ability of news or content to appear on search engines depends on various factors. Among them are the relevance and topicality of the content, its uniqueness, the ranking of the news provider and the way it has been programmed to appear in the search engine. While uploading a story, an online editor has to provide searchable keywords, mega tags and descriptive details of the content.

3.7.5 Users as Creators

One of the benefits of digital media is its importance to users in the larger scheme of technological innovation. Unlike traditional media, users can now play a more active role in the form of the creator of news content, posting comments, sharing it and voicing his/her opinions on various issues. The concept of Citizen Reporter has added a new dimension to news-gathering, as it is not possible for reporters to be at all the places. This has also led to the process of democratisation in the news-gathering process. Most citizen reporters work voluntarily, but media organisations also appoint some. However, the authenticity of such news reporting is always questionable, as citizen reporters are not trained professionals. Nonetheless, they sometimes inform the media of a particular event or corruption, to which professional reporters carry a follow-up.

3.7.6 News Gathering in Digital Space

As a result of the proliferation of media space and types of content created by diverse mediums, the role of news reporters has diversified. A news reporter works on different media platforms at the same time by creating visuals (photographs), podcasts, videos and social media content. Most media organisations have a robust online presence, so their content is used in news multimedia production. The social media presence of reporters often adds credibility to media organisations as they provide ground report feeds in social media. Some enterprising reporters have assumed the role of independent media production of their popularity. Equipped with a camera, digital mike and a laptop, they provide on-site reporting of the events.

3.7.7 Use of Social Media

Recently, social media has assumed greater importance because of its reach and popularity among the masses. As a result, no media house can afford to miss the bandwagon, and they maintain an across-media presence in social networking sites, bookmarking, social news, media sharing, microblogging, and online forum sites. Some social networking sites like Twitter, Facebook, YouTube, and Instagram have huge followings, making them ideal platforms for news dissemination.

These digital platforms are also popular among political leaders, sportspersons, celebrities, and business barons, who often voice their opinions. These social networking sites are also where politicians and leaders announce their plans and policies and interact with the masses for feedback. Incidentally, these sites have become the source of news and information for journalists and media organisations.

3.7.8 Gate-Keeping in the Digital Space

Credibility is one of the important factors that make or mars the reputation of a media product. To ensure that news is reliable and authentic, it goes through various levels of check, counter-check and re-check before it is published or broadcast. A well-defined mechanism exists for trained editorial professionals to discard false, unauthenticated, and propaganda news items. The reputation of a media organisation largely depends on the strength of its gatekeeping. However, in the digital age, the process of gatekeeping has been liquidated because of the maddening rush to be the first to give breaking news. Also, it puts an additional cost on media organisations to have several fact-checkers during 24/7 operations. There needs to be more trained human resources to do the job. However, some traditional media organisations have retained their vigour in fact-checking and have been vigilant enough to maintain editorial sanctity.

3.7.9 Analytical Profiling of Users

The digital media, based on computational analytics, provides rare insight into the profile of its readers on a real-time basis. This is quite different from the traditional media, which focuses on the circulation of newspapers and magazines. Apart from circulation figures, little information is available on the age, gender, and social profile of the people reading the newspaper. Other mediums like radio and television measure their popularity based on the number of listeners and TRP. Digital media, on the other hand, provides a detailed account of the number of people reading the news, their age group, gender, geographical location, and the time spent on a particular site. It provides a deeper insight into the kind of content liked and read by the users and their content choices. These data are quite useful for the news providers in reshaping the content provided to the readers.

3.7.10 Mobile Telephony

Mobile telephony provides one of the best examples of technological convergence among all technologies. It is not simply a device but a

combination of devices like a telephone, a typewriter, a camera, a calculator, a computer, a clock, a torch, a mirror, gaming, a navigational guide and many more, all combined in one. It is a complete world for news-gathering and dissemination and communication devices. Mobile telephony has brought a sea change to the way information is shared and consumed. It provides instant connectivity with any part of the world, thus shrinking the world into a global village.

In 2021, over 15 million mobile devices were worldwide, providing easy access to news and information. It has opened a new vista of news consumption, cutting across class, caste, gender and social division, thus empowering the weak and marginalised equally. The pace of growth in media technology has been so fast that it has become almost impossible to predict the future. It has made the access and reach of news, information and knowledge unimaginably easy from the days of traditional media, and its growth is expected to accelerate in times to come.

Check Your Progress: 2

Note: 1) Use the space below for your answer.
2) Compare your answers with those given at the end of this unit.

Choose the correct answers.

1. Corrant was a popular
 - A. Newspaper
 - B. A radio programme
 - C. Communication device
 - D. Newspaper
2. Guglielmo Marconi is the inventor of
 - A. Wireless radio
 - B. Television
 - C. Printing machine
 - D. Communication programme
3. Hyper Text Transfer Protocol (HTTP), invented by Tim Berners-Lee, is used in which of the following mediums
 - A. Newspapers
 - B. Radio
 - C. Television
 - D. Internet
4. Which format is used for uploading videos on a news website?
 - A. MP4 format
 - B. MP3 format
 - C. JPG
 - D. JPEG

5. What mass media was used by Ashoka, the Mauryan king, to communicate with people?
 - A. Public announcement
 - B. Folk songs
 - C. Rock edicts
 - D. Pamphlets
-

3.8 LET US SUM UP

We learnt that every technology has its use in its own time and space. Some of the technologies have had a transforming impact on human civilisation. It played a critical role in disseminating news, information and knowledge - the bedrock of human progress. As media is one of the constituents of learning, education, and governance, the associated technologies helped it progress. From the age of traditional media to the new digital age, it has strived to compete with allied fields in providing fast, efficient and authentic news. The various technologies also shaped the content provided to users uniquely. The digital age has broadened the canvass of information, making it easily available to the masses. It's no wonder that the age we are living in has been a knowledge society as it forms the basis of existence.

3.9 KEYWORDS

Papyrus: Derived from plant barks, it was a popular writing medium in the Nile region of Egypt in ancient times (as early as 3000 BCE).

Waqia-Navis: They were professional news reporters during the Mughal period and provided intelligence reports to the emperor through Mir Bakhshi.

News agencies are mostly privately owned commercial enterprises that provide news on a subscription basis. Newspapers pay a monthly/annual fee for the services.

ARPANET: The Advanced Research Projects Agency Network (ARPANET) is a US-based agency that developed networks for computers to communicate with each other.

HyperText Transfer Protocol (HTTP): Developed by Tim Berners-Lee, HTTP is a communication protocol that connects web servers and allows users to browse the Internet.

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3.12 CHECK YOUR PROGRESS: POSSIBLE ANSWERS

Check Your Progress: 1

1. D
2. B
3. C
4. C
5. A

Check Your Progress: 2

1. A
2. A
3. D
4. A
5. C

UNIT 4 USES OF NEW MEDIA TECHNOLOGIES IN SOCIETY

Structure

- 4.0 Introduction
 - 4.1 Learning Outcomes
 - 4.2 Understanding New Media and Media Convergence
 - 4.2.1 Characteristics of New Media Technologies
 - 4.2.2 Change in Media Infrastructural Dynamics
 - 4.3 Transitioning Society with New Media
 - 4.3.1 Shift in Social and Cultural Practices
 - 4.3.2 Digital Democratic Processes: ICTs, e-Governance, and New Concepts
 - 4.4 Dimensions of New Media Literacy
 - 4.4.1 Digital Devices, Access, and Empowerment
 - 4.4.2 Understanding the Potential of New Media Technologies
 - 4.4.3 Developing New Media Skills and Competencies
 - 4.5 User-Centric Participation via New Media Technologies
 - 4.5.1 Participatory Culture and New Media Literacy Framework
 - 4.5.2 Active Audience Approach and User-Generated Content
 - 4.5.3 Civic Engagement and Participatory Politics
 - 4.5.4 Digital Activism and New Media for Social Action
 - 4.6 Let Us Sum Up
 - 4.7 Further Readings
 - 4.8 Check Your Progress: Possible Answers
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4.0 INTRODUCTION

The materialisation of digital media has created a dual identity of media logic, prior to which media generally consisted of print and the audio-visual medium. The legacy of media as a singular entity has disintegrated and re-integrated through cultural, economic and political processes to pave the way for digital media. Therefore, the fulcrum of traditional and new media is loosely edged on production, consumption and outlet patterns.

Media as an institution has become a space of converging and diverging spaces with overlapping characteristics of traditional media and new media due to the collapse of space and time and a mode of production. In the news arena, newspapers and magazines, television news channels, and online news platforms have enriched news debates and consumption patterns, evident across all stances of life and society. This media convergence has transformed the infrastructure and content produced in the present compared to before Web 2.0 technologies.

These new media technologies have brought about societal changes at the social, cultural, political, and economic levels. Most importantly, the

audiences have also changed considerably, from users to produsers and from consumers to prosumers, thereby blurring the lines between producers and users. This unit attempts to focus on how these new media technologies have transformed and influenced the social, cultural and democratic practices of the new media audiences.

4.1 LEARNING OUTCOMES

After completing this unit, you should be able to:

- Understand the concept of new media and media convergence;
- Grasp the characteristics of new media technologies and how it has transformed the media infrastructure;
- Analyse the shift in cultural, social and political practices due to new media;
- Evaluate the three pillars of new media literacy and its efficacy in society; and
- Assess the opportunities for participation due to new media technologies at the sociological and political levels.

4.2 UNDERSTANDING NEW MEDIA AND MEDIA CONVERGENCE

The concept of digital media arises from the characteristic that all information or data in these media is encoded in numbers, the most common being that of binary code of 0 and 1. Thus, technology is the defining dimension of the media, which observes the shift of storing information digitally on a physical object, such as a USB flash drive, digital images, MP3, etc.

The ambiguous nature of new media as a term, which primarily leans on subjectivity, and the restricted perception of online media, which focuses on internet-based media only, leads us to focus on digital media for this unit in convergence with the facet of online media since the Internet has enhanced the digital sphere. Media convergence deals with the interconnectedness of communication technologies, computer networks and media content. Therefore, it brings the "three C's" together: computing, communication and content. The notion of new media convergence can be better reflected from three dimensions, all of which have influenced the social, cultural, economic and political spheres of life while changing the democratic processes.

The first form of convergence to consider is technological convergence. Technological convergence is the movement of almost all media and information to digital electronic formats, storage, and transfer of the digitisation of all media, communications, texts, sound, images, and even currency into a common digital format or language. This process has involved a switch from analogue media to digital forms.

Due to technological convergence, governments and policymakers have initiated the need to change legislation to govern this new form of industry.

This led to a second kind of convergence, called regulatory convergence, a deregulatory strategy in the media and telecommunication industries adopted by the governments of many industrial economies since the mid-1990s. This set of regulatory changes has profoundly affected the structure of the media, telecom and computing industries and significantly impacted our current media culture.

After the transformation of the regulatory framework, mergers and acquisitions across the media industry were witnessed at a large scale, driven by the combination of technological developments and the overall climate of neo-liberal deregulation and globalisation. Dominance of media conglomerates with expansive scale of mergers and acquisitions paved the way for large-scale cross-industry expansion or horizontal integration, in which a firm in one industry (for instance, telecommunications) expanded across to another industry (such as television broadcasting) and vertical integration, in which a firm that is concentrated on one point in the production chain of a sector (for instance, film production) expands into another part of the production chain in the same industry, such as film distribution. These types of expansion drove a general strategy of industrial convergence within the media and telecom sector, the third kind of convergence that occurred and changed the media landscape.

4.2.1 Characteristics of New Media Technologies

Due to the advent of new media technologies and convergent media, the novelty can be experienced in the form of:

1. New textual experiences (new kinds of genres and textual forms, entertainment and pleasure and patterns of media consumption; computer games, simulations, special effects cinema)
2. New ways of representing the world (new representational possibilities and experiences, immersive virtual environments, screen-based multimedia)
3. New relationship between subjects (users and consumers) and media technologies (use and reception of image and communication media in everyday life and meanings invested in media technologies)
4. New experiences of the relationship between embodiment, identity and community (shift in personal and social experience of time, space and pace)
5. New conceptions of the biological body's relationship to technological media (challenges to the received distinction between the human and the artificial, nature and technology, body and media as technological prostheses, the real and virtual)
6. New patterns of organisation and production (realignments and integrations in media culture, industry, economy, access, ownership, control and regulation)

4.2.2 Change in Media Infrastructural Dynamics

Uses New Media Technologies for Society

Multiple media can be understood as using different tools such as television, tape recorder, video, overhead projectors, slide projectors, etc. Multimedia is denoted as a short form for multiple media.

Enhanced levels of interactivity are made possible by combining multiple forms of media content. Online multimedia is increasingly becoming object-oriented and data-driven, enabling applications with collaborative end-user innovation and personalisation on multiple forms of content over time. Examples of these range from multiple forms of content on Websites like photo galleries with both images (pictures) and title (text) user-updated to simulations whose coefficients, events, illustrations, animations or videos are modifiable, allowing the multimedia "experience" to be altered without reprogramming. In addition to seeing and hearing, haptic technology enables virtual objects to be felt. Emerging technology involving illusions of taste and smell may also enhance the multimedia experience.

The tangent of multiple media can be witnessed from two major strands: multiplicity of devices and media platforms.

From the device's perspective, the multiplicity factor can be witnessed through the overlapping features of a Bluetooth music player and an Amazon Echo. However, they also have distinctive features which neither of them can cover. Digital media has enabled an individual to possess multiple devices, such as laptops, mobile phones, tablets, streaming devices, music players, etc., that pertain to various facets of life. Moreover, seamless connectivity has also been made possible due to the Internet and the Internet of Things (IoT). Augmented Reality headsets can be combined with that of gaming, giving rise to virtual gaming. Therefore, emancipatory mechanisms are available in the context of devices.

Similarly, online media has made multiple media platforms accessible to every individual based on user selectivity and narrowcasting possible for all needs: communicative, educative, commercial and entertainment.

Check Your Progress: 1

Note: 1) Use the space below for your answers.

2) Compare your answers with those given at the end of this unit.

1. What is media convergence?

.....
.....
.....

2. What are the three dimensions of media convergence?

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.....
.....

3. What are the characteristics of new media technologies?

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4.3 TRANSITIONING SOCIETY WITH NEW MEDIA

New media technologies have influenced the social and cultural practices and the democratic and economic processes of society. In this unit section, we will learn about the shift in practices across different aspects of society.

4.3.1 Shift in Social and Cultural Practices

Individuals now use new media technologies such as smartphones to stay connected with their families and friends via various modes of communication. Additionally, users' everyday lives have transformed considerably with newer forms of gaining education, working and maintaining relationships apart from online shopping and managing finances.

1. *New Ways of Living*

The speed, convenience, and versatility of social messaging have led to its integration within the entire customer journey, and it is even greater than traditional methods like emails, phone calls, or live chats.

WhatsApp and other similar social messaging apps have allowed people to share texts, videos, photos, and other content. Even though these apps are called IP messaging apps, these have primarily become 'Social Networks'. The forerunners in the arena of IP messaging are WhatsApp, Viber, Google Duo, Hike, Skype, Facebook Messenger, VChat, Instagram Messenger, Snapchat, Telegram, etc., wherein WhatsApp takes the lead across the country. In addition, these IP messaging platforms allow users to place a video or voice call (also known as VOIP), thereby changing the dynamics of the telecom sector in India and across the globe. Emojis, GIFs, emojis, and stickers have become quite prevalent, especially amongst the younger audience. In contrast, sharing images, videos, documents, and locations has garnered worldwide attention as well. Furthermore, social networking sites such as Facebook, Instagram, LinkedIn, Snapchat, etc., have grown multifold, initiating new ways of staying connected with friends and family.

Moreover, with the emergence of social networking sites, matrimonial sites, dating sites, edTech, etc., a new world of online relationships, internet dating, online education, and online work modes has also emerged, shaping our current cultural and social practices.

Online shopping has also been enabled due to the emergence of e-commerce websites and digital finance practices, thereby transforming

the everyday lives of society, including consumers and producers. Furthermore, every aspect of our lives can be found online, which provides an alternative to the physical world in all walks of life.

2. *Mobile Revolution*

Mobile media in the contemporary world is firmly embedded in our lives. Mobile phones have offered us the unique possibility of transcending the confines of space and located-ness, allowing us to communicate with others regardless of where we are. In doing so, they transformed how we understand space and disrupted the boundaries we had placed between private and public space and between working life and social-private life. With the infusion of mobiles, the emerging highly mobile, personalised, atomised, hybrid work-social life has completely changed the dynamics of our way of life socially, culturally, and politically.

In the political spectrum, horizontal social networks have developed extensively; however, the scope of democratising political mediation and the pressure of mobile media commercialisation and control are still contested. While in the sociocultural outcomes of the mobile revolution, individual autonomy has enhanced considerably with a renewed sense of creativity and use of imagination due to the influx of several messaging and calling digital platforms, however, the dominance of consumer culture has taken over face-to-face communication.

3. *Finance Technology and New Economic Practices*

The digital economy intersects with postmodern cultural economies (the media, the university, and the arts) and the information industry (the information and communication complex).

The digital economy is recognised as a specific mechanism of internal capture of larger social and cultural knowledge pools. Specific forms of production (Web design, multimedia production, digital service), along with forms of labour we wait to recognise as such (chat, mailing lists, amateur newsletters, and maybe free labour, too), construct the idea of digital labour.

The notion of a digital economy has revolutionised the dynamics of the economy and economic practices as well. With the emergence of cyberspace, credit and debit cards have become a norm apart from online transactions, thereby blurring and transcending geographical boundaries and language barriers. The advent of online transactions, wallet apps, UPI, PayPal, etc., has also transformed economic practices in India.

In addition, the Digital India programme has further enhanced the scope of India's digital economy. Announcements on Fibre to the Home (FTTH) and 5G will only hasten the development of reliable, high-speed telecom infrastructure, the backbone of every digital economy.

Apart from the variation in the dynamics of the economy, cryptocurrencies such as Bitcoin have materialised. It is a decentralised digital currency without a central bank or single administrator.

4.3.2 Digital Democratic Processes: ICTs, e-Governance and New Concepts

The evolution of digital media is a fascinating backdrop for examining political institutions. New media technologies have become tools for moulding societal structures, evidently shaping interactions between individuals and governments. Research on digital media's impact on democratic systems continues to grow through the metric of press freedom and expression. On the contrary, comparative studies on its effects within authoritarian governments have lagged.

1. *e-Governance*

e-Governance in India has transformed to promote inclusive growth that covers electronic services, products, devices and job opportunities. An initiative driving this growth is Digital India. The Digital India programme is the government's flagship programme with a vision to transform India into a digitally empowered society and knowledge economy. The aim of this initiative is maximum governance and minimum government.

E-Governance emphasises shifting governance and policymaking to the digital platform and using digital tools to bring about change and transformation in the political and democratic processes.

2. *Cyber Laws*

With the arrival of digital media, policymakers worldwide developed cyber laws for their respective countries, which governed communication technology, particularly cyberspace or the Internet.

Cyber laws apply to all users of this space as they have worldwide jurisdiction. Cyber law can also be described as the branch of law that deals with legal issues related to using inter-networked information technology.

In most developed countries, cyber laws have been developed stringently to adhere to the norms of privacy and security of its citizens, especially in Western countries. However, in most developing countries, cyber laws are not as well defined and are in the best interests of all stakeholders involved.

In India, cyber laws are contained in the Information Technology Act, 2000 (IT Act), which came into force on October 17, 2000. The Act's main purpose is to provide legal recognition to electronic commerce and facilitate filing electronic records with the Government. A recent amendment of the Act in 2021, which specifically deals with laws about OTT platforms and social media, has been brought under the purview of the existing IT Act in India.

3. *Net Neutrality*

The concept of net neutrality focuses on the aspect that all data on the Internet should be treated equally by corporations, such as Internet service providers and governments, regardless of content, user, platform,

application or device. Network neutrality requires all Internet service providers (ISPs) to provide the same level of data access and speed to all traffic and that traffic to one service or website cannot be blocked or degraded. ISPs are also not to create special arrangements with services or websites in which companies provide them with improved network access or speed.

The term "network neutrality" was introduced in 2002. The concept was floated in response to efforts by the Federal Communications Commission (FCC), a United States regulator body, to require broadband providers to share their infrastructure with competing firms. Internationally, countries like the USA, Japan, Brazil, Chile, Norway, etc., have some form of law, order or regulatory framework that affects net neutrality.

In the Indian context, the Telecom Regulatory Authority of India (TRAI) adopted net neutrality regulations in July 2018. The regulations highlight that internet access services should be governed by a principle that restricts any form of discrimination or interference in the treatment of content, including practices like blocking, degrading, slowing down, or granting preferential speeds or treatment to any content.

4. *Digital Literacy Initiatives*

As technology transforms what and how we read and consume information, the notion of digital literacy becomes crucial.

The American Library Association (ALA) defines digital literacy as "the ability to use information and communication technologies to find, evaluate, create, and communicate information, requiring both cognitive and technical skills."

In this context, digital literacy encompasses more than education because the Internet has become a key source of information. It is imperative to be digitally literate to comprehend what is authentic and reliable information while consuming it. Individuals aware of digital literacy understand the basics of Internet safety, such as creating strong passwords, understanding and using privacy settings, and knowing what or what not to share on social media.

While digital literacy has gained prominence globally at an institutional level, India has embraced the National Digital Literacy Mission (NDLM) Programme, not just for students but for all strata of society.

The National Digital Literacy Mission Programme is a dynamic and integrated digital literacy awareness, education, and capacity programme platform. It will help rural communities take the lead in the global digital economy, help them maintain competitiveness, and shape a technologically empowered society. The vision of the Digital Literacy Mission (DLM) is to create a multi-stakeholder consortium and work with the government and their various schemes and agendas to showcase in some of those panchayat constituencies how making them digitally literate can change the scenario of governance, empowerment, social inclusion, educational approach and employment.

4.4 DIMENSIONS OF NEW MEDIA LITERACY

On the one hand, new media technologies have completely transformed the minute ways in which we live our lives; on the other hand, they have also brought about changes at the macro level, from economy to politics. However, despite the transition of all paradigms of society, it is imperative to understand the critical perspective of digital media to be fully equipped with how digital media can empower individuals and society at large.

4.4.1 Digital Devices, Access and Empowerment

When discussing access to digital devices and new media technologies, we often take a privileged stance and consider it a no-brainer to own devices such as laptops, smartphones, the Internet, etc. However, the concept of access does not limit itself to the upper middle class and high class of society; it also leans towards the economically weaker sections of society along with the marginalised sections. Furthermore, apart from ownership of said devices, the usage and ability to use them also highlight the aspect of access. The primary question that arises when it comes to empowerment via new media technologies in society is if marginalised communities such as persons with disabilities (PWDs), people from remote communities, people belonging to lower socio-economic strata, LGBTQIA communities, etc., have equal opportunities to access ICTs. If not, then the need to find a way to bridge this gap is of utmost relevance, essentially to make society equitable at the basic level of access.

4.4.2 Understanding the Potential of New Media Technologies

The second dimension of new media literacy is the opportunity to understand and fully grasp the impact and reach of these new media technologies in society. This parameter deals with the scope of influence that new media technologies might have on our social, cultural, political and economic lives. This dimension has already been discussed in great detail in the previous sections of this unit. However, a critical analysis of the same is explicitly needed to accept and adapt, first and foremost, to the fact that new media technologies have a major role in society.

4.4.3 Developing New Media Skills and Competencies

Lastly, the third dimension of new media literacy is the participatory function of users in new media technologies to be fully empowered. However, one must have the necessary skill set and competencies.

Jenkins et al. (2009) have identified 11 new media literacies comprehensively covering social skills and cultural competencies amongst young people to participate in online media spaces fully. The new media literacies' framework is based on traditional literacy, research, technical, and critical analysis skills taught in the classroom and developed through collaborations and networking. The core media literacy skills are as follows:

1. *Play: the capacity to experiment with one's surroundings as a form of problem-solving*

Through play, children and young people try on roles, experiment with culturally central processes, manipulate core resources, and explore their immediate environments. Children can play games and shift their emphasis from fun to engagement and learning, which is also deeply motivating. Educators can tap into play as a skill when they encourage free-form experimentation and open-ended speculation.

2. *Simulation: the ability to interpret and construct dynamic models of real-world processes*

New media provides powerful new ways of representing and manipulating information. New forms of simulation expand our cognitive capacity, allowing us to deal with larger bodies of information, experiment with more complex configurations of data, form hypotheses quickly and test them against different variables in real time. Contemporary video games allow youth to play with sophisticated simulations and, in the process, to develop an intuitive understanding of how we might use simulations to test our assumptions about the way the world works.

3. *Performance: the ability to adopt alternative identities for improvisation and discovery*

Gameplay is also one of a range of contemporary forms of youth popular culture that encourages young people to assume fictive identities and, through this process, develop a richer understanding of themselves and their social roles. Educators have used dramatisations to teach children to reflect more deeply on their experiences of stories. One of the most prominent examples is Model United Nations (MUN), which helps young people develop new knowledge and strategies by enabling them to develop alternative identities.

4. *Appropriation: the ability to meaningfully sample and remix media content*

Appropriation is understood as a process by which students learn by taking culture apart and putting it back together. It may involve both analysis and commentary. Sampling intelligently from the existing cultural reservoir requires a close analysis of this material's existing structures and uses; remixing requires an appreciation of emerging structures and underlying potential meanings. Such appropriation is visible in drama, theatics, art, and music and can also be acknowledged in gaining insight into educational materials.

5. *Multi-tasking: the ability to scan one's environment and shift focus onto salient details on an ad hoc basis*

Attention, in order to learn cohesively, is important but difficult for learners nowadays, especially due to the emergence of digital media; however, instead of focusing on narrowing attention, young people often respond to a rich media environment by multi-tasking. Multi-tasking involves monitoring and responding to the sea of information around us. Students need help distinguishing between being off task and handling multiple tasks simultaneously. Currently, young people are playing with

these skills as they engage in games or social activities that reward the ability to maintain a mental picture of complex sets of relationships and to adjust quickly to shifts in perceptual cues.

6. *Distributed Cognition: the ability to interact meaningfully with tools that expand our mental capacities.*

Applications of the distributed cognition perspective to education suggest that students must learn the affordances of different tools and information technologies and know which functions tools and technologies excel at and in what contexts they can be trusted. Students need to acquire patterns of thought that regularly cycle through available sources of information as they make sense of developments in the world around them. One of the recent examples is augmented reality (AR), a potential tool for distributed intelligence to be applied in the learning process.

7. *Collective Intelligence: the ability to pool knowledge and compare notes with others towards a common goal*

Children and adults are acquiring the skills to operate within knowledge communities by interacting with popular culture. We often learn through play that we later apply to more serious tasks. For example, young Pokémon fans, who each know crucial details about the various species, constitute a collective intelligence whose knowledge is extended each time two youths on the playground share something about the franchise. Educators can deploy aspects of collective intelligence when students pool observations and work through interpretations with others studying the same problems at scattered locations. Such knowledge communities can confront problems of greater scale and complexity than any student can handle.

8. *Judgement: the ability to evaluate the reliability and credibility of different information sources*

The new mediated landscape of mainstream news sources, collaborative blog projects, unsourced news sites, and increasingly sophisticated marketing techniques aimed at ever-younger consumers demand that students distinguish fact from fiction, argument from documentation, real from fake, and marketing from enlightenment. Even when media content has been determined credible, it is vital for students also to identify and analyse the producer's perspective: who is presenting what to whom and why. Media literacy education, therefore, heavily relies on the concept of Judgment to distinguish information from misinformation and disinformation.

9. *Transmedia Navigation: the ability to deal with the flow of stories and information across multiple modalities*

At the most basic level, transmedia stories are stories told across multiple media. Modern literacy requires the ability to express ideas across various systems of representation and signification, including words (spoken or written), images (still or moving), music, 3D models, etc. Students must learn to sort through various modes of expression,

determine which is most effective in reaching their audience and communicating their message, and grasp which techniques best convey information through this channel.

10. Networking: the ability to search for, synthesise, and disseminate information

In a world in which knowledge production is collective and communication occurs across various media, the capacity to network emerges as a core social skill and cultural competency. Students today tap into popular search systems such as Google.com, Amazon, etc., readily available on Web 2.0, to collect and annotate data for themselves and other users. Therefore, Networking is only partially about identifying potential resources; it also involves a process of synthesis, during which multiple resources are combined to produce new knowledge. Educators use social networking to link learners with others who might share their interests or encourage students to publish works produced for the larger public.

11. Negotiation: the ability to travel across diverse communities, discerning and respecting multiple perspectives, and grasping and following alternative sets of norms

The fluid communication within the new media environment brings together groups who otherwise might have lived segregated lives. Culture flows easily from one community to another. People online encounter conflicting values and assumptions and come to grips with competing claims about the meanings of shared artefacts and experiences. Therefore, it becomes increasingly critical to help students acquire skills in understanding multiple perspectives, respecting and even embracing diversity of views, understanding a variety of social norms, and negotiating between conflicting opinions. Educators can foster negotiation skills when they bring together groups from diverse backgrounds and provide resources and processes that ensure careful listening and deeper communication.

Therefore, as highlighted by Jenkins et al. (2009), core media literacy skills combine social skills and cultural competencies in and out of school so that young people can adapt and learn effectively about the dynamic environment through the available tools. Apart from school, parents become another agency that can help shape young people's relationships with online tools for enhancing their mental capacities to be media and information-literate, from communication to effective participation in online media spaces.

Check Your Progress: 2

Note: 1) Use the space below for your answers.

2) Compare your answers with those given at the end of this unit.

1. What are the new social and cultural practices adopted by individuals with the help of new media technologies?

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Mobile Transition

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2. How have the democratic processes evolved with new media technologies?
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3. What are the social skills and cultural competencies Jenkins et al. (2009) discussed for empowering themselves?
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4.5 USER-CENTRIC PARTICIPATION VIA NEW MEDIA TECHNOLOGIES

4.5.1 Participatory Culture and New Media Literacy Framework

From a media literacy perspective, Jenkins et al. (2009) initiated the idea of participatory culture among young people in online media. As per Jenkins et al. (2009), young people are consumers and producers in online media spaces. Ito et al. (2009) illustrate that youth participate in online media spaces for two main purposes- friendship-driven and interest-driven. In this context, Ito et al. (2009) identify three sub-genres of participation: hanging out (friendship-driven participation), messing around (acquiring a new skill online) and geeking out (intensive and focused participation after acquiring the skill online; hence, learning).

The notion of participatory culture, as per Jenkins et al. (2009), stems from three core gaps:

1. **Participation Gap** (unequal access to opportunities, experiences, skills and knowledge)
2. **Transparency Problem** (difficulty to recognise how media shapes their perception)
3. **Ethics Challenge** (ethics to communicate and responsibly participate in online media spaces)

Therefore, media education and literacy have become imperative to making online media a dynamic environment that can be engaged to its full potential. Moreover, participatory culture shifts the focus on literacy from individual expression to community involvement, especially among young people.

Borrowing the idea of “Affinity Spaces” (Gee, 2004), Jenkins et al. (2009) state that affinity spaces have become the basis of participatory culture among young people, offering them opportunities to learn and also bridging differences of age, class, gender, race, and educational level. Furthermore, participatory culture includes both popular culture and informal learning for efficient participation in online media spaces.

There are four forms of participatory culture:

1. **Affiliations** (forming formal and informal memberships in online communities centred around various forms of online media such as Friendster, Facebook, message boards, metagaming, game clans, etc.)
2. **Expressions** (producing new forms such as digital sampling, skinning and modding, fan video making, fan fiction writing, zines, mash-ups, etc.)
3. **Collaborative Problem-Solving** (working together in formal and informal teams to complete tasks and develop new knowledge through Wikipedia, alternative reality gaming, spoiling, etc.)
4. **Circulations** (shaping the flow of media through podcasting and blogging)

Therefore, participatory culture combines traditional literacy skills (how to search for information, evaluate the credibility of information, synthesise and make sense of information, and make a decision and action) and new media literacy (social skills or methods of interaction with larger communities).

4.5.2 Active Audience Approach and User-Generated Content

With Web 2.0, the shift from users to produsers and consumers to prosumers has become apparent. Before the Internet, communication was followed with a top-down approach, making it passive and mostly one-way. However, audiences can participate in media production and interact with media content online. Moreover, new media platforms have enabled the common public to access, interact with and participate in the media organisation, leading to an active audience approach. An active audience approach has also initiated well-informed participation in society. The framework of the Internet also allows instantaneous reach, which further motivates individuals to shift from passive participation to active participation in the media production process. One of the key examples of this transformation is citizen journalism. Citizen journalism, as a concept, has allowed citizens to report on local issues and bring forth stories worth telling to the world.

An increased availability of technologies supports the increased diversity of participatory practices. Due to the Internet's modality, there is an intensification and massification of already existing participatory practices, which gives rise to more user-generated content. Therefore, user-generated

content emphasises the participation of digital media users in content production. Some examples of user-generated content are blogs, vlogs, podcasts, webzines, digital storytelling, wikiing, etc.

Despite the possibility of engaging with new media technologies in the best way possible, digital participation varies on how individuals use the said technologies, wherein the distinction ranges from consumption to production (Beemt, 2010):

1. **Traditionalists:** Such individuals only use the Internet for browsing. Therefore, it remains a one-way communication and is inclined towards a passive audience approach.
2. **Gamers:** Gamers engage with new media technologies for gaming and similar purposes, wherein they adapt and perform alternative identities. Due to this, they partially lean towards active engagement with the Internet.
3. **Networkers:** Networkers, on the other hand, prefer to maintain networks and interchange information with other networkers. They maintain blogs and vlogs and indulge in activities stimulating active audiences across the Internet.
4. **Producers:** Producers are the ultimate active audiences who participate in producing user-generated content. Using various techniques and concepts, producers engage with new media technologies for writing, uploading photos and videos, graphic design, and drawing. They may also participate in civic or political engagement apart from social activities.

4.5.3 Civic Engagement and Participatory Politics

With the rising importance of new media technologies as well as their reach, large proportions of people across racial and ethnic groups have access to the Internet and use online social media regularly to stay connected with their family and friends while pursuing their interests and hobbies. Therefore, with the possibility of engaging with and participating in online media, the public can:

- a) Link quickly, aggregate and share information from a vast number of sources;
- b) Derive meaning from this jumble of information through commentary;
- c) Spontaneously generate online discussion communities around any given piece of information; and
- d) Enable discussion communities concerned with a particular issue to multiply and mutate rapidly, self-replicating viral across the Internet.

Due to the public engagement with new media, a direct relationship has also been drawn between an individual's personality and their engagement with public affairs, including the political process, social movements and academic activities. Moreover, social ties can be developed with other

interested people who influence their engagement over the digital platform. Thus, online social media networks facilitate better participation in civic affairs by associating with creating with multimedia content, transmedia navigation, and various other UGC formats.

Similarly, participatory politics has gained traction due to new media technologies enabling horizontal and non-hierarchical communication, especially for marginalised communities. Participatory politics is a significant dimension of the political life of young people, giving them greater control, voice, and potential influence over the issues that matter most in their lives. However, participatory politics can be considered an addition to an individual's engagement rather than an alternative to other political activities. Learning how to judge the credibility of what people find online has also enabled youth to get news through participatory channels.

4.5.4 Digital Activism and New Media for Social Action

Individuals and their organisations use the Internet to organise themselves and mobilise the public by producing radio shows, newsletters, newspapers and magazines, wikis, spoof websites and sites that expose misinformation. There are predominantly four areas through which citizens can engage with new media for social action:

1. Freedom of expression through citizen journalism: User-generated content (UGC) is increasingly used and published by mainstream media organisations. Individual citizens are researching, preparing and publishing reports for a mass audience. More capable citizens are using new media technologies, leading to better quantity and quality of UGC. Therefore, citizen journalists contribute to:
 - a) news content;
 - b) sharing opinions and first-hand experiences;
 - c) collaborative content (digital storytelling, community workshops, etc.), and
 - d) interactive journalism (collective experience).
2. Digital storytelling in identity development: Digital storytelling explores the identity that individuals and organisations have developed in the public and not-for-profit sections. It acts as a vehicle for the voices of under-represented or marginalised groups of adults, especially women. A digital story is a personal narrative with digital technologies for public consumption online. Therefore, digital stories:
 - a) Encourage people to conduct research;
 - b) Foster critical thinking skills;
 - c) Assist people to communicate effectively;
 - d) Give people a voice;
 - e) Encourage people to develop a community; and
 - f) Promote creativity, digital and information literacy.

3. Intercultural skills and social action: Intercultural skills help to bridge differences, defuse conflict and set a foundation for peaceful coexistence. The basis for intercultural competence lies in the following skills:
 - a) Self-awareness and self-respect (by examining the lens through which you view the world)
 - b) Cultural humility and empathy (through accepting how others see the world)
 - c) Engaged listening (in order to participate in authentic intercultural dialogue)
 - d) Flexibility (through adapting to temporary shifts in perspective)
 - e) Relationship building (by forging lasting cross-cultural personal bonds).
4. Freeing the mind to use new technologies for social action: New media technologies associated with the Internet have created the most liberating intellectual and social spaces in the history of humanity. People who want to communicate with one another have found ways around government restrictions. This has resulted in more transparency and openness in the government. It has benefited marginalised and oppressed people since freedom of speech and action is now available to millions worldwide.

Furthermore, social media applications, including social networking sites, blogs, podcasts, and content shares, have been used by several institutions to facilitate a participatory cultural experience. Examples of the role of social media in pushing social action are:

- Collaborative editing of an article on Wikipedia
- Uploading of images on Facebook
- Uploading of videos on YouTube
- Creation of short-term messages on Twitter

Such activities enable more and more people to become media producers, distributors, and consumers. In such ways, social networks also challenge one of the former hegemonies of traditional media institutions. Therefore, online media can allow users to create and participate in online spaces for various causes, especially through user-generated content. Although there are varied forms of participation, young people actively engage with their newfound agency to participate in civic and political arenas.

Check Your Progress: 3

Note: 1) Use the space below for your answers.

2) Compare your answers with those given at the end of this unit.

1. What are the four forms of participatory culture?

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2. Discuss the role of user-generated content in the active audience approach.
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Uses New Media Technologies for Society

3. How can an individual participate in the democratic processes with the help of new media technologies?
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4.6 LET US SUM UP

In this unit, we have discussed the notion of media convergence, which stems from three forms of convergence: technological, regulatory and industrial. The dimensions of media convergence also stimulate the novelty of new media technologies towards newer experiences, other ways of representation, refined relationships between subjects and the technology, evolved concepts of identity and community and different ways of organisation and production. Additionally, the aspects of multiple media and how they contribute to the transition from old to new media have been discussed in detail.

Regarding the transcendence of society due to Web 2.0 technologies, the shift in cultural and social practices has been reflected instead of a change in lifestyle, communication, mobile technologies, and new economic practices at the micro level. At the macro level, new media technologies have influenced democratic processes by introducing concepts such as e-governance, cyber laws, net neutrality, and digital literacy initiatives. However, despite the knowledge of such concepts, the dimensions of new media literacy are imperative to understand, essentially to critically assess the uses of new media technologies for and in society. Accessibility to ICTs, understanding their potential and the need for social skills and cultural competencies to ascertain the same have also been discussed.

Lastly, the participatory function of new media technologies in society has been assessed in great detail. The Participatory Culture and New Media Literacy framework by Jenkins et al. (2009) has been observed to be critical for this unit section. The active audience approach and essence of user-generated content, which becomes the crux of the participatory function, delve deeper into new media participation's sociological and political approach. Finally, the possibility of civic engagement, participatory politics and digital activism, which has been made possible due to new media

technologies, has been assessed from the empowerment vantage point.

4.7 FURTHER READINGS

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4.8 CHECK YOUR PROGRESS: POSSIBLE ANSWERS

Check Your Progress: 1

1. The phenomenon of media convergence deals with the interconnectedness of communication technologies, computer networks, and media content. Therefore, it brings the "three C's" together: computing, communication, and content.
2. Three dimensions of media convergence:
 1. Technological convergence
 2. Regulatory convergence
 3. Industrial convergence
3. Characteristics of new media technologies:
 1. New textual experiences
 2. New ways of representing the world
 3. New relationship between subjects (users and consumers) and media technologies
4. New experiences of the relationship between embodiment, identity and community
5. New conceptions of the biological body's relationship to technological media
6. New patterns of organisation and production

Check Your Progress: 2

1. New forms of social and cultural practices adapted by individuals due to new media technologies:
 - New ways of living
 - New ways of communication
 - Mobile revolution
 - New economic practices
2. Influence of new media technologies on the democratic processes:
 - e-Governance
 - Cyber laws
 - Net neutrality
 - Digital literacy initiatives
3. Social skills and cultural competencies introduced by Jenkins et al. (2009):
 1. Play: the capacity to experiment with one's surroundings as a form of problem-solving
 2. Simulation: the ability to interpret and construct dynamic models of real-world processes
 3. Performance: the ability to adopt alternative identities for improvisation and discovery
4. Appropriation: the ability to meaningfully sample and remix media content
5. Multi-tasking: the ability to scan one's environment and shift focus onto salient details on an ad hoc basis
6. Distributed Cognition: the ability to interact meaningfully with tools that expand our mental capacities.
7. Collective Intelligence: the ability to pool knowledge and compare notes with others towards a common goal
8. Judgement: the ability to evaluate the reliability and credibility of different information sources
9. Transmedia Navigation: the ability to deal with the flow of stories and information across multiple modalities
10. Networking: the ability to search for, synthesise, and disseminate information
11. Negotiation: the ability to travel across diverse communities, discerning and respecting multiple perspectives, and grasping and following alternative sets of norms

Check Your Progress: 3

1. Four forms of participatory culture (Jenkins et al., 2009):

Mobile Transition

- Affiliations (forming formal and informal memberships in online communities centred around various forms of online media such as Friendster, Facebook, message boards, metagaming, game clans, etc.)
 - Expressions (producing new forms such as digital sampling, skinning and modding, fan video making, fan fiction writing, zines, mash-ups, etc.)
 - Collaborative Problem-Solving (working together in formal and informal teams to complete tasks and develop new knowledge through Wikipedia, alternative reality gaming, spoiling, etc.)
 - Circulations (shaping the flow of media through podcasting and blogging)
2. Before the Internet, communication was followed with a top-down approach, making it passive and mostly one-way. However, audiences can participate in media production and interact with media content online. The Internet's framework also allows instantaneous reach, further motivating individuals to shift from passive to active participation in media production. Due to the Internet's modality, there is an intensification and massification of already existing participatory practices, which gives rise to more user-generated content.
 3. Possibilities of individuals to participate in democratic processes with new media technologies:
 - Media production and user-generated content
 - Civic engagement
 - Participatory politics
 - Digital activism (Freedom of expression, citizen journalism, digital storytelling, identity development, adoption of intercultural skills, social action)

Block

2

INTERNET OPPORTUNITIES AND CHALLENGES

UNIT 5

Uses of Interactive Multimedia Tools

UNIT 6

Young People in the Virtual World

UNIT 7

Challenges and Risks in the Virtual World

UNIT 8

Promotion of Alternative Media

BLOCK 2 INTRODUCTION

After you learn about the critical analysis of media contents in the first Block, let us move on to the contemporary digital media system. In this Block, you will understand the specific application side of information and Communication Technology (ICT) based digital platforms. Its uniqueness, usefulness, resourcefulness, etc., are explored deeply in this Block.

Unit 5: Uses of Interactive Multimedia Tools. In today's digital age, learning is evolving rapidly, introducing innovative tools and platforms. This module explores interactive multimedia technologies, comprehensively understanding their significance and applications. We'll explore interactivity, exploring its levels and manifestations within multimedia contexts. We'll navigate through various interactive learning formats, from text to audio, video, and graphics, each offering unique engagement opportunities. Additionally, we'll examine free and open-source software for content creation and explore integrating digital games into education, distinguishing between educational and entertainment games. You will grasp interactive multimedia's role in learning and its potential for societal impact.

Unit 6: Young People in the Virtual World. Communication technologies have revolutionised human civilisation throughout history, fostering increased literacy and immersive experiences. From Plato's concerns about the influence of theatre to modern debates on online safety, we explore the growth and expense of the virtual world. This Unit explores its impact on generational learning, the emergence of digital natives, and the participatory culture it fosters. We examine the dichotomy between the real and virtual realms, navigating the complexities of simulation-based games. Despite risks, the virtual world offers invaluable education, healthcare, and many more opportunities.

Unit 7: Challenges and Risks in the Virtual World. Before exploring cyber security, it's essential to grasp the essence of 'cyberspace'. Coined by William Gibson, it represents a virtual realm where digital interactions occur beyond physical boundaries. Understanding cyberspace's intricacies is pivotal as we navigate evolving threats. From hacking to cyberstalking, the challenges in securing cyberspace are multifaceted. You will understand the cyber security concept, emphasising the need for robust defences and legal frameworks. By discerning between computer-related and facilitated crimes, you'll acquire insights crucial for safeguarding digital assets in an interconnected world.

Unit 8: Promotion of Alternative Media. In this Unit, we explore the transformative impact of digital technology on media communication. As traditional media evolves into interactive platforms, alternative media emerges as a beacon of inclusivity and participatory democracy. Enabled by internet-enabled smartphones and social media, users engage in two-way communication, creating and sharing diverse content. Yet, disparities persist, hindering access for marginalised communities. Throughout this Unit, we will understand the essence of alternative media, its necessity, forms, and

challenges. We critically assess ownership, content creation, audience engagement, and sustainability.

Cyberspace provides immense opportunities for its users. Unlike other mainstream media, digital media facilitates interactivity to engage with a wide range of audiences and subjects. As a responsible digital citizen, you must engage with this medium productively. For that, this Block would give an orientation.

UNIT 5 USES OF INTERACTIVE MULTIMEDIA TOOLS

Structure

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 - 5.2 Interactivity
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5.0 INTRODUCTION

Learning in the digital-networked space has opened up many innovative tools and spaces. Interactive multimedia technologies are immersive, activate the user, and sustain the interest and curiosity to learn, play, and apply knowledge.

5.1 LEARNING OUTCOMES

After completing this unit, you should be able to:

- Understand the definition and nature of interactivity;
- Acquire knowledge on interactive multimedia formats for learning;
- Familiar with the open-source software for creating e-content and learning; and
- Learn the user of games for social change through learning.

5.2 INTERACTIVITY

The convergence between new technologies and the Internet has led to the unprecedented communications revolution in the twenty-first century. Interactivity has become the main adjective of this world and the media landscape. Scholars have identified that interactivity is the interweave between three elements in communication: source, medium, and message. Despite no consensus on the definition of interactivity, some scholars identify it as "most effective if a high level of interactivity between participants is involved". (Koolstra and Bos, 2011, p. 207)

Finding a comprehensive definition for the term interactivity is challenging due to the overlap with many fields; for instance, some scholars identify interactivity from a communication angle, technology, education, etc.

Furthermore, Quiring and Schweiger (2008) indicate that the term "interactivity" is derived from sociology and computer sciences, while communication science borrowed the term in the late 1980s to be used in communication studies. However, nowadays, interactivity is a common expression in the age of social media and the Internet.

In addition, Jenkins (2006) distinguishes between interactivity and participation: "Interactivity refers to the ways that new technologies have been designed to be more responsive to consumer feedback." (p. 133), while participation "is shaped by the cultural and social protocols." (p. 133).

5.2.1 Levels of Interactivity

The measure of interactivity is considered challenging because there is no consensus on its definition, and it overlaps with various sciences. Thus, the levels of interactivity are not fixed due to their connection with other knowledge. This section attempts to identify the different levels of interactivity in the context of media and education.

Koolstra and Bos (2011) identify the levels of interactivity as interactive, with several elements such as synchronicity, timing flexibility, control over the content, number of participants, physical presence, use of sight, use of hearing, and use of other senses.

The first level is a maximum score of interactivity, which refers to the use of a set of senses during the communication process, for instance, the use of hearing, use of sight, as well as interaction with other elements such as timing flexibility, control over the content, and the number of participants. Face-to-face communication is considered one of the levels of interactivity through interacting with the many senses, such as touch or smell.

In the age of convergence blogs, online chats, and watching video clips with education, the levels of interactivity are different. Salmon (2002) identified five levels of interactivity for e-learning:

1. access and motivation,
2. online socialisation,

3. information exchange,
4. knowledge construction
5. development.

5.2.2 Interactive Learning

Whereas interactivity term in learning refers to the merits or interaction level of the media. It's a dynamic activity between the learning elements and the medium.

Researchers identify the types of interaction in learning into five kinds of interactivity (Bannan-Ritland, 2002; North- rup, 2002), which are designed to develop the process of learning and to obtain knowledge:

1. **Learner:** content interaction: Learners gain awareness by learning from the content of lectures, which are systematically arranged and redesigned to obtain effective teaching.
2. **Learner:** interface interaction refers to the interaction between the interface and the human element that emerges when interacting with new technologies.
3. **Learner-instructor** interaction refers to the relationship between learners and teachers who are aware of the use of new technologies in the learning process.
4. **Learner** interaction refers to discussions between learners and teachers, which allow both to share their thoughts through interactive technology. This results in efficiency in learning by enriching the dialogue and information exchange.
5. **Learner:** self-interaction encourages learners to expose, investigate, and build awareness through interactive technology.

5.2.3 Interactivity in Multimedia

A kind of communication known as "interactive media" is one in which the value of the output is dependent on the value of the input. It allows users to control, integrate, and alter many different types of media, such as text, computer graphics, audio, video, and animations. This course examines the conceptual design of interaction, new media, interactivity, human-computer interaction, graphical user interfaces, digital culture, interaction design, and virtual reality. The integration of many information technologies is what makes interactive multimedia possible. These technologies include computers, data storage, telephones, and televisions. Examples of interactive multimedia Applications include video games, electronic encyclopaedias, travel guides, and educational and training programmes.

Oliver Quiring and Wolfgang Schweiger (2008) argue interactivity is "a process of inter-human communication via technical means." Hence, the technical part is crucial for interactivity.

They argue two types of interactivity:

1. User-User interactivity
2. User-System interactivity

However, developers generate the algorithm and content of the system. Hence, user-system interactivity is user-developer communication. User-user interactivity also happens between the user and the developer. Therefore, it takes place between human beings.

They propose three levels of interactivity:-

1. Action
2. Evaluation of the situation
3. Exchange of meaning

Here, evaluating the situation has a crucial impact on action and the exchange of meaning.

Check Your Progress: 1

Notes: 1) Use the space below for your answer.

2) Compare your answers with those given at the end of this unit

1. Define interactivity. Provide examples of interactive platforms.

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2. What are the two types of interactivity?

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3. Explain the levels of interactivity.

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4. Name five types of interactive learning.

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5.3 INTERACTIVE MULTIMEDIA LEARNING FORMATS

**Uses of Interactive
Multimedia Tools**

The emerging multimedia platforms are dynamic and require "updates" to provide more security and stability for the content and to suit various digital platforms. It is important to understand them separately, which helps them to study converged media content. The elements of multimedia provide the learner with a more immersive experience. The file formats are now numerous and ever-emerging, but the cloud-based content made it possible to make the text, audio, video, animation and graphics interactive and seamlessly networked.

5.3.1 Text

Education technology software enables static text to become interactive e-text, which helps learning more interesting and fun and improves cognitive skills. Massive open learning, as well as other e-learning processes, along with audio-video e-text, plays an important role. While reading the text, the user can hyperlink relevant information for further reading. The text colour also plays an important role in communication with the learner. Colouring key terms and providing a pop-up-enabled brief meaning or explanation will help the learner remember and understand the meaning. The text audio reader is another interactive option that will help users who are not native English speakers. The audio-enabled text (difficult words) will enhance the user's pronunciation. It can be done using cloud-based text platforms like Google Documents, word documents on OneDrive, etc. A plain Word document linked to an online web page can also be converged with the above-discussed interactions. Some of the software is www.activelylearn.com, where you can also add interactive questions for the learners while they read the e-text, including short answers and multiple choice questions. It also conducts polls. PDF documents using software like Adobe Acrobat Reader, Foxit Reader, Libre Office, Inkscape, etc., will help add notes and annotations and highlight the text in PDF documents.

Text-based content creates Doodles, Whiteboard animations, and word clouds. Word clouds are one tool used to use keywords in a study to create and highlight the most appropriate and popular terms among other text through a graphics or interactive text format.

5.3.2 Audio

Smart learning is enabled with Artificial intelligence-based communication systems like Amazon 'Alexa', Google Nest 'Mini', driving directions in maps, etc. The voice commands help navigate content and control smart gadgets. Learning with Alexa or Google Mini provided an immense opportunity not only for people who are blind but also for users who would be learning through questions, playing quizzes and other interactive tools. The digital version of newspapers on mobile applications and websites is enabled with the screen reader, where you can listen to the audio version of the content.

NPTEL platform. It offers learners video, e-text, and audio formats of the lecture for download. In digital learning, audio has gained more importance as it engages users while doing other work (for example, travelling on a metro rail). Indeed, we often listen to important speaker videos on YouTube rather than watch them. Audio lectures have great potential to engage the audience's aural senses.

Podcasting is another emerging area where teachers, enthusiasts, and skilled people share their expertise with the desired audiences. Ted Talks are one of the most popular series available in both video and audio formats. Learning a language requires the correct pronunciation of words. Audiobooks and audio lectures are effective ways of learning the art of language.

Sound can help with motivation and focus, according to an evaluation of audio interaction. The blind students could distinguish noises with ease. Visually impaired students can feel spatiality and immersion in AudioChile, a virtual environment with 3D sound. (Sanchez, Saenz, pg. year) For those who are blind, the field of assistive technology can be highly complex and can be seen from various angles. Some of these technological advancements for blind people include smartphone-based assistive technology like Carnegie Mellon University's smartphone-based Trinetra project, which enables blind people to scan product barcodes independently; StopInfo, which provides detailed information about bus stops to blind riders, and the display reader, which enables blind people to access household appliance displays. Project Ray 4, GeorgiePhone, MIT Fifth Sense, and the portable OrCam, which has features for people who are blind and use just speech and touch, are notable advancements.

5.3.3 Video

Interactive multimedia allows learners to deliver a reaction to an online sequence and receive a response as a result of the input. In comparison, traditional videos do not offer any interactivity apart from pause and play. Interactive video is an innovative and exciting form of media that transforms video from its traditional image. Big brands worldwide spend more today to engage with their customers online via interactive videos. These brands have achieved great success as the online viewing and buying experience is more experiential. By definition, interactive videos are videos where the audience participates in the viewing experience. Unlike old-fashioned linear videos, interactive videos are not for inactive viewing; on the contrary, they incite the viewer to engage candidly with them for a more immersive experience. Though the technology behind such videos is still comparatively recent, more and more advertisers and content producers are starting to embrace it. Mobile Marketer, a U.S.-based firm, mentions in one of its recent findings that there is a forty-seven per cent increase of interest noted on average through interactive videos. Studies also specify a nine times increase in intent by a purchaser while browsing interactive videos as they provide an immersive shopping experience online. For example, a brand called Ted Bakers has online videos where viewers can purchase clothes showcased on in-action models appearing in an advertisement. In addition to e-commerce videos, interactive videos are now common for product demos, storytelling data

capture and e-learning. Life Saver, for example, uses interactive elements to create an educational video that helps his viewers learn about saving lives while practising their decision-making ability.

Interactive videos are produced by marking hotspots, which are clickable areas. When a hotspot is clicked, it leads to an action, such as more information being shown. There are two types of hotspots; the first is a static hotspot, an area in the frame that is static throughout the video. The second one is a sticky hotspot, an area anchored to move along people or objects as they move in the video, creating more engagement with the viewer. Another element of interactive videos is overlays or inset frames that appear when a hotspot is clicked on. These overlays review additional information after a keyword or a hotspot is clicked. Overlays often lead to external websites and downloadable content. The third most common element of interactive videos is branching; a frame where you get two options to choose from provides the audience with a more personalised giving experience. Another important and growing phenomenon in real estate, travel and e-commerce is 360° interactive videos. Such videos allow the viewer to scroll in any direction across the space, giving a three-dimensional image by changing the viewing angle for an immersive experience.

Mapping the course through which one will experience the video and the elements within the video is the pre-production for making interactive videos. Another common practice in making interactive videos is scripting how the branching or anchoring elements will roll out during the video and then preparing the content for each overlay or branch. Wirewax, Hapyak, and Rapt are some popular interactive video editing platforms available, apart from many developing applications that can be used on a smartphone.

5.3.4 Graphics and Animation

"Ek thithali anek thithali" is one of the first animated songs to reach large audiences in India and discuss unity and diversity on India's national television, "Door Darshan." Animation and graphics make learning fun and interactive, with users' or learners' participation. Animation can be used to learn maths, science, moral science, ethics, and other behavioural training.

Complex concepts, such as the anatomy of the human body, heart functioning, space, etc., can be visualised and made interactive through animation. Virtual, augmented, and mixed-reality immersive content makes the learners' experience more realistic and effective.

5.4 INTERACTIVE MULTIMEDIA SOFTWARE

The modern learning, communicating, or marketing age is widely based on multimedia-based resources. It improves the effectiveness and efficiency of learning by engaging students at a deeper level than may otherwise be possible. Not only for learning, but it has completely changed audio and visual experiences overall in day-to-day life. Multimedia software packages add effects to amateur mobile camera shoots.

Some are built into social media platforms like Facebook, Instagram, and Twitter. These platforms offer not only colour correction and the addition of text but also animated graphic effects, audio, and image transitions. Facebook provides an automated collage of visual memories by organising images and videos with suitable music.

Interactive Multimedia Software (IMS) has bridged the gap between "real world" phenomena and their processes. The software package includes text, drawings, photographs, video clips, music, narration, animation, and simulation. The best feature of IMS is that many participants can communicate simultaneously with control. Interactive multimedia technologies can represent ideas in almost any mediated form. It gives opportunities for higher levels of engagement, improves representation and enhances inclusivity. We can say IMS provides a proper "democratic environment" of interaction. Students and the "cognitive tools" are two. The important bases of this technology are utilised by "intellectual partners" in the learning process. It creates many interactions between the partners.

There are various multimedia software available in the technology market. Some are built with internet media platforms, some are available without payment, called open source software (OSS), and some are paid. We learned about built-in software earlier in this lesson. Open-source software is the most popular form of IMS. Students, teachers, the general public, and even early professionals use it. In contrast, paid IMS is mainly used by professionals, media houses, institutions, and high-end users.

5.4.1 Free and Open Source Software

Software for content creation for educational purposes is expensive due to the cost of the licence. The copyleft movement and free and open-source software brought together like-minded professionals to create royalty-free software. This has not only helped in education but also many other fields.

Open source software (OSS) is called free software because it is copyright-free, and anyone can use it. So many OSS are available online and otherwise ready to create content. You can download and use it. However, many open-source software leave their trademark on the completed piece. Here, we list the ten most popular open-source multimedia software.

GitHub is one of the primary sources of free and open-source software. Some of these initiatives started at MIT and other individual and group efforts. To name a few, I like Linux, GNU, UNIX, etc. The software includes learning management systems like www.moodle.org, which various universities have adopted. Moodle is enabled with assessment systems like quizzes, interactive videos, on-demand lectures, live streaming, etc. Software platforms like www.h5p.org provide interactive layers of assessment on the videos to encourage learners to play with the content-based assessment while watching the videos. Geogebra(www.geogebra.org) is another interesting software for learning mathematics available on multiple platforms and in augmented reality format.

Developing e-content can be done with the help of the following software during video and audio content post-production. For mobile phones, VidCutter, Shotcut, Kinemaster, Open camera, etc. For video editing on a desktop, one may use OpenShot, Avidemux, Blender (visual effects and animation), Cinelerra Infinity, Flowblade, Kdenlive, etc.

5.4.2 Interactive Multimedia Tools for Content Creation

Content marketing companies have realised that interactive content plays an important role. It has become the best way to get the audience's attention and

I understand the target audience. Artificial intelligence has impacted behaviour patterns and ways of thinking. Interactive content has massive potential for virality, generating shares, comments, likes, and other social media actions that lead to developing organic traffic.

There are many tools for generating interactive content. Some are designed for ready-to-use, while some need to be adjusted for desired content creation. Here, we are giving information about a few tools for creating interactive content.

1. **Ion Interactive:** This tool makes it easy to create interactive content, such as e-books, landing pages, quizzes, lookbooks, calculators, etc.
2. **Contentools** is a well-known tool available on the market. It allows you to create both static and dynamic content and provides materials for generating leads.
3. **SurveyMonkey:** One of the best tools for creating surveys, quizzes, tests and data-based communication.
4. **MapMe** creates interactive maps. Companies frequently use this tool for map-based marketing strategies.
5. **Playbuzz:** It gives many options for content creation and is widely used to create community-based content. It also provides user data and metrics.

There are several interactive platforms for conducting Quizzes with instant results and ranking. To mention a few, they include Kahoot, Big Button, Mentimeter, Hotpotatos, etc. They are also used for feedback.

It is easy and quick to make whiteboard animation, where you can provide a visual and textual description of a concept, definition, or formula. The software available is Video Scribe, Powtoons, and Google Doodle. Canva is one of the most popular software platforms for creating interactive presentations, videos, posters, intro materials, etc.

Video editing has been one of the important parts of e-content preparation. Free software like Openshot and Davinci Resolve help in video editing, while Bensound and YouTube audio for royalty-free music and Pixabay (audio-visual content free), pixels, freepik, etc. are for images, graphics and animations.

Production with mobile phones has come in handy, and several applications help learners and teachers at various levels develop media content—for example, Open Camera for Shooting, Inshot, Cinema Fv5, Kinemaster, and Animaker.

Animation used to be expensive and highly skilled. Now, the learner can use free and open software with all its potential features. They include Animaker, Blender, Nuke, K-3D, Opentoonz etc. Among many other software, 'Handbrake' is used for video compression for multiple digital platforms.

Check Your Progress: 2

Notes: 1) Use the space below for your answer.

2) Compare your answers with those given at the end of this unit

1. What do you understand about free and open-source software?

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2. Explain the importance of creative commons in digital learning environments?

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5.5 DIGITAL GAMES IN THE CLASSROOM

In the classroom, playing games is one of the most effective strategies to keep pupils' attention. Historically, various games may be played, each of which is distinguished from the others in terms of culture and location. Several games are played across a variety of very similar cultures. There are several categories of games, including board games, real-world games, role-playing games, and others. In addition, the number of participants is another factor that can be used to classify these games. Games create an environment in which involvement is encouraged, and discourse contributes to the growth of a person's personality on both the physical and mental levels.

Game design has also innovated with more interactivity and immersive user participation as technology advances. Digital games with well-lit screens, captivating graphics, and real-life interactivity provide a magical feeling to the users. Several games are designed not just for entertainment but for edutainment. Games for behavioural change are designed for specific purposes to address issues like mental health, learning, trauma, learning maths, etc.

5.5.1 Educational Games vs Entertainment Games

Educational games are different from entertainment games. Educational games aim to improve the cognitive levels of learners, focusing on skills like computing, maths, reasoning, etc. Sometimes, issues like gender sensitivity, familiarity with cultural ethos, language, grammar, and problem-solving are the focal themes.

According to Prensky (2006, p. 4), "Kids learn more positive, useful things for their future from video games than they learn in school." Video is more powerful, and one can re-play, unlike a one-time lecture in the class. This does not undermine the physical classroom teaching-learning model, but maps, drawing, word games, pre-numeric, and cognitive learning help improve their skills. Gee (2007, p. 10) supports gaming by saying, "Good games are problem-solving spaces that create deep learning." It helps with quick thinking, memory, and critical thinking, and learners can explore more possibilities of solving an issue.

On the other hand, entertainment games aim to provide pleasure and experience to the users or players in unrealistic situations. For example, in racing games, where hardly any traffic rules matter, the concept of an accident is not there. As soon as it gets a fatal crash, vehicles reappear, unlike in real life. Not only that, gun games push the user to more violence and inappropriate behaviour.

5.5.2 Digital Games for Instruction and Learning

Through play, repetition and discovery become two crucial parts of learning. Many students have a "sweet spot" for gaming, which makes gaming in education successful in concept acquisition, whereas book use can be more challenging. Through play, students may not even realise they are learning. There is a demand for innovation in the gaming industry. Unexpected occurrences and difficult decisions enable the gamer to continue playing.

Including a story or narrative in a game can significantly engage the player. This enables constant feedback and challenges at the appropriate difficulty level while preventing frustration.

Games provide a framework for problem-solving. This allows a player to "fail," meaning that a combination of hard, enjoyable, and identity-building motivates the learner to persist until the challenge is finished. This is a fruitless endeavour. Success may take some time to achieve, but growth is constant, and so is the knowledge needed to solve the problem.

Games should be blended with educational objectives. For learning to occur, actions within the game must be relevant to life outside the game. Contrary to the concepts of practice and practice, games should choose an approach that simplifies the game and restricts the scope of knowledge. For a player to be successful in the game, the subject matter that must be taught through the game should be the value of knowing the relevant information. To demonstrate achievement in student learning, games must possess specific characteristics. The game should be as convincing as feasible and

challenging. The game's core activity should be participatory and engaging for the pupils. Games are about decision-making, where you observe the outcomes and receive feedback. The outcome necessitates originality and innovation for a work to perform properly and run successfully. Games teach pupils about rewards and the effort required to obtain them. To advance in the game, the player must master the learning goals and objectives underlying the game.

Integration, motivation, and concentration are the three components to consider while building strong and successful games. Focus is most effective when investigating, operating, or interacting while learning.

5.5.3 Game for Change

Mayer, R. E. (2019). asserts that "game-based learning is methodologically sound, theoretically grounded, and educationally relevant." Games are expressions of play which allow people to go beyond instant imagination and direct activity. Games are like ice-breaking activities conducted in a way that can be an effective tool for community participation and creating a dialogue between players. McKee et al. (1998) describe games that can enhance participatory processes discreetly placed in the learning process. It helps people to reflect, relax, energise, bring a sense of interest, create humour, "grab people in the gut", feel emotions, and induce meditation. They provide diversity, discovery and surprise through various play methods, thus keeping players involved. It triggers both sides of the brain - cognitive, logical, and emotional, creative. It stimulates perception, affection or expression, creating interest by demonstrating a thought-provoking situation. Games are expressions of play which allow people to go beyond instant imagination and direct activity. The striving point in any game is the sense of accomplishment when the players get rewards and appreciation, and different strategies are adopted to win any game. Feedback is an important component of any game, which motivates the player to play till the end. Games offer the ability to "try on" different identities and customise them with little risk of failure. A game plays an important role in the ability to earn one's own identity. (Stokes, Seggerman, Rejeski, 2007). Games play an imperative role in the lives of young people.

5.5.4 Digital Games for Awareness and Advocacy of Issues

Nowadays, digital games are used mostly to promote positive behaviours such as hand washing, maintaining hygiene, eating nutritious food, etc. Digital games also help in providing cognitive learning for the participants. Organising different group and individual activities helps in emotional and cognitive learning. Digital games are more interesting as learners/participants gain knowledge by participating in the activity through entertainment. We can use audio and video, which helps the participant/ learner get knowledge through entertainment.

Digital games also help improve learning behaviour and attitudes towards positive behaviour. Participants/learners can encounter different issues and learn how to solve them using different methods, such as digital games. For

example, an HIV/AIDS counsellor can learn different counselling techniques to counsel High-Risk Groups like Truck drivers, Migrant labourers, Transgenders, etc.

Digital games are also economically viable. For example, a participant/learner can get training using an Android phone, Zoom, Microsoft Training, etc., whereas classroom training costs more than digital training. A trainer can provide training from anywhere, and simultaneously, a participant can get an education through different activities and games.

Digital games or communication empower participants/learners to share their experiences without hesitation, which helps them gain knowledge and overcome different barriers to their professional work.

Digital games help learners use creative skills by involving different group activities. For example, presentations promote different health behaviours among target people and their methods. Digital games are helpful as participants/learners can learn from different activities using posters, art, and descriptions. It's useful for the learner to get close to the issues.

Check Your Progress: 3

Notes: 1) Use the space below for your answer.

2) Compare your answers with those given at the end of this unit

1. Explain the difference between educational and entertainment games.

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2. Enumerate the role of games in digital learning environments?

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5.6 LET US SUM UP

As we conclude Unit 5, we've explored the vibrant landscape of interactive multimedia tools. From understanding the essence of interactivity to exploring diverse multimedia formats, we've learnt how these technologies can revolutionise the learning experience. We also learnt about open-source software and tools to create engaging e-content. In summary, this unit has given an outline of the transformative potential of interactive multimedia in education. The digital learning environment is a new emerging teaching-

learning process; the knowledge of having a better understanding of this platform would give a higher leverage to harness the potential for better learning.

5.7 FURTHER READINGS

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5.8 CHECK YOUR PROGRESS: POSSIBLE ANSWERS

Check Your Progress: 1

1. Interactivity Definition and Examples: Interactivity refers to the dynamic engagement between users and digital content, enabling communication or manipulation. Examples include social media platforms like Facebook and Twitter, where users interact by posting, liking, and commenting. Additionally, interactive websites feature elements such as quizzes or games, allowing users to actively participate in the content they consume.
2. Two Types of Interactivity: Interactivity encompasses user-to-user interactions, like those found on social media platforms, where users communicate with each other. Meanwhile, user-to-system interactions involve users interacting with a system or interface, such as engaging with an online shopping platform or playing a video game.
3. Levels of Interactivity Explanation: Interactivity spans various levels, from basic navigation to immersive experiences. These levels include exploratory interactivity (simple navigation), adaptive interactivity (personalised content), conversational interactivity (real-time communication), and immersive interactivity (virtual reality).

4. Types of Interactive Learning: Interactive learning methods include simulations (virtual labs), gamification (learning through games), collaborative platforms (wikis, forums), interactive videos (with quizzes or branching scenarios), and virtual classrooms (live online sessions with interactive tools).

Uses of Interactive
Multimedia Tools

Check Your Progress: 2

1. Free and open-source software (FOSS) refers to programs whose source code is freely available for anyone to study, modify, and distribute. FOSS fosters collaboration, innovation, and transparency in software development. Users benefit from cost-effectiveness, customization, and community support. Examples include Linux operating systems and the LibreOffice suite.
2. Creative Commons (CC) licences enable creators to share their work with specific permissions while retaining copyright. In digital learning environments, CC licences facilitate access to a vast array of educational resources, allowing educators and learners to reuse, remix, and redistribute content legally. This promotes innovation, collaboration, and inclusivity by breaking down barriers to knowledge sharing and fostering a culture of open education.

Check Your Progress: 3

1. Educational games focus on imparting knowledge, skills, or concepts while entertainment games prioritise amusement and enjoyment. Educational games often incorporate learning objectives and assessments, whereas entertainment games prioritise gameplay experience. Additionally, educational games are designed with instructional strategies to facilitate learning, while entertainment games may not have explicit educational goals.
2. Games in digital learning environments serve various roles:
 - Facilitate active learning through interactive experiences.
 - Enhance engagement and motivation by providing immediate feedback and rewards.
 - Support personalised learning experiences through adaptive algorithms.
 - Foster collaboration and social interaction among learners.
 - Develop critical thinking, problem-solving, and decision-making skills.
 - Enable learners to explore complex concepts in a safe and immersive environment.
 - Offer opportunities for assessment and progress tracking.
 - Promote creativity and innovation through game-based challenges and simulations.

UNIT 6 YOUNG PEOPLE IN THE VIRTUAL WORLD

Structure

- 6.0 Introduction
 - 6.1 Learning Outcomes
 - 6.2 The Growth and Expense of the Virtual World
 - 6.3 Technology's Generational Impact
 - 6.4 The Generation Alpha
 - 6.5 Digital Natives
 - 6.6 The Two Worlds: The Real and the Virtual
 - 6.7 Simulation-Based Games
 - 6.8 The Participatory Culture of the Virtual World
 - 6.9 Let Us Sum Up
 - 6.10 Further Readings
 - 6.11 Check Your Progress: Possible Answers
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6.0 INTRODUCTION

In the history of communication, technologies have proved to be turning points in deciding the course of human civilisations. Whether it was the writing systems of Egyptians, Greeks, Romans, Chinese or Indians, it paved the way for human progression. The inventions of the printing press, followed by telegram, radio, television and now the Internet, have transformed the communication mechanism as never before. If one looks at the technological development of these communication systems closely, one realises two very distinctive features. It has progressively made the technologies available to the masses with increased literacy; second, it has provided users with a participatory and immersive experience. While it has been the cause and effect of increased literacy, it has also, at the same time, given way to new experiences in the form of simulated reality.

One such early example of simulated reality was the invention of theatres by the Greeks, which had a massive following and a captivating impact on the audience. It creates an imaginary parallel world that contrasts with reality, leaving the audience spellbound under its influence. It had the power of stimulating and raising the passion of the masses. For this reason, the Greek philosopher Plato was against the immersive practice of theatre, which he thought was a bad influence on society. According to him, it motivated young minds of impressionable age to unreasonable action and, at times, to violence. A thin line exists between these two worlds of stimulated and existential reality. This was effectively demonstrated in the cinematographic output of *The Truman Show* and the *Matrix*.

However, some harmful influences were felt with the coming of the Internet. In more recent times, the deadly Blue Whale Game was responsible for online suicides among teenagers. However, this does not mean that the world of simulated reality is devoid of virtues. On the contrary, it has played a vital role in education, healthcare, awareness programmes, entertainment and immersive learning.

In addition to gaming, entertainment, and media production, simulated reality has other benefits, especially in learning and higher education. We all experienced how the world was thrown out of gear after the Coronavirus pandemic in 2020. According to one estimate, more than 87 per cent of the global student population was affected by the closure of schools and colleges. It was online learning and virtual reality that came to people's rescue. Online and virtual reality also provided working models to test products and models during global immobility in various industries. It also helped in improving productivity.

Other innovations further strengthened the virtual world's role as a solution provider to various industries. The people who were at the vanguard of this technological transformation were youth. They quickly learned, adopted, and implemented new technologies to meet exigencies. As youths are early adopters of technologies, the generational impact can be felt across various stages.

6.1 LEARNING OUTCOMES

After completing this Unit, you should be able to:

1. Understand the growth and expansion of the virtual world;
 2. Discuss the technological impact on generational learning;
 3. Explain the difference between the material and the virtual artefacts;
 4. Discuss the various forms of simulated-based games and technologies;
 5. Explain the participatory nature of the virtual world; and
 6. Understand the emergence of a distinct class of digital natives.
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6.2 THE GROWTH AND EXPENSE OF THE VIRTUAL WORLD

A virtual world is an open-ended simulated environment. It creates a new identity in the form of avatars to interact with the members of a tribe. It is a virtual platform created by technological storytelling where each member plays their part. The community members could belong to a social or professional group with certain skills, thus allowing them to interact at various levels of activities. During the last decade, the growth in virtual reality has been significant. According to one estimate, there are over a billion registered users with demographic dominance of the 10-15 age groups. Augmented Reality (A.R.) and Virtual Reality (V.R.) also rapidly expanded. It has a market size of \$28 billion and is expected to increase to \$252 billion by 2028. According to another estimate, some 23 per cent of

AR/VR device users belong to the 25-34 age group, which shows the dominance of youth in the sector. A device-based immersive experience of the virtual world has a significant share in the global trade. It has reached some 11 million devices, cutting across geographical areas. According to one estimate, the younger generation, in the age group 12-17 years, owns 75 per cent of cell phones. On average, they sent more than 3,000 messages in a month.

There has also been a drastic fall in the cell phone-owning age. In the U.K. alone, some 50 per cent of the age group of 10 have a Smartphone. Also, nearly a quarter of those under four years old have tablets. An increasing dependence on these devices has led to enhanced exposure to electronic screens. It has created a debate about its impact on children's eyesight and behavioural psychology. On the positive side, these technologies have also opened a new world of knowledge, information, and learning for the youth. It has exposed them to new cultures and value systems and connected people of diverse backgrounds globally.

The expansion of the virtual world also opened new opportunities for tech-savvy entrepreneurs who broke traditional business barriers. Many of the virtual businesses were initially start-ups of small businesses, but they later expanded at the global level. Multinational corporations acquired some in multimillion-dollar deals. The examples of Neopets and Club Penguin are among some of the most cited examples. Neopets is a virtual pet platform where users with currencies like Neopoints and Neocash can own and buy pets in the virtual world. While Neopoints are on-site-generated currency and can be won in the game, Neocash relates to real-world currency and can be transacted in the real world.

Neopets was later acquired by Viacom, which also owns Nickelodeon. Club Penguin, an online game established in 2005, was later acquired by the Walt Disney Company. In addition, new emerging media companies like Sulake⁴ and Mind Candy emerged and became powerful platforms in the virtual world.

Check Your Progress: 1

Notes: 1) Use the space below for your answer.

2) Compare your answers with those given at the end of this Unit.

1. How would you describe the significance of virtual spaces in contemporary society?

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2. Discuss societal attitudes towards immersive experiences?

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3. What broader concepts do Neopoints exemplify, and how do they contribute to the dynamics of online interactions and economies?

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4. Explain the concept of 'bionic hearing' and its implications?

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6.3 THE TECHNOLOGY'S GENERATIONAL IMPACT

As new virtual world businesses were being established and expanding, their share in the global marketplace began having a significant impact. So much so that it began defining its users with separate and individualised identities. If we look at the history of global civilisation, technologies have defined each era, and based on it, societies have been variously defined. We are very much aware of the steam and electrical-powered machines that heralded the Industrial Revolution and the subsequent birth of industrial society. In the 21st century, expanding information and knowledge through networked computers and the Internet led to the birth of a knowledge society. However, these were the broad defining terms for which generational impact was not considered.

Only in the 1960s did familial and societal generations begin to be studied more closely. During this time, technologists and sociologists observed that the invention of new technology had a much deeper and more rapid impact. Instead of bringing a major generational shift (popularly called the generation gap) every 50 or 20 years, the behavioural change in a new generation was felt every ten years or even less. Some technologies were used to define the period's youth, defining their technological identity.

Although no scientific method defines the generational shift, most theories are based on broad parameters and generalisation. In some cases, the defining

features were sociological and demographic changes, such as at the end of World War II when American society observed an increased birth rate between 1946 and the mid-1960s, leading to the labelling of the generation as baby boomers. The baby boomers were soon followed by the next generation born between the mid-1960s and the early 1980s and popularly called Generation X, based on Douglas Coupl's novel "*Generation X: Tales for an Accelerated Culture*". The generation showed a marked deviation in their behaviour because of scepticism towards traditional society, leading to their disillusionment, anger and frustration with the existing realities. Generation X was taken over by Generation Y, who are popularly called millennials. They were born between the early 1980s and the latter half of the 1990s and were at the threshold of major technological change as computers and the Internet made their way. Like the previous generation, the name of the generation was derived from a book titled "*Generations: The History of America's Future, 1584 to 2069*", which considered the cyclic nature of human behaviour.

Generation Z soon followed Generation Y, markedly different from their previous generation. Born as they were at the turn of the millennium, they were already exposed to smartphones. They spent their adolescence with the new-age technology as the iPhone arrived. Not surprisingly, three-fourths of that generation already had an iPhone. This generation has also been called iGen because of the communication device they came to be identified with. One of the features of their behavioural pattern has been an increase in screen time. They spend more time on devices, leading to social deprivation. For this generation of youth, the device helped them socialise and form group identities in the virtual world. The generation also suffered from mental health crises as they had less social support in the real world. They were found to be less self-confident, less optimistic and often unhappy with their real life. Some of them also suffered from depression and anxiety because of their inability to adapt to social realities outside.

The youth born in the virtual world age were a by-product of a changing world, shaped by new technology, new socio-economic order and geopolitical forces. The fast pace of life, innovation, and an interconnected world stressed the need for self-sustainable individuals. Their individual needs were fulfilled by the emerging technology that provided immersive experience, whether in learning, entertainment or skilful gaming. The new technology proved complimentary to the changing psychology of individuals. Now, the Artificial Intelligence-driven virtual world has become efficient in providing companionship and acting as a friend, philosopher and guide, thereby reducing the need for human socialisation. This sounds futuristic and unreal to an earlier generation; the new generation seems steeped in a new digital experience.

6.4 THE GENERATION ALPHA

The rapid generational change has been most obvious during the last ten years because of accelerated technological development. This has led to the development of a new construct in the form of Generation Alpha, which is

considered a generation in the making. They are a new generational cohort, born after 2010 and are more technologically savvy. They were born in the digital age when the virtual world had already established itself. In a way, they did not inherit the virtual world but were instead born *into* it. They also faced the 2020 Coronavirus pandemic-led lockdown and conducted their education online, thus showing remarkable adaptability. Many of them spent their first year of educational life online. Having distinct behaviour and personality traits, their number is expected to cross two billion by 2025, thus making it the biggest generational cohort.

They are the generation more driven by voice than a keyboard through virtual voice assistants like Apple's *Siri* and Amazon's *Alexa*. This Generation is hyper-connected through information highways and spends considerable time online on various virtual and social media platforms. They have also been shaped and influenced by the web and online ecosystem. Many of them have become social influences in their capacity. They were born in the age of iPads, iPhones, and apps, greatly impacting their behaviour, lifestyle and attitude.

Generation Alpha are equally active on social media platforms and Instagram, with the latter sharing its origin in 2010. They were born and brought up with screens before their eyes, with a new world of online and virtual worlds. Virtually connected with the rest of the world, the generation was technologically empowered to enter a new era, shaping their engagement. Unlike the previous generation, the Alpha generation is more tolerant, open, and welcoming of new changes and believes in gender parity and inclusivity. Many Alpha generations are connected with their close environment, thus having opinions on political issues, sustainability, development and climate change.

Check Your Progress: 2

Notes: 1) Use the space below for your answer.

2) Compare your answers with those given at the end of this Unit.

1. Analyse the generational categorization of 'Generation X'?

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2. Discuss the emergence of the Alpha Generation and its significance within the context of evolving demographics?

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3. Explore the notion of 'digital natives' and its relevance in understanding contemporary societal dynamics?
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6.5 DIGITAL NATIVES

The virtual world has given rise to several nomenclature for its inhabitants. Digital native is one of the most popular acronyms and has recently gained coinage. It also includes a wide range of digital and virtual user experiences. Alpha generation is one of the recent subsets added to it. There are also other names, like the 'net savvy' Generation, Google Generation, and M Generation, for using Media and MySpace, which are associated with the youth. Because of deep immersion in devices and their online screen presence, the digital natives have also been called Screenagers and millennials on steroids because of their hyperactive presence in the digital space. The digital natives are youth born after 1989, showing a marked difference from the earlier generation.

Digital natives are also known for their ability to get into "the zone" of the metaverse, a new form of virtual experience. One popular virtual metaverse that has gained popularity among the youth is Metaspace, which provides a 3D virtual experience to its users. Metaspace is a virtual space where youth create their avatars and get to study, work, play, dance, learn and interact with like-minded users. This also offers a play-to-earn game that enables users to earn while enjoying the virtual experience. Built on a Unity game engine, Metaspace is quite popular among youth because it is profitable and adventurous. In addition to being a game, it is an entire universe which entertains and up-skills the users.

While the game-oriented virtual worlds provide users with an online adventurous experience, Social Virtual Reality (SVR), on the other hand, focuses on social interaction between digital natives. It is not guided by narrative as in the gaming virtual world and lacks level-ups, portrayal and character advancement. In short, the social virtual world becomes the site of building social character and helps its users with the simulation of behavioural science. For the youth, SVR holds special interest as it allows them to interact and socialise online. It offers immersive activities and social engagements to diverse groups of people belonging to disparate cultures, nationalities, genders and age groups. However, there is little research on the likes and dislikes of the youth on these platforms that could help its makers scale up or tone down some of its features and calibrate the outcome of the SVR space.

6.6 THE TWO WORLDS: THE REAL AND THE VIRTUAL

For the youth, both the real and the virtual worlds are spaces for negotiating

their identities and making space for themselves. It is also a site for self-gratification and demand-fulfilling. In addition to socialisation, it offers opportunities for expressing individual personalities through varied avatars, which becomes their new identity in the virtual world. As mentioned earlier, a virtual world is a computer-simulated space where numerous individuals and avatars interact, converse, communicate and participate in common activities. It is a community of like-minded people empowered by virtual space. These community members are quite similar in their virtual space but different in personalities, skills and individual dispositions.

Sometimes, the material artefacts of the real world may or may not correspond to the virtual world as the latter is based on different norms and rules of the digital space. These differences notwithstanding, there has been exponential growth in virtual spaces as they offer an opportunity for youth to connect with people, forming tribes of like-minded people. It also has the benefit of bypassing some of the limitations like physical space and unpleasant experiences on the part of the users. In addition to this, there are fewer biases and shaming based on physical deformity in the virtual world. People with disabilities can lead a normal and respectful life like any normal avatar. The virtual world has the unique feature of filtering the unwanted, thus debarring unpleasant personalities who have the potential of becoming a liability to the tribe.

Recently, it has often been argued that youth spend more time online than offline, sometimes at the cost of their social life and activities. While this is true, technology has driven them in that direction. Today, youth live in a hybrid world marked by simultaneous presence, both in the real and virtual world. Their online presence has now been replaced by "inline" simultaneous real and virtual existence. They are hyper-connected with their group members through the Internet. An avatar in the virtual world enjoys multiple identities and may espouse multiple causes, including social, political, professional, and religious ideologies.

While part of the virtual world, the youth is equally connected with real-world issues like sustainability, equitable development, climate change and gender issues. This is evident based on their participation in these social and political movements. Moreover, there are also connecting links between the real and the virtual world in the form of Milgram and Kishino, which provides a continuum between the two parallel worlds. Augmented reality, on the other hand, has attempted to provide a link between the real and the virtual worlds. The virtual identity of the 'born on the Internet' generation has become so overwhelming that it has become the primary source of their secondary identity in the real world. They identify themselves with their new avatar more than their real selves.

Sometimes, dual identity creates disharmony for the users. The dominant identity in fulfilling their needs becomes their primary source of inspiration. Individuals sometimes create impressive avatars for public display that make them look happy, confident, and healthy. This is contrary to their real and fundamental nature in the real world. Psychologists have called this behaviour in the virtual world as wish-fulfilment. Dominant virtual avatars

are sometimes deliberately created, using technological features to dominate the virtual space. These avatars can 'attend' all events and be everywhere using Internet connectivity. Sometimes, they can increase 'bionic hearing' that controls, monitors and alters the listening experiences of the users through in-ear headphones. Thus, the virtual world has its power structure, which is technologically driven and sometimes challenged by its users. Although virtual reality offers hordes of new features and experiences to its users, it could not somehow find a mass appeal like Facebook, Twitter, Instagram and YouTube.

Avatar-based navigation and a longer learning curve will likely deter new users. Another reason is the necessity of having an effective audiovisual ecosystem. But despite all these constraints, there has been tremendous growth in the virtual reality business, with new investments, applications, and ideas finding rapid incorporation. It could be hoped that some of these applications will find wider acceptance and be included on existing platforms like Facebook, Instagram, and YouTube.

6.7 THE SIMULATION-BASED GAMES

Computer-mediated simulation games are among the most popular virtual reality products and have been widely accepted among youth. Often considered addictive and having a bad influence on young, impressionable minds, these games have become an easy escape from the harsh reality of day-to-day living. The youth is said to get immersed in the virtual "zone," so much so that they are disconnected from the real world. Some sociologists view it as a result of social and political stratification and alienation due to unemployment, poverty and political and religious divides.

The virtual world, which is participatory, offers its users a level-playing field where all members are equal. It is a platform where all differences are dissolved. Some parents prefer these virtual spaces as they offer good learning and socialisation experiences. The parents feel that it saves the child from real violence and bullying. But some experts say some experts say there is no escape from the real world. The youth must be exposed to harsh realities during the learning process.

In addition to these socialisation pressures, there is, however, hard economics involved in the gaming industry. More and more investors, business houses and multinational corporations are looking at the gaming industry as a business with a good return. In the process, they target youth as one of its biggest consumers. According to one estimate, the global revenue in gaming was US\$159.3 billion in 2020, showing a growth of 9.3% over the previous year. Europe contributed US\$29.6 billion, North America US\$40 billion and China US\$43 billion. In recent years, investments have increased, targeting countries with a youth population.

Since the time gaming became popular, there have been two profit models that its users have practised. One is "pay to win", and the other is "paying for passion". In the former model, which was popular till 2015, players paid to upgrade their capabilities. They paid to add faster and stronger features, which helped them stand out from their competitors. But with the launch of

Honor of Kings in 2015, the model transformed overnight where skills, abilities and spending more time chiselling the skills became the source of profitable earning. In this model, the users did not have to invest money but their time to make a profit in the virtual space. So, these platforms became new sites for fair and equitable play where a virtual avatar becomes the source of passion.

Some of the other popular games, depending on the age and inclinations of the users, are *Second Life* for adults, *Habbo* for youth and *Whyville* for children. *Habbo* was one of the most popular virtual worlds in the early 2000s, with more than 10 million monthly users. However, with the introduction of gaming apps by Facebook and other social networking sites in the 2010s, the popularity of *Habbo* declined considerably. For the youth, Club Penguin is another popular game that has gained a good following. Pet Society and Secret Builder are other virtual world games for young children. Big business corporations like Webkinz, Bratz, and Barbie dolls have attempted novel ways to converge these virtual games with real-world objects like toys, dolls and other artefacts. This has helped consolidate revenues for the corporations and brought a sense of familiarity with the virtual world for the children.

According to a study, parents view these virtual platforms as safe places for socialising and skill learning for their children. In addition to these games, there are other computer-mediated simulation games like Xbox 360 and Nintendo Wii, which are quite popular among the youth. Other games like Free Fire or Asphalt 9 have recently found considerable users. These games have helped the youth in nurturing talent. Children can be seen playing games on Roblox while communicating with friends on Discord. These virtual games have helped people come together on a common platform. In some games, there are options for a co-op split screen, as in Super Mario Galaxy, which helps the user invite a friend and participate indirectly.

These virtual worlds belong to Virtual Environments (V.E.s), initially developed for the entertainment and gaming industry. The World of Warcraft and Habbo Hotel have carved a niche for themselves in this direction. At one point in time, it is interesting to note Habbo Hotel had more than 200 million registered characters and was touted as the "world's largest online community". Youth has also been using other tools like Roundme and Aurasma for self-directed learning and for developing critical thinking. To solve difficult problems, they have been using XMind in addition to Google, One Drive, Facebook and Edmodo for communication and collaboration.

6.8 THE PARTICIPATORY CULTURE OF THE VIRTUAL WORLD

As a result of technological innovation, the virtual world of the 21st century has become more accommodative, participatory and democratic. While the communication flow in the earlier generation was one-way, in the virtual world, it has become a seamless flow in both directions. The distance between the source and the receiver has almost diminished, allowing instant exchange of ideas, information and skills. Now, the consumer in the virtual

world has also become a creator and an active partner. As a result, the virtual world has become a site of engagement for both partners with some minor modifications. For the source, the virtual world has provided them with a unique capability to participate, learn and improve the process on which the virtual world is based.

The 'Web 2.0' heralded an era of 'online participatory culture' that has continued apace in a new format in the virtual world. The participants, whether in the form of new avatars or on gaming platforms, take part in real-time while being dispersed in various geographical locations. The time-space continuum seems to have shrunk in the virtual world, providing participants with a level playing field. The 'user-centric approach' has become so overwhelming that it has forced big corporations to consider the users' 'changing tastes, preferences and subcultures'. Some virtual reality platforms' designs are based on user experience to gain acceptability and authenticity.

Check Your Progress: 3

Notes: 1) Use the space below for your answer.

2) Compare your answers with those given at the end of this Unit.

1. Evaluate the phenomenon of avatar creation in virtual spaces?

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2. Assess the global gaming industry's economic landscape?

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3. Enumerate the evolution of virtual spaces and their impact on youth culture?

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6.9 LET US SUM UP

As we learnt, the virtual world has opened a new world of immersive experience to the youth, providing them a unique opportunity to participate in the hyper-connected world. It has given rise to generational change, leading to a new tribe of digital natives who are more dependent on new technology than any other generation before. Although the real and virtual worlds work on different levels, their conflict becomes inevitable, given their differences. There is a wide disparity between the two, and neither mirrors the live-in reality of the other. However, the participatory nature of the virtual world makes it an apt place to chisel digital skills and socialise in the ethereal world. This virtual world is not real but contains some features that are close

to the existing world.

The simulation-based games have added a new dimension to the active participatory nature of the new reality world. The concept of avatars is considered an individual's alter ego, finds a vicarious fulfilment of desires, and lives a parallel life quite akin to the one they desire. While it has immense utility at the individual level, it has also led to personality disorders where the user is not able to differentiate between the two worlds clinically, leading to adaptability issues. However, These aberrations are insignificant compared to its advantage, which has found application in learning, entertainment, designing, improving productivity and engaging with diverse audience groups. This is particularly useful for youth born in the digital age and those who have mastered the art and science of the virtual world.

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6.11 CHECK YOUR PROGRESS: POSSIBLE ANSWERS

Check Your Progress: 1

1. Virtual spaces, such as the internet, serve as crucial platforms for communication, collaboration, and entertainment in modern society. They transcend physical boundaries, enabling individuals to connect globally and engage in diverse activities, from social networking to immersive gaming experiences. These spaces facilitate the exchange of ideas, cultures, and information, shaping contemporary interactions and behaviours. Through virtual environments, people can explore new identities, express creativity, and form communities based on shared interests. Moreover, virtual spaces play a significant role in education, commerce, and cultural exchange, contributing to the increasingly interconnected nature of our world.
2. Throughout history, various civilizations have grappled with the influence of immersive experiences like theatre on youth. For instance, ancient Greeks viewed theatres with scepticism, fearing their potential to corrupt the morals of young individuals through vivid portrayals of human emotions and vices. Similarly, in Roman society, theatres were often associated with decadence and moral decay, prompting concerns about their impact on impressionable minds. In Indian and Chinese cultures, similar debates arose regarding the educational and moral value of theatrical performances. These historical perspectives shed light on broader societal attitudes towards entertainment and its perceived effects on youth development.
3. Neopoints, within virtual environments, represent a form of currency or reward system utilised for various purposes, including purchasing virtual goods, upgrading avatars, and participating in in-game activities. These points hold value within the virtual ecosystem, serving as a means of measuring achievement, progress, and status. Users can earn Neopoints through gameplay, completing tasks, or engaging in virtual economies. Additionally, Neopoints often contribute to the gamification of online experiences, incentivizing user participation and fostering engagement. Their significance extends beyond mere virtual transactions, reflecting the integration of economic principles into digital environments and the evolution of online communities.

4. 'Bionic hearing' refers to the enhancement of auditory perception through technological interventions, typically involving the use of advanced hearing devices or implants. Unlike traditional hearing aids, which amplify sound, bionic hearing technologies utilise sophisticated algorithms and sensors to mimic the functionality of the natural auditory system. By capturing, processing, and transmitting sound signals directly to the auditory nerve, these devices can restore or augment hearing capabilities in individuals with hearing impairments. Bionic hearing represents a groundbreaking advancement in the field of assistive technology, offering improved sound quality, speech intelligibility, and spatial awareness for users. Its development underscores the potential of technology to address sensory disabilities and enhance human experiences.

Check Your Progress: 2

1. Generation X encompasses individuals born roughly between the mid-1960s and early 1980s, characterised by distinct socio-cultural influences and generational traits. Growing up in the aftermath of significant social upheavals, such as the civil rights movement and the Vietnam War, Generation X is often associated with a sense of disillusionment and pragmatism. They witnessed rapid technological advancements, economic shifts, and changes in family structures, shaping their worldview and values. Generation X is known for its entrepreneurial spirit, independent mindset, and scepticism towards authority. Their experiences bridge the gap between preceding generations and subsequent digital natives, contributing to diverse perspectives within contemporary society.
2. The Alpha Generation comprises children born after the 2010s, representing the first cohort to grow up entirely in the digital age. Raised amidst ubiquitous technology, they are characterised by their innate familiarity with digital devices, internet connectivity, and digital media. The Alpha Generation's upbringing is marked by constant exposure to screens, interactive gadgets, and online platforms, shaping their cognitive development and social interactions from an early age. Unlike previous generations, who witnessed the emergence of digital technologies, Alphas are born into a world where digital interfaces are ubiquitous, influencing every aspect of their lives. Their unique upbringing poses challenges and opportunities for education, parenting, and societal adaptation in the digital era.
3. Digital natives are individuals who have grown up immersed in digital technologies, shaping their identities, behaviours, and relationships in profound ways. This demographic group is characterised by their fluency in navigating digital interfaces, leveraging technology for communication, learning, and entertainment. Digital natives exhibit a natural affinity towards internet-connected devices, social media platforms, and digital content creation tools. They are adept at multitasking, information processing, and online collaboration, reflecting the transformative impact of digitalization on modern lifestyles. Digital natives' experiences underscore the evolving nature of human-machine

interactions, blurring the boundaries between physical and virtual realities. Their emergence poses implications for education, media consumption, and societal norms in an increasingly digitised world.

Check Your Progress: 3

1. Avatar creation in virtual spaces allows users to craft digital representations of themselves, known as avatars, to navigate and interact within digital environments. These customizable personas serve as extensions of users' identities, enabling them to express individuality, creativity, and social presence in online interactions. Through avatar creation, users can customise various aspects of appearance, personality, and behaviour, reflecting personal preferences and aspirations. Avatars facilitate social engagement, enabling users to connect with others, form communities, and participate in virtual activities. Additionally, avatar creation fosters a sense of ownership and agency within virtual environments, empowering users to shape their digital experiences and narratives.
2. The global gaming industry experienced significant growth in revenue, reaching an estimated US\$159 billion in 2020. This substantial economic impact reflects the industry's resilience and adaptability in response to changing consumer preferences, technological advancements, and market dynamics. Factors contributing to this growth include the widespread adoption of digital distribution platforms, the proliferation of mobile gaming, and the rise of esports as a mainstream entertainment phenomenon. The gaming industry's revenue encompasses various sources, including game sales, in-game purchases, subscription services, and advertising revenue. Moreover, the COVID-19 pandemic accelerated digital transformation trends, leading to increased demand for gaming content and online social experiences. As such, the gaming industry continues to be a lucrative sector driving innovation and cultural engagement on a global scale.
3. During the early 2000s, Habbo emerged as a popular virtual space for youth, attracting millions of monthly users and fostering social interactions within its digital ecosystem. As a virtual community platform, Habbo provided users with customizable avatars, virtual rooms, and social features for communication and collaboration. Its appeal stemmed from its vibrant virtual environment, which facilitated socialisation, creativity, and self-expression among users. Through avatar customization, users could personalise their virtual identities and engage in a wide range of activities, including virtual parties, games, and role-playing experiences. Habbo's success highlights the growing significance of virtual communities in youth culture, shaping digital interactions and social dynamics during the early internet era.

UNIT 7 CHALLENGES AND RISKS IN THE VIRTUAL WORLD

Structure

- 7.0 Introduction
- 7.1 Learning Outcomes
- 7.2 Concept of Cyberspace
 - 7.2.1 Characteristics of Cyberspace
 - 7.2.2 Issues Emerging from Cyberspace and Need for Regulation
- 7.3 International and National Cyber Laws
 - 7.3.1 International Law
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- 7.4 Information Technology Act, 2000
 - 7.4.1 Electronic Signature and Electronic Records
 - 7.4.2 Regulation of Certifying Authorities
 - 7.4.3 Cyber Appellate Tribunal
 - 7.4.4 Intermediaries
- 7.5 Cybercrimes
 - 7.5.1 Types of Computer Crimes
 - 7.5.2 Cybercrimes: Some Cases
- 7.6 Let Us Sum Up
- 7.7 Further Readings
- 7.8 Check Your Progress: Possible Answers

7.0 INTRODUCTION

In the era of rapid use of information communication technologies networks, devices and services worldwide, cyberspace has emerged as a new medium of communication. According to the International Telecommunication Union (ITU), International Internet bandwidth is growing rapidly worldwide, and India is among the front runner nations of the world. In India, the Internet is growing at a fast pace in cities as well as villages. More and more people are using mobile telephones, and this has further accelerated its growth in the country. The new virtual space has thus given rise to many social and national issues and has posed new challenges to deal with technology driven cybercrimes and to protect a person's privacy and intellectual rights.

This Unit provides you an overview of the concept of cyberspace, cybercrimes and other issues emerging from it.

7.1 LEARNING OUTCOMES

After completing this Unit, you should be able to:

- Discuss the concept of cyberspace;
- Explain the need for regulation of cyberspace;

- Outline various issues emerged due to cyberspace;
 - Describe cybercrimes and offences under Information Technology (IT) Act; and
 - Acquaint yourself with the law regulating cyberspace in India.
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7.2 CONCEPT OF CYBERSPACE

Cyberspace represents a space created by science where various events, sharing of ideas take place with the help of the Internet connecting various computer systems and mobile phones.

With the advent and growth of electronic communication, the word “cyberspace” has entered our everyday parlance. But what does this word signify? To a common person, cyberspace refers to a virtual area without limits where one can meet people and discover information on any subject through the Internet. In cyberspace you can find right, wrong or confusing answers to almost any question. This description of cyberspace is not 100% accurate, but it points out some of its important characteristics: its non-physicality, its social dimension and its functionality.

According to Rebecca Bryant, Cyberspace represents “the new medium of communication, electronic communication, which is fast outmoding, or even replacing, more traditional methods of communication. It appears, then, that space and cyberspace can count as roughly equivalent conceptual entities, at least in the sense of sharing the four common sub-concepts of place: distance, size, time and route.

Despite the differences, cyberspace is, in one way, intimately connected with the physical world. Cyberspace depends, for its very existence, on hardware and software, cables and routers — it depends on physical objects existing in physical space. And, of course, this intimate connection between the two also represents a fundamental difference - physical space, if it exists, depends on nothing at all”.

7.2.1 Characteristics of Cyberspace

David B. Whittle in his book, “Cyberspace: The Human Dimension”, has identified three characteristics of cyberspace: (1) It is not a physical location but a virtual space. (2) One needs an access device to enter cyberspace. That means one needs some sort of physical access device (may be a computer screen, a telephone, a terminal, etc.) with an artificial processing mechanism, such as digital computing power and/or software. And that should be joined with other access devices on a network of physical connections. (3) It enables interaction and communication between individuals and groups of individuals and their creative output, largely independent of time and space.

7.2.2 Issues Emerging from Cyberspace and Need for Regulation

Today new communication technologies, usage of mobile phones and other communication devices are globally challenging the traditional notion of

jurisdiction. It has led to the possibility of invasion of the privacy of an individual. There is a need to have effective law to deal with the problems of cyber social media crimes, rumour-mongering, email spoofing, spams, cyber stalking, defamation and various other cybercrimes as the impact of these crimes can be more than the conventional crimes. These cybercrimes are usually committed by the person using fake identity, not readily and easily identifiable.

Further, due to anonymity and the ease of circulation it has given rise to many social debates that demand the reconciliation of the two views viz., freedom of speech and expression and the concern for maintaining basic civic peace and standards. Besides this, the major areas of concern which calls for strict regulation are: Management of Intellectual Property and to prevent Infringements in digital media; spread of terrorism, cross border taxation; cyber security which is an expensive affair as the business organisations are vulnerable to data breaches leading to loss of business opportunities and therefore needed to be secured from unauthorised access, modification or removal of data/information, data theft; authentication, data protection and data privacy of the industries, individuals and government agencies; Encryption; Protection of e-consumers from the misleading advertisements of goods and services enabling them to make informed and meaningful choices. The business organisations must manage the consumer information responsibly respecting the privacy of the individuals, but this requires strict regulators restricting the exchange and use of data.

Check Your Progress: 1

Note: 1) Use the space below for your answers.

2) Compare your answers with those given at the end of this unit.

1) What are the characteristics of cyberspace?

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2) Why do we need cyberspace regulation?

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7.3 INTERNATIONAL AND NATIONAL CYBER LAWS

In this section we shall briefly discuss the international and national laws which govern cyberspace.

7.3.1 International Law

UNCITRAL Model law 1996, Model law on E-Signature, 2001 and United Nations Convention on the Use of Electronic Communications in International Contracts, 2005 constitute some international initiatives relating to cyberspace.

UNCITRAL Model law 1996 -The first Model Law on E-commerce was adopted in 1996 by the United Nations Commission on International Trade and Law (UNCITRAL). The General Assembly of the United Nations adopted it by passing a resolution on 30th January 1997. The prime objective of the law was to have uniformity in law relating to e-commerce at international level and to provide equal treatment to paper-based and electronic information. India is also signatory to this Model law and hence, enacted the Information Technology Act, 2000.

Model law on E-Signature, 2001(MLES) - In 2001, the Model law on E-Signature was adopted by United Nations Commission on International Trade and Law (UNCITRAL) with the aim to enable and facilitate the use of electronic signatures by establishing criteria of technical reliability for the equivalence between electronic and hand-written signatures. The law may assist countries in establishing a modern, harmonised and fair legislative framework to effectively address the legal treatment of electronic signatures and give certainty to their status. Accordingly, India passed the Information Technology (Amendment) Act, 2008, which made necessary amendments in 2000.

United Nations Convention on the Use of Electronic Communications in International Contracts, 2005 - It was adopted on 23 November 2005 and came into force on 1 March 2013. It recognises the fact that electronic communications play a fundamental role in promoting trade and economic development both domestically and internationally and improves the efficiency of commercial activities. It aims to provide a common solution to remove legal obstacles to the use of electronic communications in a manner acceptable to States with different legal, social and economic systems. The Electronic Communications Convention aims at facilitating the use of electronic communications in international trade by assuring that contracts concluded, and other communications exchanged electronically are as valid and enforceable as their traditional paper-based equivalents.

7.3.2 National Law

The Government of India being signatory to UNCITRAL LAW on E-commerce enacted the 2000 which was amended in the year 2008 to implement the UNCITRAL Model Law on Electronic Signatures, 2001. Many traditional crimes which are capable of being committed with the use or aid of or through computers and technology have been brought within the definition of conventional crimes and therefore fall under the ambit of the Indian Penal Code, 1860 as amended. The Evidence Act, 1872 has been amended, section 65A and section 65B of the Indian Evidence Act, 1872 provides for Admissibility of electronic records as evidence. The Banker's

Book Evidence Act, 1891 and the Reserve Bank of India Act, 1934, have also been amended to facilitate collection of evidence to deal with cybercrimes or any matter connected with such crimes. The main purpose of these amendments is to address the related issues of electronic commerce, electronic crimes and evidence and to enable further regulation regarding Electronic Fund Transfer.

For further detailed information, you may visit the website of the United Nations Commission on International Trade Law: www.unicitral.org.

7.4 INFORMATION TECHNOLOGY ACT, 2000

The Information Technology Act, 2000 aims to provide legal recognition for the transactions carried out by the means of electronic data interchange and other means of communications commonly referred to as “Electronic Commerce”, which involve the use of alternatives to paper-based methods of the communication and storage of information, to facilitate electronic filing of document with the government agencies.

7.4.1 Electronic signature and Electronic records

Section 3A of the Information Technology Act provides that a subscriber may authenticate any electronic record by such electronic signature or electronic authentication technique which (a) is considered reliable; and (b) may be specified in the Second Schedule.

Chapter III of the Act pertains to legal recognition of the electronic records (Section 4), electronic signature (Section 5) and their usage in Government and its agencies (Section 6). Chapter IV lays down rules for attribution of the e-record, the mode and manner of its acknowledgement and determination of time and place of dispatch and receipt of electronic records. Section 10A provides for validity of contracts formed through electronic means. Chapter V lays down conditions for secure electronic records and secure electronic signature.

7.4.2 Regulation of Certifying Authorities

The provisions relating to Regulation of Certification Authorities are given in Chapter VI of the Information Technology Act. Chapter VI deals with appointment of a controller and other officers, functions of controller, recognition of foreign certifying authorities, licence to issue electronic signature certificates – application, renewal, suspension of licence and procedure for grant or rejection of licence.

Functions of Controller

Controller of Certification authority is a focal point in the Information Technology Act, who shall discharge the functions under this Act subject to the general control and directions of the Central Government. According to Section 18 of the Information Technology Act, the Controller may perform all or any of the following functions:

- a) Exercising supervision over the activities of the Certifying Authorities.
- b) Certifying public keys of the Certifying Authorities.
- c) Laying down the standards to be maintained by the Certifying Authorities.
- d) Specifying the qualifications and experience which employees of the Certifying Authorities should possess.
- e) Specifying the conditions subject to which the Certifying Authorities shall conduct their business.
- f) Specifying the contents of written, printed or visual materials and advertisements that may be distributed or used in respect of a Digital Signature Certificate and the public key.
- g) Specifying the form and content of a Digital Signature Certificate and the key.
- h) Specifying the form and way accounts shall be maintained by the Certifying Authorities.
- i) Specifying the terms and conditions subject to which auditors may be appointed and the remuneration to be paid to them.
- j) Facilitating the establishment of any electronic system by a Certifying Authority either solely or jointly with other Certifying Authorities and regulation of such systems.
- k) Specifying the way the Certifying Authorities shall conduct their dealings with the subscribers.
- l) Resolving any conflict of interests between the Certifying Authorities and the subscribers.
- m) Laying down the duties of the Certifying Authorities.
- n) Maintaining a database containing the disclosure record of every Certifying Authority containing such particulars as may be specified by regulations, which shall be accessible to the public.

Powers of Controller

In Section 24 of the procedure for grant or rejection of licence is stated. According to this Section, the Controller may, on receipt of an application under Section 21(1), and after considering the documents accompanying the application and such other factors, as he deems fit, grant the licence or reject the application. However, no application shall be rejected under this section unless the applicant has been given a reasonable opportunity of presenting his case.

Section 25 of the procedure for suspension of licence is laid down. According to this Section:

- 1) the Controller may, if he is satisfied after making such inquiry, as he may think fit, that a Certifying Authority has-
 - a) made a statement that the application for the issue or renewal of the licence is incorrect or false in material particulars;

- b) failed to comply with the terms and conditions subject to which the licence was granted;
 - c) failed to maintain the procedures and standards specified in Section 30;
 - d) contravened any provisions of this Act, its rules, regulations or orders; revoke the licence: Provided that no licence shall be revoked unless the Certifying Authority has been given a reasonable opportunity of showing cause against the proposed revocation.
- 2) The Controller may, if he has reasonable cause to believe that there is any ground for revoking a licence under the above sub-section (1), by order, suspend such licence pending the completion of any enquiry ordered by him. However, no licence shall be suspended for a period exceeding ten days unless the Certifying Authority has been given a reasonable opportunity of showing cause against the proposed suspension.
- 3) No Certifying Authority whose licence has been suspended shall issue any Digital
- 4) Signature Certificate during such suspension.

Sections 28 and 29 of the Act provide power to the Controller or any officer authorised by him to investigate contraventions and to access to computers and data if he has reasonable cause to suspect any contravention of the provisions of this Act, its rules or regulations.

7.4.3 Cyber Appellate Tribunal

Section 57 of Information Technology Act lays down provisions relating to Appeal to Cyber Appellate Tribunal.

- Any person aggrieved by an order made by controller or an adjudicating officer under this Act may file an appeal to a Cyber Appellate Tribunal having jurisdiction in the matter, within forty-five days of receipt of the copy of the said order. However, no appeal shall lie to the Cyber Appellate Tribunal from an order made by an adjudicating officer with the consent of the parties. The Cyber Appellate Tribunal can also entertain an appeal after the expiry of the said period of forty-five days, if it is satisfied that there was sufficient cause for not filing it within that period.
- The Cyber Appellate Tribunal shall give both the parties to the appeal, an opportunity of being heard before passing such orders.
- The appeal filed before the Cyber Appellate Tribunal shall be disposed off as expeditiously as possible with an endeavour for final disposal within six months from the date of receipt of the appeal.

Procedure and powers of the Cyber Appellate Tribunal— Section 58 of Information Technology Act provides that the Cyber Appellate Tribunal has, for the purposes of discharging its functions, the same powers as are vested in a civil court under the Code of Civil Procedure, 1908 while trying the suit.

However, the Tribunal shall not be bound by the procedure laid down by Section 5 of Code of Civil Procedure, 1908, but shall be guided by the principles of natural justice and, subject to the other provisions of this Information Technology Act and its rules. The Tribunal shall have powers to regulate its own procedure including the place at which it shall have its sittings.

7.4.4 Intermediaries

Section 2(1) (w) of Information Technology Act defines: Intermediary means any person who on behalf of another person receives, stores or transmits that record or provides any service with respect to that record. Intermediary includes telecom service providers; network service providers; internet service providers; web-hosting service providers; search engines; online payment sites; online- auction sites; online-marketplaces and cyber cafes.

As the Internet has grown to permeate all aspects of the countries and economy; the role of Internet intermediaries in bringing together or facilitating interactions, transactions or activities between third parties on the Internet is crucial as they influence and determine access to and choice between online information, services and goods.

Duties of Intermediaries:

- According to Section 67 C of Information Technology Act, Intermediary shall preserve and retain such information as may be specified for such duration and in such manner and format as the Central Government may prescribe. In case of intentionally contravening this duty, the Act provides that intermediary shall be punished with an imprisonment for a term, which may extend to three years and be liable to fine.
- Section 69(3) provides that the subscriber or intermediary or any person in- charge of the computer resource shall, when called upon by Central Government or a State Government or any of its officers specially authorised by the Central Government or the State Government, must extend all facilities and technical assistance to them. Intermediary will provide them access to (a) the computer resource generating, transmitting, receiving or storing such information; or (b) intercept, monitor, or decrypt the information; or (c) information stored in computer resources.
- The Information Technology Act also deals with blocking public access of any information through any computer resource. The intermediary has to comply with the direction issued by the Government in this regard. In case, the intermediary fails to comply with the direction issued shall be punished with an imprisonment for a term which may extend to seven years and be liable to fine.

Role of intermediaries and the law

Intermediaries play an important role and act as the tools that enable users to access information and provide new opportunities for social activities and citizen participation. Their technical capacity to prevent harm by

strengthening cyber security, e-consumer security and to protect privacy and intellectual property rights are very important. It has always been the concern across the world that besides certain duties and responsibilities the intermediaries must also be given protection or exemption from legal liability that could arise due to posting of illegal content by the users. In many countries like the USA and members of the European Union, there are attempts to provide legal protection to intermediaries from such user generated content. Such protection is often termed as a ‘safe harbour’ protection. Our Information Technology Act also provides for exemption from liability of intermediary in certain cases as discussed below:

Exemption from liability

Under Information Technology Act intermediaries are not liable for any third-party information, data, or communication link made available to others in following cases:

1. Where the intermediary does not–
 - a. initiate the transmission,
 - b. select the receiver of the transmission, and
 - c. select or modify the information contained in the transmission;
2. Where the intermediary observes due diligence while discharging his duties under this Act and observes such other guidelines as the Central Government may prescribe from time to time.

Liability of intermediaries

Intermediary will be liable in the following circumstances:

- a) Where the intermediary has conspired or abetted whether by threats or promise or otherwise in the commission of the unlawful act;
- b) On being notified by the appropriate Government or its agency that any information, data or communication link residing in or connected to a computer resource controlled by the intermediary is being used to commit the unlawful act, if the intermediary fails to expeditiously remove or disable access to that material on that resource without vitiating the evidence in any manner.

Check Your Progress: 2

Note: 1) Use the space below for your answers.

2) Compare your answers with those given at the end of this unit.

- 1) Define the term ‘intermediaries’.

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- 2) Who can file an appeal to the Cyber Appellate Tribunal?

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7.5 CYBERCRIMES

The term cybercrime refers to the wide range of crimes that involves computers and networks, where a computer is used as a tool to commit crime or computer itself is the target of a crime or incidental to a crime. The term cybercrimes, if used in generic sense, its scope can be extended to covers many kinds of civil and criminal wrongs. The cyber-crimes are committed against individuals or property, they are also committed against an organisation - Government, non-government; company; firm or group of individuals, or against the society at large.

7.5.1 Types of Computer Crimes

Computer crimes can be categorised as given below:

Conventional crimes committed through computer: There are several traditional or conventional crimes that are committed against individuals and their properties. Many of these crimes are now being committed by the aid of computers. Cyber defamation, cyber pornography, cyber stalking/harassment, cheating, digital forgery, theft, Internet fraud/ financial crimes including cheating, credit card frauds, money laundering, online gambling and sale of illegal articles, cyber terrorism etc are the crimes punishable under both Indian Penal Code and Information Technology Act.

Cyber defamation (publication of a defamatory statement about someone on a website or sending of emails containing defamatory information to the known contacts of the victim) is covered under section 499 of Indian Penal Code (IPC) read with section 4 of the Information Technology Act. Cyber frauds are also covered under Section 420 IPC. Digital forgery of documents is creation of a document which one knows is not genuine and yet projects the same as if it is genuine. Fraudulent birth certificates, ID cards, etc are dealt with in various sections of IPC and Information Technology Act. Cyber stalking, i.e. repeated acts of harassment or threatening behaviour of the criminal targeting the victim with the aid of the Internet, e-mail, or other electronic communication devices to stalk another person, is a cybercrime as well as a crime under IPC. Cyber pornography, showing of sexual acts can be dealt with under Sections 292 and 293 IPC, Sections 67,67A and 67B Information Technology Act and Indecent Representation of Women's Act.

Crimes committed on a computer network and related to mail: These crimes are technology driven crimes like hacking/unauthorised access, E-mail spamming, or E-mail spoofing. Email spamming means an illegal intrusion into a computer system and/or network. E-mail spamming also means

sending largeamounts of mail to the victims because of which their account or mail server crashes. Email spoofing means an e-mail that appears to originate from one source although it has been sent from another source. These crimes are dealt with under Indian Penal Code as well as Information Technology Act.

Crimes relating to data alteration/destruction: computer vandalism, transmitting of virus/worms/Trojan horses/ logic bomb, theft of Internet hours; data diddling, salami attacks- insignificant alteration in customers account which in a single case would go completely unnoticed; phishing, etc. Data diddling is a type of cybercrime in which data is altered as it is entered into a computer system, most often by a data entry clerk or a computer virus. Phishing is a sort of cybercrime often used to steal user data, including login credentials and credit card numbers, etc. Usually, it is committed by a person under the disguise of some trustworthy entity.

Section 43 of the Information Technology Act also provides for civil liability.

Crimes relating to violation of Intellectual property rights- The examples are distribution of pirated software; and cybersquatting i.e., obtaining of a domain name consisting of the owner's distinctive trademark. The traditional laws for protecting intellectual property have also been applicable to the infringements taking place in digital media.

7.5.2 Cyber Crimes: Some Cases

It will be useful for you to know about some cases related to cybercrimes dealing with fake identity, defamation, cheating, and cyber pornography, publishing or transmitting obscene material in electronic form, etc.

SMC Pneumatics (India) Pvt. Ltd. v. Jogesh Kwattra, decided by ADJ, Delhi on 12 February 2014

In this case it was alleged that defendant Jogesh Kwattra being an employee of the plaintiff company had sent derogatory, defamatory, obscene, vulgar, filthy and abusive emails to his employers as also to different subsidiaries of the said company all over the world with the aim to defame the company and its Managing Director. The plaintiff filed a suit for permanent injunction restraining the defendant from doing the above said illegal acts. The Hon'ble Judge of the Delhi High Court passed an ex-parte interim injunction observing that a prima facie case had been made out by the plaintiff and consequently restrained the defendant from sending derogatory, defamatory, obscene, vulgar, humiliating and abusive emails either to the plaintiffs or to its sister subsidiaries all over the world including their Managing Directors and their Sales and Marketing departments. The defendant was further restrained from publishing, transmitting or causing to be published any information in the actual world as also in cyberspace which is derogatory or defamatory or abusive of the plaintiffs.

However, ADJ, Delhi in the judgement dated 12 February 2014 held that "this court is not in a position to accept the strongest argument on behalf of plaintiff under the circumstances in the absence of direct evidence to infer

that it was the defendant in particular, who was sending these emails - the test of balance of probabilities is to be applied to the evidence available on record and not to the inferences". The issue was accordingly decided against the plaintiffs and in favour of the defendant and suit of the plaintiff was dismissed.

State of Tamil Nadu Vs Suhas Katti, AMM Court, Egmore (CC No 4680 of 2004)

This is considered as the first case in India of conviction under Section 67 of 2000. In this case the accused, a known family friend of the victim, was interested in marrying her. However, the victim married another person and that marriage later ended in divorce. The accused started contacting her once again, but she turned down his marriage proposal. The accused took up harassment of the victim through the Internet by posting obscene, defamatory and annoying messages about her in the yahoo message group and then forwarding emails to the victim through a false e-mail account opened by him in the name of the victim. The posting of the message resulted in messages and phone calls from several persons to the victim who also received phone calls by people who believed she was soliciting for sex work.

The accused was found guilty and sentenced for offences under section 67 of Information Technology Act 2000 and 469, 509 of the IPC. The sentence included imprisonment for two years and fine.

National Association Of Software (NASSCOM), vs Ajay Sood and Others,

Decided by Delhi High Court on 23 March 2005.

In this case the defendants were operating a placement agency involved in head-hunting and recruitment. To obtain personal data, which they could use for purposes of headhunting, the defendants composed and sent emails to third parties in the name of NASSCOM. Plaintiff filed the suit praying for a decree of permanent injunction restraining the defendants or any person acting under their authority from circulating fraudulent E-mails purportedly originating from the plaintiff of using the trademark 'NASSCOM' or any other mark confusingly similar in relation to goods or services. Prayer for damages was made in the plaint.

This landmark judgement delivered on 23rd March 2005 brings the act of "**phishing**" into the ambit of Indian laws even in the absence of specific legislation. The court observed that "An act which amounts to phishing, under the Indian law, would be a misrepresentation made during trade leading to confusion as to the source and origin of the email causing immense harm not only to the consumer but even the person whose name, identity or password is misused. It would also be an act of passing off as is affecting or tarnishing the image of the plaintiff, if an action is brought by the aggrieved party."

The defendants in the present case admitted their illegal acts and the parties settled the matter through the recording of a compromise in the suit

proceedings. According to the terms of compromise, the defendants agreed to pay a sum of Rs1.6 million to the plaintiff as damages for violation of the plaintiff's trademark rights. The court also ordered the hard disks seized from the defendants' premises to be handed over to the plaintiff who would be the owner of the hard disks. Defendants, their servants and agents were barred from circulating fraudulent e-mails purportedly originating from the plaintiff or using the trade name NASSCOM or any other name/mark and address of the plaintiff amounting to tarnishing their image.

Activity-1

Go through newspaper reports and identify some cybercrimes dealing with fake identity, defamation, cheating, etc. as discussed above. Follow up the stories and analyse the outcome.

Check Your Progress: 3

Note: 1) Use the space below for your answers.

2) Compare your answers with those given at the end of this unit.

- 1) Explain the term 'phishing'.

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- 2) What is Data Diddling?

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7.6 LET US SUM UP

In this unit we discussed various aspects relating to Cyber law such as the concept of cyberspace; the need for regulation of cyberspace; cybercrimes and offences under Information Technology (IT) Act; and the law regulating cyberspace in India.

Today cyberspace has emerged as a new medium of communication, a place where numbers of social and economic activities are going on leading to new challenges and new forms of crimes. Some of these involve computers and networks, where computers may be used as a tool to commit crime or computer itself is the target or computer may be considered as incidental to a crime. Therefore, the role of internet intermediaries, their technical capacity to prevent harm by strengthening cyber security, e-consumer security and in protecting privacy and intellectual property rights cannot be denied. It was

discussed that the intermediaries need to observe due diligence while discharging their duties. The applicable law to govern electronic records and technology driven crimes is Information Technology Act, 2000. It was also explained that many traditional crimes which are capable of being committed with the use or aid of or through computers and technology can also be dealt with under Indian Penal Code, 1860; The Evidence Act, 1872, The Banker's Book Evidence Act, 1891 and the Reserve Bank of India Act, 1934, and others.

7.7 FURTHER READINGS

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7.8 CHECK YOUR PROGRESS: POSSIBLE ANSWERS

Check Your Progress: 1

- 1) Cyberspace is not a physical location but a virtual space. One needs an access device to enter cyberspace. That means one needs some sort of physical access device (may be a computer screen, a telephone, a terminal, etc.) with an artificial processing mechanism, such as digital computing power and/or software. That should be joined with other access devices on a network of physical connections. It enables interaction and communication between individuals and groups of individuals and their creative output, largely independent of time and space.
- 2) Today new communication technologies, usage of mobile phones and other communication devices are globally challenging the traditional notion of jurisdiction. This has led to the possibility of the invasion of privacy of an individual. We need effective law to deal with the problems of cyber social media crimes, rumour-mongering, e-mail spoofing, spams, cyber stalking, defamation and various other cybercrimes as the impact of these crimes can be more than the conventional crimes. These cybercrimes are usually committed by the person using fake identity thus not readily and easily identifiable.

Check Your Progress: 2

- 1) Section 2(1) (w) of Information Technology Act defines Intermediary any person who on behalf of another person receives, stores or transmits that record or provides any service with respect to that record. Intermediary includes telecom service providers; network service providers; internet service providers; web-hosting service providers; search engines; online payment sites; online-auction sites; online-marketplaces and cyber cafes.
- 2) Any person aggrieved by an order made by controller, or an adjudicating officer can file an appeal to a Cyber Appellate Tribunal having jurisdiction in the matter, within forty-five days of receipt of the copy of the said order. However, no appeal shall lie to the Cyber Appellate Tribunal from an order made by an adjudicating officer with the consent of the parties

Check Your Progress: 3

- 1) Phishing is a sort of cybercrime often used to steal user data, including login credentials and credit card numbers, etc. Usually, it is committed by a person under the guise of some trustworthy entity.
- 2) Data diddling is a type of cybercrime in which data is altered as it is entered into a computer system, most often by a data entry clerk or a computer virus.

UNIT 8 PROMOTION OF ALTERNATIVE MEDIA

Structure

- 8.0 Introduction
 - 8.1 Learning Outcomes
 - 8.2 Understanding Alternative Media
 - 8.2.1 Concept and Definition
 - 8.2.2 Need for Alternative Media
 - 8.2.3 Digital Media and the Forms of Alternative Media
 - 8.3 Content and Audiences: Issues and Concerns
 - 8.3.1 Understanding the Needs of Audiences of Alternative Media
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8.0 INTRODUCTION

Digital technology has changed the ways of communication, the forms of media and media processes and most of society itself. Every media form is essentially 'digital' in the new media environments. Although the traditional media forms such as newspapers, magazines and broadcast media are still structured into a 'one-way' news processing mode, however with the very characteristic of interactivity, the digitalisation of media provides everyone with an opportunity to inform others, to make it two-way. It creates a more inclusive media experience with digital media processes where people can consume media and participate in producing the content.

Alternative media practices are possible with increased access to digital technology, particularly through internet-enabled smartphones, enabling users to create audio-visual content and its easy distribution on social media. Today, with interactive digital media platforms, news and information processes facilitate alternative gathering, writing, publishing, and dissemination methods. With this, a newer form of journalism can be

observed, published and distributed on social media sites and platforms such as YouTube, Facebook, Twitter, and Instagram. Such content is also distributed on chat apps like WhatsApp and Telegram.

However, social media is one part of digital media and a larger audience, and marginalised sections still lack access to digital participation. Against such a backdrop, there is a need to understand whether digital media is qualitatively or positively providing the way to alternative media or not. To reach the answer to the question, we will have to understand the meaning and the need for alternative media and the contents of alternative media. Also, critical questions need to be answered, such as who owns and controls the technology. Is there any relationship between the ownership of technology and control of the content? Who are the producers and consumers of alternative media content? In our endeavour to understand how digital media promotes alternative media, we will also be looking at some good practices and cases of alternative media so that we may remove the obstacles and use the insight to strengthen media practices towards an inclusive society.

8.1 LEARNING OUTCOMES

After completing this Unit, you should be able to :

- Understand and define alternative media;
- Know the importance and need for alternative media;
- Describe the forms and processes of alternative media;
- Explain the issues and concerns related to the content and audiences of alternative media;
- Evaluate the alternative media practices and sustainability;
- Critically analyse the issues of ownership and control in alternative media; and
- Assess the role of alternative media in society.

8.2 UNDERSTANDING ALTERNATIVE MEDIA

Alternative media is a comparative term. It has to be seen in comparison to, let us say, mainstream media. Generally, it is observed to be the media of the people who do not find a place in mainstream media, located at the margins or not a part of the 'centre'. Thus, alternative media is important to give a voice to the voiceless. Also, it is complementary to the mainstream and essential to bridging the gaps and making society inclusive. However, to understand the need for and the processes of alternative media, we must define and conceptualise alternative media about the whole media landscape.

8.2.1 Concept and Definition

Since there is no concrete definition of alternative media (as discussed above), multiple definitions define it based on its role and functions in society. For example, in Oxford references, alternative media has been defined broadly in three ways: "community press" used by "minority groups

for campaigning"; "radical media" used for "political messages" and media "other than mainstream" for promotional purposes.

To elaborate, alternative media work as a 'supplement' to the mainstream media in such structures where either access to the mainstream media is not provided or representation is not inclusive of all the social, economic, cultural or political groups. Usually, alternative media processes include traditional, "relatively open and unedited" content.

Participation is present in almost all forms of community media" as part of alternative communication. (UNESCO cited in Lewis, 1993, 12) Because community media evolves within minority groups, small communities, or subcultural groups within communities, they may be confined to specific geographic locations for specific purposes, such as awareness campaigns on particular issues and protest drives against issues related to civic amenities, etc.

Radical press or content forms such as graffiti, political newsletters, pamphlets, etc., are also considered part of alternative media. It is used by political groups or parties that feel underrepresented by the 'corporatised' mainstream media systems to spread their political messages.

As a marketing strategy, promotional tools and content for a product are sometimes categorised as alternative media. It includes cinema, music, and writings considered 'out of' the 'information-based' mainstream content.

Thus, to define alternative media, one can ask, what is the alternative to what? Moreover, how is it different from the compared one? According to Atton (2004), Alternative media should be fundamentally grounded in the cultural forms of an independent media outlet. Alternative media should also possess some if not all, attributes: a reliance upon modern, evolving technology; de-professionalised organisational norms and roles; horizontal communication patterns; cultural and political radical content; innovative and independent distribution practices; and a compelling aesthetic form. (cited in Kenix, 2011).

Besides this, alternative media can also be defined based on the production process. Looking at the content distinction, alternative media content is often comprised of different types of news stories and information-based content given in storytelling formats (traditional and modern) focusing on the needs and goals of a particular situation of a specific locality meant for local audiences.

8.2.2 Need for Alternative Media

In consumer societies, mass media often offers profit-driven content, ignoring the need-based content. This may include human rights, linguistic/cultural rights, the plight of people experiencing poverty, etc. For a long time, such issues have been ignored, underrepresented, or misrepresented by the mainstream media, keeping some people at the social margins. Against this backdrop, communities and sections of society start using media themselves with the help of traditional practices or modern

technology-supported small-scale media ventures. If we look at the broader picture, the trend is not limited to the communities within a geographical area; we can notice it regarding economic or political movements for freedom. We can take the example of developing nations with special needs for communication that are not represented in international media, the newly emerging political demands of native peoples in North America, or the needs of refugees in Western European nations to create socio-cultural realities for themselves.

We can borrow Denis McQuail's preposition of normative theories of press to include development media and democratic-participant media theories as a framework to be added for a need-based media approach along with the other four theories, i.e. Soviet media theory, authoritarian media theory, libertarian media theory, and, social responsibility theory of media. According to McQuail, individual citizens and minority groups must have the right to access the media, which must serve their specific communication needs, such as education, health, development, etc., and should not be controlled by the market or the state. In a participatory form, such media would be small-scale, interactive and decentralised to challenge the conventional gatekeeping process of mainstream mass media. "Democratic, grassroots involvement in small-scale media enables people to formulate their definitions of needs and goals, and, in Nyerere's phrase, 'develop themselves'." (1973, p. 60)

In contemporary times, in the digital media environment, alternative media may enrich media plurality by paving the way for civic engagement and participation in citizen journalism worldwide. This can lead to a true public sphere and "fills the gaps left empty by many mainstream media narratives" (Russell, cited in Turner and Saber, 2016). Because it will widen the evidence-based journalistic content for citizens "to make informed choices and hold their governments to account" (Coulson, 2013). The strong alternative media base also supports the media ecosystem by countering misinformation and disinformation that affect the cohesiveness of any society. Also, media plurality streaming into the media system may help combat filter bubbles and echo-chambers where audiences are exposed only to content that aligns with their existing belief or ideology.

In Lewis's words (1984,1), the need and role of alternative media can be concisely put as "expanding the services of mass media, challenging mass media systems and their implications. Offering alternatives to mass media systems, doing things which mass media systems cannot do." Addressing this issue requires a collaborative effort from platforms, users, and society.

8.2.3 Digital Media and the Forms of Alternative Media

The advent and development of digital media have provided a way to converge all traditional media forms into digital forms. "Digital platforms can now be regarded as key participants within the broader framework of news media; they may not be publishers, but their roles as distributors are increasingly hybrid in nature." (ABC, 2018, p. 6) With the continuously increasing spread of digital media, we witness the digital editions and additions of what used to be seen on the streets. For example, forms such as

community newsletters, fanzines, pamphlets, posters, graffiti, street theatre, and puppetry are presented as digital art, films, and content as part of alternative media. "Alternative media have been so widely divergent in their approach and execution of storytelling and news reporting" (Kenix, 2011,17)

Nevertheless, it is not only the 'traditional' digital; digital media provides many more avenues for alternative media practices, particularly on social media platforms. Social media has become an alternative 'public space' to voice concerns without 'margins'. Some newer forms of alternative media are evolving. For example, short-form video content or 'reels', live streaming of the content/events, and personalised interactive content.

Short-form content: Reels are short, engaging videos. "This format's success can be attributed to its ability to convey information, entertainment, and creativity in a concise and visually appealing manner. User-generated content is catching up in popularity and ease." (Sridharan, 2023). For example, Instagram reels and YouTube shorts.

Long-form content: Weblogs/blogs, video blogs, podcasts, etc., are long-form content published online. Blogs are text-based articles and information pieces written and combined with multimedia-supported content and hyperlinks. As the name suggests, video blogs are audio videos produced for social media consumption. Similarly, podcasts are audio programmes (now available in video formats).

Community engagement on Social networking platforms: Social media platforms such as Facebook and LinkedIn provide the facility to create social media pages for community or group engagement. These pages may be kept open for public access or restricted to the members. You may publish various content, from articles and videos to information and announcements. The 'followers' of the group may actively participate by commenting and responding to the content and even for **live streaming** of certain events. Thus, social media platforms disseminate information and foster online communities.

Digital streaming: Although on-demand digital streaming platforms such as Netflix, Zee5, Amazon Prime Video, etc. are so far proving to be an 'alternative' to the theatre for film watching, they can also be a source of alternative media content in the form of films and series made on themes concerning the lives of marginalised communities/individuals.

Check Your Progress: 1

Note: 1) Use the space provided below for your answers.

2) Compare your answers with those given at the end of this unit.

1. List three digital media content forms used by alternative media with examples.

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8.3 CONTENT AND AUDIENCES: ISSUES AND CONCERNS

The more we are facilitated by digital technology, the more challenges we face concerning the credibility and authenticity of the content and the purpose of the people sharing the content behind the face of a community. Today, when the information is being fed into the 'networks' of the internet, increasingly, online communities are posing as alternative media platforms, specifically coming in the "roles of new media 'watchdog', 'fact-checker' and 'critics', creating "a new information asymmetry". Let us understand the challenges at the level of content and audiences in the environment where the audiences, increasingly, are taking the role of producer in addition to the producer.

8.3.1 Understanding the Needs of Audiences of Alternative Media

To understand the needs of the audiences of alternative media, we have to seek answers to the following questions first:

- Who are the audiences of alternative media?
- How do they access and use the content of alternative media platforms?

Let us borrow the conceptual frame given by Denis McQuail (2016) to bring an understanding of the audience, who sees audiences originating "both in society and in media and their contents" (250). With a need-based approach to media content, we see how media content fulfils the information needs of communities and societies. Here, the audience acts as a 'target group' for media content and shares "at least one significant social/cultural identifying characteristic – that of shared space and membership of a residential community." (McQuail, 2016, p. 409). Thus, the audiences of alternative media are more locale and distinctive in structured group formations. For example, women as a community, individuals with disabilities (or special abilities), rural audiences, etc.

We can find the answer to the second question in the practices around media today. "new media have opened up new opportunities for the formation of very small audiences based on many different aims and identities and with the advantage of being able to serve very dispersed groups." (McQuail, 2016, p. 409) However, to make the optimum use of new media, we have to examine whether the individuals and groups at the margins can access the new digital media to make it an alternative voice. Therefore, the foremost need of audiences would be the 'access' to the 'open' or "commons" "available to anyone who wishes to participate in the networked information environment outside of the market-based proprietary framework." (Benkler, 2006 cited in Goggin, 2011, 157) Here, we can cite Seshu (2016), for example, "In India, most NGOs working with women realised that an online presence in the form of blogs, websites, and accounts in social networking sites was an important and necessary extension of the work they did offline." (250)

Access to technology-driven media alternatives transforms the 'passive' audience into an active audience by prompting them to engage in activities such as commenting, sharing, editing and adding to the existing content. To access the need-based information, the audiences of alternative media use search engines and look for content in the form of podcasts, blogs, short videos, etc., that brings not only the local problems to the fore but also make people aware of their rights, sense of belonging and much more.

8.3.2 Journalistic Practices: Mobile Journalism, Citizen Journalism, and Community Journalism through Virtual Communities

The ease of accessing internet-based digital devices has increased users' participation through two-way communication, which is possible in new media. Smartphones, especially with camera and microphone capabilities, have opened a new world of possibilities for common people to create and produce content recognised as part of alternative voices.

Handy mobile phones and faster internet speed enabled reporters to reach remote areas with comparative ease. Producing and consuming news using mobile phones is called MOJO or mobile journalism. MOJO has dramatically changed the traditional media scenario. Today, the technology is used by big media houses for live reporting and sending reports of such events, which the heavy camera setup cannot cover. By shifting to the 'digital', the media houses are practising 'digital' for news gathering, processing/producing, and distributing. For example, there has been a shift from cable news channels like Al Jazeera USA to 'mobile and online content providers'. Crowdsourcing, advanced search to find more news sources, and a content management system (CMS) to increase the reach and provide the content either on the individual app or using social media platforms/apps are all part of news processes as part of MOJO.

However, the access of common people to the same digital devices, such as accessible, inexpensive smartphones, open-access software, and social media platforms that enable them to interact with the content, extends the journalistic activity from mobile journalism to citizen journalism. Consumers of news on such platforms sometimes add information or edit information by commenting on the existing content. Thus, "mobile journalism is an ongoing conversation between journalists and users" that extends to citizen journalism. (Steve Hill and Paul Bradshaw, 2019). Therefore, when we discuss events like the World Trade Centre attack of 9/11 in the USA or the London bombing of 2005, we acknowledge the alertness of the citizens who captured the event on their handy cam and mobile phone. Nevertheless, with more direct participation in journalistic content production, the scholars define citizen journalism with the notion that "the person doing the reporting is independent and does not work for a media organisation." (Hinton & Hjorth, 2013, p. 65)

Today, we have ample examples of individual initiatives as part of citizen journalism. Amateurs, journalists, and activists produce journalistic content through blogging, live tweeting, video blogging, etc. Darnella Frazier, the

recipient of the Pulitzer Award, 2021 (Special Citation), set such an example by "courageously recording the murder of George Floyd" on her mobile phone and showing it to the world through social media.

Citizen journalism takes a collaborative sustaining practice when supported by the community. Therefore, we can define community journalism as the next level of citizen journalism. In the past, citizen journalism has been supported by the help of non-government organisations and self-help groups, and there are a few examples where local bodies of pro-active people have been participating in community journalism with social media platforms. Nevertheless, the major power of the internet lies in the widespread network of people, which it made possible globally. It extended citizen journalism to community journalism at almost a top level, where like-minded people with similar interests unite to raise a voice on certain issues. Campaigns such as 'Black Lives Matter' built and gained momentum after the George Floyd murder case because of the 'online activism' of the 'community of interest' online.

8.3.3 Prosumers: Participatory and Interactive Consumers

To understand how digital media promotes alternative media and journalistic practices, we can look at how the nature of consumers or users of media is increasingly transforming or shifting from being 'consumers' to 'prosumers'. Access to production-based activities and 'open publishing' "eroded [d] the dividing line between reporters and reported, between active producers and passive audience" (Edwards, 112) Internet-based technology allows user-generated content (UGC) to be used in a two-way communication process with user-friendly interfaces. This created a new audience that participated proactively. "Produsers", as a combination of the two, i.e., producer and user, is a more sociological perspective to look at today's participatory media practice. The term was coined by Australian academician Axel Bruns (2008).

This is also indicative of the shift from anonymous 'mass' audience to 'individual' audiences as a frame of reference (Athique, 2013), a digitally empowered consumer, conceptualised by Alvin Toffler (1980) in his book The Third Wave as a "prosumer". The consumers of the content are engaged in activities like video content production, skilled consumption to gain professionalism, and 'amateur professionalism'. "As this power shift becomes embraced commercially, the new centrality of prosumers to the digital economy is exemplified by the amateur video-sharing site YouTube and the participatory culture that it facilitates" (Burgess and Green, 2009, cited in Athique, 2013, 165). "A prosumer is not simply a consumer of digital services, but also a designer of digital artefacts, such as weblogs, digital music, video clips, game mods and so on." (Athique, 2013, 45)

With "empowered choices armed with ready information", ordinary citizens are gaining knowledge and entering into the domains previously limited to the professionals. (Athique, 2013, 44) "What becomes clear in such accounts is how small media organisations can engage with the mainstream to get alternative grassroots viewpoints expressed...central to the approach is dialogue and persuasion rather than control. (Edwards, 113)

8.3.4 Issues in Planning, Managing and Sustaining the Medium: Cases

Social media platforms enable citizens to journalistic content and make aware that citizens are using social media for governance, as we find in the rural communities of Rajasthan's Goner village, where people make small videos, write text content and post it on social media platforms such as X (formerly Twitter) for public view and specially meant for governing bodies for solutions (Sharma & Feigelson, 2023), as "relayed pieces of information" on social media (Burgess and Green, 2009 cited in Athique, 2013, 168) Nevertheless, there are a few examples of community and alternative media which are sustaining as a true journalistic 'experiment' if not 'experience'. Following are such cases to understand the issues of planning, managing and sustaining alternative media with the help of digital media:

Khabar Laharia (India): India's first digital rural news network, run by 30 women reporters and stringers in 13 Uttar Pradesh and Madhya Pradesh districts. One of India's oldest community media organisations, Khabar Lahariya, is a case of transformation from a newspaper to an online "hyperlocal channel" working through a website and YouTube. The organisation claims to have more than 5 million viewers on multiplatform news channels. The organisation trains rural women in journalism and production skills, like storyboarding and shooting using smartphones, for 6-8 months. Due to low production costs, these women can send more stories to the Delhi offices for editing and online distribution, and this is how they increasingly adapted to increase the network of rural women in community journalism.

Community Initiative by Chicas Poderosas (Latin America): It is a not-for-profit organisation operating across Latin America, USA and Europe. Founded in 2013 by Mariana Santos, the community found a new pace with the 'Training the Trainers' event in 2015. Chicas Poderosas provides female journalists with the needed journalistic tools and skills in a collaborative structure. (Vuyst, 2020) To sustain the media initiative, the community runs journalism workshops and digital literacy programmes to strengthen the distribution channel. "The digitally literate Chicas Poderosas core team uses file sharing and collaborative working tools like Slack. These skills are then passed on to communities, to ensure best practice but also ease of collaboration, using the same platforms" (Turner & Saber, 2021)

There are an increasing number of cases of community and alternative media today, where educational institutions (especially in cases of community radio initiatives) and NGOs (other alternative media practices and advocacy) are joining in collaborative efforts with marginalised sections and neighbourhoods towards sustainable planning and management of communication practices with an adaptive use of digital technologies. For example, some of these organisations are also shifting to apps and other cost-effective digital tools rather than websites, which are expensive to run and reach a wider audience.

Activity 1

Identify any community media initiative of your locality and observe:

- How it is using digital media platform/s.
- Make a list of such platforms.

Indicate what forms of content are being used by the community media.

Check Your Progress 2

Note: 1) Use the space provided below for your answers.

2) Compare your answers with those given at the end of this unit.

1. How is citizen journalism different from mainstream/conventional journalism?

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2. Who are 'prosumers'?

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8.4 ALTERNATIVE MEDIA: OWNERSHIP AND CONTROL

Participation and inclusion of the marginalised, unheard voices in the frame of media is how alternative media can be described. However, in doing so, it needs 'ordinary' citizens at the decision-making level in organisational and managerial roles to own, if not 'control' such alternatives, as UNESCO's Third Medium-Term Plan (1990-1995) states about the alternative forms of communication, that the media may be consciously alternative in their way of operating through their organisational structure. Let us try to understand the issues, challenges, realities and solutions for achieving such a participatory media system.

8.4.1 Understanding Different Ownership Patterns: Critical Theories

In his book, *Social Media: A Critical Introduction*, Christian Fuchs provides an array of critical postulations given by different scholars on social media. These can be clubbed broadly into the critical theory tradition as the following:

Political Economy theory looks at information production, distribution and consumption from a 'power-relation' perspective. For example, social media platforms like Facebook, X, etc., own and control the mechanism of the platforms while the users only create/produce the content. Terranova (cited in Fuchs, 2014) calls it "Web 2.0 is based on the exploitation of free labour". Also, Lovink (2008) asserts the need for economic and revenue models to bring parity for alternative/participatory media producers for their economic viability.

Extending the political economy of digital and social media online, Fuchs (2008, 2010, 2014) points out how media corporations (like the old system) exploit and 'sell' the audiences to advertisers. "Internet users who form an Internet prosumer/producer **commodity** and are part of a surplus-value generating class that produces the commons of society" are, thus, the **products for the advertising market business**.

The "notion of sharing" and other activities on social media platforms such as Facebook, mystifying the logic of profit, advertising and commerce" (John 2012 cited in Fuchs, 2014) can be seen in the broad spectrum of **Cultural Industry theory** as all such activities play a part of 'cultural capital' where everyone wants to own (here, act) to follow the fashion or trend, which ultimately result in the increasing profit of the corporates.

Similarly, there is a **techno-determinism** perspective, where social media is seen with "techno-deterministic ideologies" and "internet-centricism" (Morozov, 2011) that run the society. On the other hand, the notion of the **digital divide** indicates the apprehensions controlling access to function and ownership by controlling the algorithm through content management systems (CMS), having an independent/personal digital tool by a few compared to others.

8.4.2 Democratising Ownership

The digital spaces and the increased access to them have certainly democratised the 'audiences' towards the 'right to know'; however, 'democratising ownership' is still a goal to achieve. As we discussed the critical theories, we now know that a three-fold system has to be adopted to make the ownership of alternative media of digital spaces democratic in nature:

1. **Accessible infrastructure mechanism:** A self-reliant internet-based digital infrastructure with more start-ups and app developers in the country can facilitate alternative media.
2. **Inclusive organisational structure:** The 'sustaining' alternative media organisations reflect optimism about the training they impart to remote and marginalised areas. However, true participation emerges when they are trained to acquire decision-making roles. Therefore, non-hierarchical, local democratic journalism should be practised with the help of tenure-based training from time to time for equal and collective decision-making powers in editorial policy decisions.

3. **Support system by all actors and stakeholders:** Although alternative media has been seen as an 'alternative', 'oppositional' media to the mainstream, however, as we have seen throughout the discussion, it is a supportive, complimentary and supplementary medium to not only the 'mainstream' media but also to the 'good governance', hence, all the societal stakeholders must come forward to make such initiatives more democratic. As Tewksbury and Rittenberg (2012,169) say, “[t]here may not be a new world order – media corporations and political elites will likely always garner the lion's share of the audience – but important components of mass society will change (and have changed already)”.

8.4.3 Revenue Models of Alternative Media

Whether it is an individual citizen journalist or the reporters working in a community setting, they need some economic support to sustain their journalistic practice. It has been noticed that such initiatives manage to start with funding from donors; however, they fail to continue in the long run. To avoid that, community-based media organisations are exploring revenue models today to encourage citizen reporters to keep producing high-quality content. This includes horizontal integration, networking, and experimenting with content, apart from a simple subscription and/or donation model to generate revenue.

First, we can see the example of *Khabar Lahariya*, which uses a horizontal integration model with online expansion for urban digital audiences and the 'offline' newspaper for the rural community. The organisation Chambal Media (which manages the revenue for the community media project) has kept the original newspaper *Khabar Lahariya* intact in its earlier form since it has a base of audience and credibility.

On the other hand, purely online community-based organisations, such as Chicas Poderosas, look for more collaborations beyond funding. Through networking, such organisations can gain recognition as the 'global face' of alternative media. Thus, with diverse perspectives, they can achieve financial and resource support from other countries.

Nevertheless, gaining audiences for serious content of alternative media is the real challenge in digital media environments where algorithm, number of clicks and views, Search Engine Optimization (SEO) and CMS are still the deciding factors for revenue generation. In such a situation, organisations and alternative media initiatives are experimenting with the content forms to the extent of 20-30 per cent of the total content to include such stories that may attract audiences easily.

Lastly, we can add the 'responsibility model' of revenue by adding social actors to this list, as mentioned in the AC report of 2018:

News is a public good - it serves a purpose beyond the immediate needs of advertisers and consumers- but monetising that 'good' is difficult. Hence, it has traditionally needed a cross-subsidy in the form of advertising or, in some cases, government support. (p.4)

Check Your Progress: 3

Note: 1) Use the space provided below for your answers.

2) Compare your answers with those given at the end of this unit.

1. List three ways through which the ownership in alternative media systems can be democratised.

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8.5 ROLE OF ALTERNATIVE MEDIA IN SOCIETY: CRITICAL APPRAISAL

A democratic society develops with information dissemination and awareness that stream through diverse media. Digital media has enhanced the chances of media plurality with more participation from all stakeholders. However, certain grey areas need to be worked on. First, alternative media organisations face challenges from the corporate social media platforms and sites (the major distributional channels for such organisations) concerning monetary interests, data management and control. Secondly, some media initiatives, running essentially through online communities, face serious transparency and trust issues due to their filtration policies and communication strategy to promote only a single view/perspective. Highly political, such communities lead to the formation of filter bubbles, failing the core objective of alternative media.

Not to forget, “journalism has multiple roles: it monitors and curbs power; it supports and creates public debate; and it educates and entertains” (Accc, 2018) by incorporating increased crowdsourcing, transparency and accuracy as an essential part of training, alternative media shall contain all the ethical principles which assert the diversity of perspectives. Also, this will enable 'networked journalism' that incorporates both trained journalists and citizen journalists, enjoying the strengths of both forms of news gathering and reportage (Bruns et al., 2009,205).

Activity 2

Identify any one alternative media initiative in your locality. Critically examine it for:

- the inclusivity of organisational structure
- the inclusive representation in the content

Write a report in 300 words.

8.6 LET US SUM UP

In this Unit, we discussed various concepts and perspectives on understanding alternative media, and thus, we attempted to define alternative media. The social structure was explained to understand the need for alternative media. With forms of digital media platforms and content, we were able to see and locate how alternative media practices are being adapted to new media environments. We discussed various digital media forms, such as short forms like shorts and reels and long forms like blogs and podcasts. Also, we learned about social media spaces for community engagement that are utilised for alternative media projects.

The advent of new media technologies has transformed the production of journalistic content and the nature of audiences. By facilitating two-way communication in mass media structures, audiences are also prompted to participate in content production proactively. This led to newer forms of journalism, such as mobile journalism (MOJO), to enrich and widen the scope of citizen and community journalism. Thus, prosumers are the new actors in the media process. However, there are challenges in planning, managing and sustaining alternative media initiatives. We tried to understand the good practices adopted by certain community media initiatives in this regard in the Unit.

We discussed the issues and challenges of ownership and emerging patterns with the help of various critical theories and tried to find possible solutions. With a practical approach, we see how various media organisations from the alternative media arena are emerging with adaptive revenue models for economic sustainability. We hope the discussion will enable you to critically examine the role, function, and structures of alternative media initiatives in society and assess them as part of the efforts to democratise the media spaces in this digital age.

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8.8 KEYWORDS

User-Generated Content: Content produced by the users or audiences of internet-based media platforms/sites.

Filter bubble: The process of limiting the content a person can see and

access through personalised searches, recommendation systems, and algorithmic bias inherent in the internet-based media system.

Crowdsourcing: Seeking information, input or news story ideas from people on social media or internet-based platforms/websites.

8.9 CHECK YOUR PROGRESS: POSSIBLE ANSWERS

Check Your Progress: 1

1. The three digital media content forms used by alternative media are:
1. Short-form content such as – short videos. For example, Instagram reels, YouTube shorts, etc.
2. Long-form content, including long videos/documentaries and articles. For example, blogs, V blogs, podcasts, etc.
3. Page-based content meant for community engagement. For example, Facebook page and discussion forums on other social media platforms to connect and engage with more people.

Check Your Progress: 2

1. While mainstream media is based on a more structural and organisational structure limited to professional journalists and media owners, citizen journalism is open to more direct participation in journalistic content production by all common citizens. Citizen journalists are independent reporters who do not work for a formal media organisation.
2. Prosumers are proactive users of internet-based digital platforms/sites who produce content and actively participate in online communication processes.

Check Your Progress: 3

1. The three ways through which the ownership in alternative media systems can be democratised are:
 - a) Accessible infrastructure mechanism
 - b) Inclusive organisational structure
 - c) Support system by all actors and stakeholders

Block

3

DIGITAL INFORMATION LITERACY

UNIT 9

Information Literacy

UNIT 10

Applications of Information Literacy

UNIT 11

Learning Environments & Information Literacy

UNIT 12

Digital Information Processing

BLOCK 3 INTRODUCTION

One of the main dimensions of media literacy is that a user needs to know how to use methods and means to collect information about any issues, problems, crises, interests, or curiosity. Realising that you need more information about your situation and, at the same time, having the skills and competencies to collect that information from trustworthy places is the crux of this Block—Information Literacy. In this Block, we explore information literacy from digital media perspectives.

Unit 9 Information Literacy. Throughout this Unit, we will explore the core concepts, theories, and models that underpin Information Literacy (IL). We'll understand the various definitions and models, including the SCONUL 7 Pillars of IL and UNESCO IL Standard, alongside the Swiss Standards for Information Literacy. You'll discover the pivotal role of libraries in IL instruction and dissect the Information Literacy Competency Standards for Higher Education. Through this Unit, you'll be equipped with the knowledge and skills to navigate the information landscape confidently and critically.

Unit 10: Applications of Information Literacy. In today's digital age, information permeates every aspect of our lives, influencing decision-making, shaping opinions, and driving societal progress. This Unit revolves around the fundamental principles of information literacy, equipping you with the essential skills to navigate and harness the vast sea of information available. Information literacy encompasses locating, evaluating, and effectively utilising information from various sources. Understanding its significance is crucial in a world where misinformation and data overload abound. By mastering information literacy, you empower yourself to make informed choices, contribute meaningfully to discussions, and engage critically with the world. Throughout this Unit, we will explore the historical evolution of information literacy and key concepts such as meta-literacy and digital citizenship. We will also examine the role of library professionals and educators in promoting information literacy.

Unit 11: Learning Environment and Information Literacy. This Unit explains the transformative realm of online learning, propelled by the boundless capabilities of the Internet. Within virtual environments, students and educators engage in dynamic interactions facilitated by various tools, fostering collaboration and personalised learning experiences. The global shift to online education, accelerated by the COVID-19 pandemic, highlights the indispensability of understanding the determinants of online learning, including disruptive technologies and information literacy. As we navigate this digital landscape, we will explore the intricacies of self-regulated learning and the evolving role of libraries in providing access to knowledge.

Unit 12: Digital Information Processing. In today's digital age, information is omnipresent and pivotal to our daily lives, influencing decisions and actions across various domains. This Unit explores the intricate realm of digital information, encompassing its structure, processing, storage, and ethical considerations. As we navigate this Unit, we will explore the essence

of digital information, unravelling its inherent characteristics and the mechanisms involved in its processing. We will scrutinise the nuances of Creative Commons licences, elucidating their relevance in promoting knowledge dissemination while safeguarding intellectual property rights. You will grasp the fundamentals of digital information and cultivate the skills to navigate the digital landscape with prudence and proficiency.

With an understanding of the nuances of information literacy, you should realise the need for information to tackle your situation and collect that information from reliable sources. That is this Block's aim; we hope you will grasp those from these Units.

UNIT 9 INFORMATION LITERACY

Structure

- 9.0 Introduction
- 9.1 Learning Outcomes
- 9.2 Information Literacy: Concept
- 9.3 Definitions of Information Literacy
- 9.4 Information Literacy Models
 - 9.4.1 SCONUL 7 Pillars of Information Literacy, Core Model for Higher Education
- 9.5 Information Literacy Standards
 - 9.5.1 UNESCO IL Standard
 - 9.5.2 Swiss Standards for Information Literacy
 - 9.5.3 The Nine Information Literacy Standards for Student Learning
- 9.6 Library's Role Information Literacy Instruction
- 9.7 Information Literacy Competency Standards for Higher Education: Use of the Standards
- 9.8 Information Literacy Practices
- 9.9 Information Literacy Rubrics
- 9.10 Information Literacy Curriculum Outline
- 9.11 Let Us Sum Up
- 9.12 Keywords
- 9.13 Further Readings
- 9.14 Check Your Progress: Possible Answers

9.0 INTRODUCTION

In our ever-evolving digital landscape, the ability to navigate, evaluate, and utilise information effectively is paramount. This Unit will explain the core concepts, models, standards, and practices of information literacy, providing you with a comprehensive understanding of this essential skill set. This Unit explores the concept of information literacy, examining various definitions and understanding its significance in today's information-rich environment. Also you will learn the prominent information literacy models, such as the SCONUL 7 Pillars and UNESCO IL Standard, shedding light on their frameworks and applications. Also you will explore different information literacy standards, including those set by UNESCO and Switzerland, to grasp the global perspective on this crucial competency. Understanding the pivotal role of libraries in information literacy instruction, we will discuss how they support and facilitate the development of these skills among learners. The practical applications of information literacy through competency standards, practices, rubrics, and curriculum outlines also explained.

9.1 LEARNING OUTCOMES

After completing this Unit, you should be able to:

- Discuss the concept and theory of information literacy (IL);
- Explain the information literacy standards in terms of students learning;
- Explain the main models of information literacy;
- Understand the various Information Literacy models

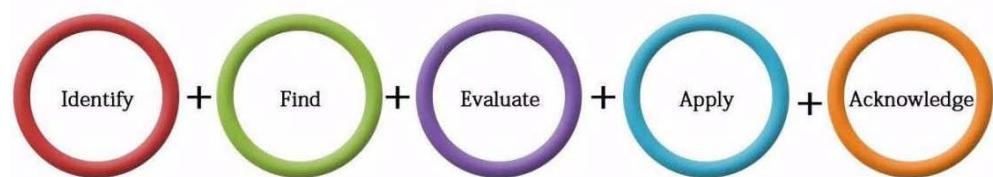
9.2 INFORMATION LITERACY: CONCEPT

Information literacy has become a survival skill for contemporary society. It entails individuals who are skilled in using information.

Information is available through libraries, community resources, special interest organisations, media, and the Internet--and increasingly, information comes to individuals in unfiltered formats, raising questions about its authenticity, validity, and reliability. In addition, information is available through multiple media, including graphical, aural, and textual, which pose new challenges for individuals in evaluating and understanding it. The uncertain quality and expanding quantity of information pose large challenges for society. The abundance of information will not create a more informed citizenry without a complementary cluster of abilities necessary to use information effectively. In such a scenario where we expect people to make informed decisions independently, the relevance of IL increases manifold. Be it any organisation, association, or profession, IL is and will remain an important dimension irrespective of gender, country, status, age, or other social indicators.

Information literacy (IL) is the term used to describe the efficient and competent handling of information. The American Library Association (ALA) describes IL as the ability to locate, evaluate, and use information. It is a set of abilities requiring individuals to "recognise when information is needed and have the ability to locate, evaluate, and use effectively the needed information."

The information literate person can:



Information

Fig. 9.1: Attributes of an IL person

It forms the basis for lifelong learning. It is common to all disciplines, learning environments, and all levels of education. It enables learners to master content, extend their investigations, become more self-directed, and assume greater control over their learning. An information-literate individual can:



Fig. 9.2: Attributes of an IL person



IL helps people understand the issues surrounding the ethical and legal use of information, including access to and use of information.

Information literacy ranks among the most important qualifications for success in study and the profession of an information society. In higher education, information literacy is primarily promoted by libraries, which have, in recent years, expanded on their original offers of library launches and research courses to meet the optimal placement of skills for the information society. Rockman rightly observes, "Information literacy is no longer just a library issue. It is the critical campus-wide issue for the 21st century, of keen importance to all educational stakeholders, including faculty, librarians, and administrators".

9.3 DEFINITIONS OF INFORMATION LITERACY

- **CILIP has defined information literacy** as "knowing when and why you need information, where to find it, and how to evaluate, use, and communicate it in an ethical manner."
- **SCONUL defines information literacy** as "Information literate people who demonstrate an awareness of how they gather, use, manage, synthesise, and create information and data in an ethical manner and will have the information skills to do so effectively."
- **The Joint Information Services Committee (JISC)** uses i-skills to describe information literacy and IT skills. i-skills are defined as "the ability to identify, assess, retrieve, evaluate, adapt, organise, and communicate information within an iterative context of review and reflection.

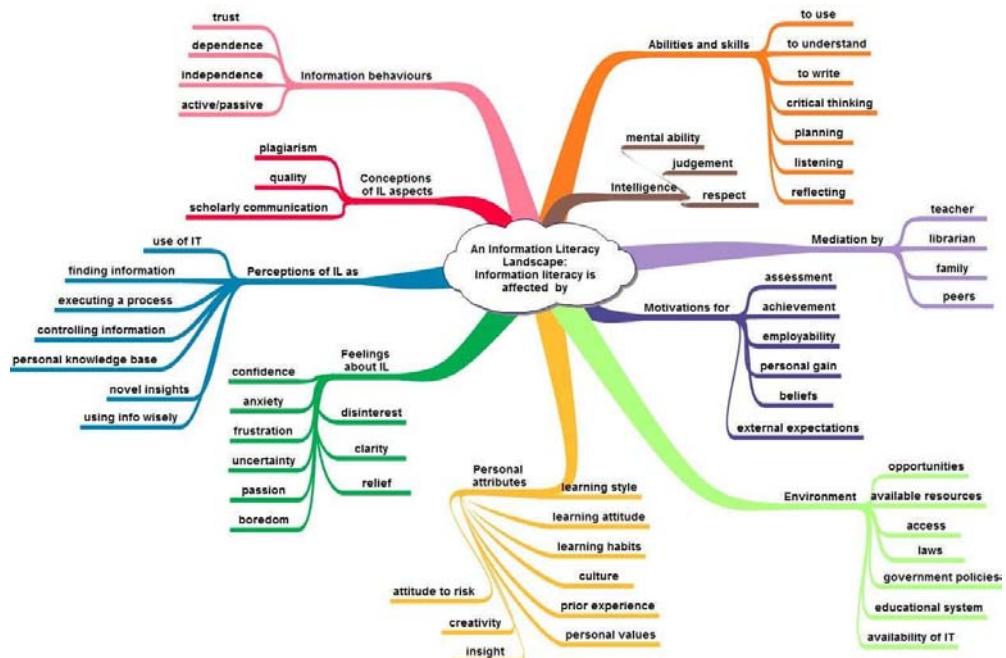


Fig. 9.3: IL landscape

9.4 INFORMATION LITERACY MODELS

Models represent the information-seeking process you go through when seeking information to answer questions, complete an assignment, or explore something you're curious about. The process can be very direct, simple, or complex—a lot depends on the questions you're trying to answer or the problem you must solve. Models were developed to define information literacy and outline the information-seeking process (information problem-solving process, the research process). They are like a roadmap for navigating through the information-seeking process.

Sometimes, we take one path, and sometimes another—how we find, analyse, and use information depends on many things, including how we learn, the

available resources, the task in our hands, and what we may already know about the topic.

Several widely known models of IL have been developed through research and evaluation. There are many similarities among the models. There is more agreement than disagreement among the models. Some well-known Information Literacy models are:

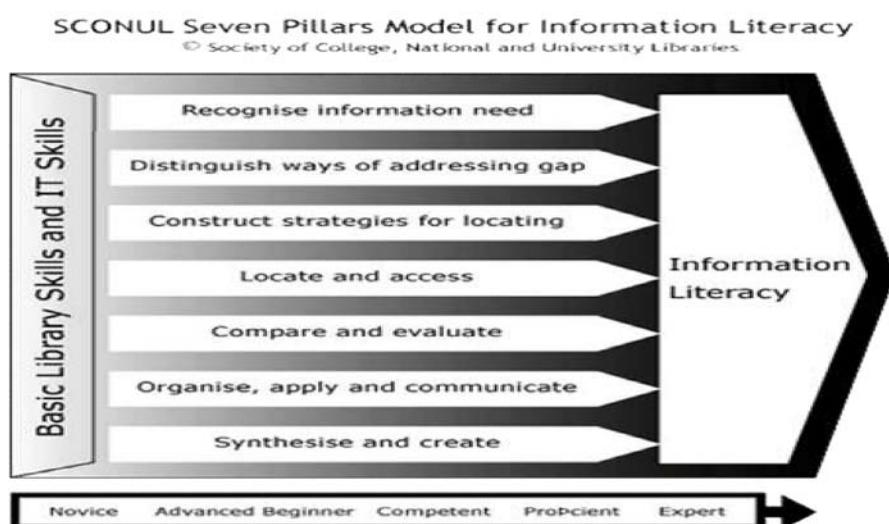
Kuhlthau-Information Seeking; Eisenberg & Berkowitz - The Big6 Skills; Irving-Information Skills; Pitts & Stripling - Research Process; New South Wales - Information Process; Loertscher - Information Literacy Model; Follett - Information Skills Model; Netsavy Model; Info Ohio - DIALOGUE Model; and SCONUL – Seven Pillars Model.

9.4.1 SCONUL 7 pillars of Information Literacy, Core Model for Higher Education

This model has been used to build the Learning outcomes for Information and Research Skills. SCONUL (Society of College, National, and University Libraries) updated its original seven-pillar framework in April 2011 to account for the changing terminology and concepts surrounding information literacy. This new framework is student and outcome-focused.

Data

1. **Identify:** Able to identify a personal need for information
2. **Scope:** Can assess current knowledge and identify gaps
3. **Plan:** Can construct strategies for locating information and data
4. **Gather:** Can locate and access the information and data they need
5. **Evaluate:** Can review the research process and compare and evaluate information and
6. **Manage:** Can organise information professionally and ethically
7. **Present:** Can apply the knowledge gained: presenting the results of their research, synthesising new and old information and data to create new knowledge and disseminating it in various ways.



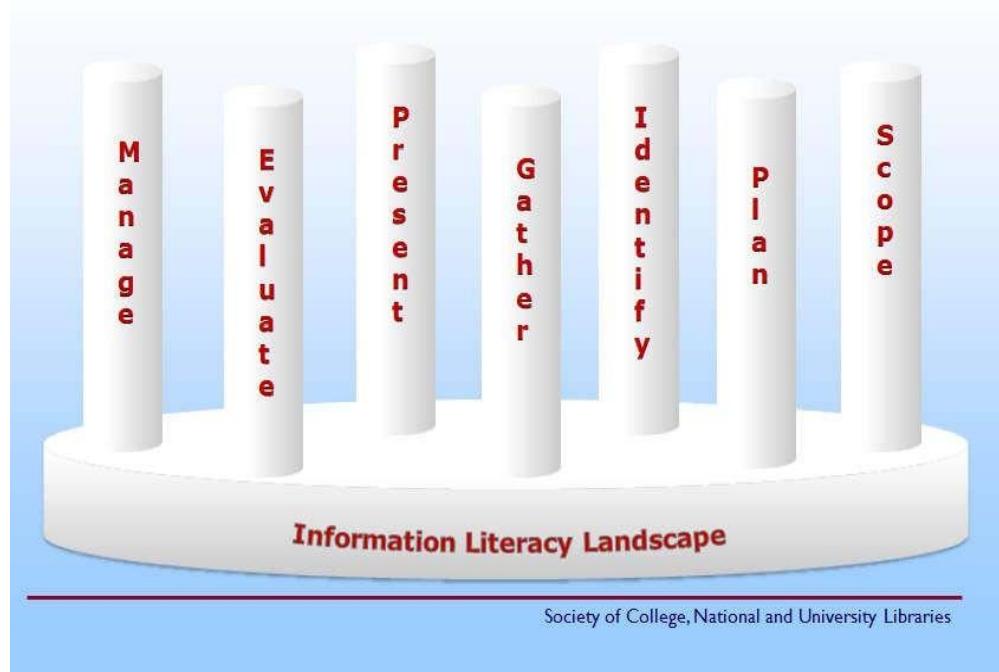


Fig. 9.4: SCONUL 7 pillars IL, Core Model for Higher Education

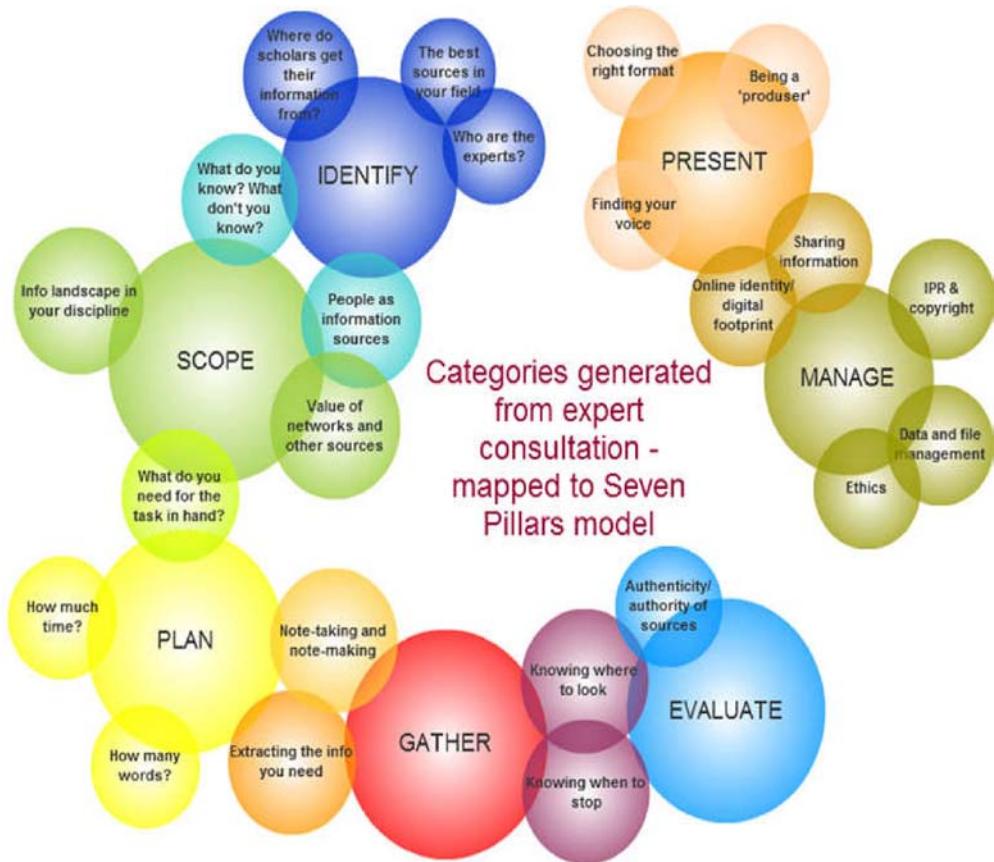


Fig. 9.5: skill and competencies associated with SCONUL 7 pillars IL model

Check Your Progress: 1

Note: 1) Use the space below for your answers.

2) Compare your answers with those given at the end of this unit.

1. Define information literacy and explain its significance in the context of higher education.

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2. Compare and contrast different models of information literacy, such as the SCONUL 7 Pillars and UNESCO IL Standard.

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3. Discuss the role of libraries in information literacy instruction and how they contribute to enhancing students' information literacy skills.

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4. Analyse the nine information literacy standards and their relevance in contemporary educational settings.

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5. Evaluate the effectiveness of information literacy rubrics in assessing students' information literacy competencies.

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7. Explain the concept of information literacy practices and provide examples of how they can be applied in academic and professional contexts.

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9.5 INFORMATION LITERACY STANDARDS

Many definitions and models were created to define the information literacy concept. The true challenge has been how to create an information-literate

society. One initiative to meet this challenge has been to develop IL standards. Standards have been developed through a cooperative and collaborative process that includes representatives from all stakeholders. Information literacy standards established for different levels developed to be customised for the specific environment, translated into many other languages, contain performance indicators, can be used to frame curriculum objectives, learning outcomes and assessment criteria, and serve as guidelines for faculty, librarians, and others in developing IL programs. There is one standard for each expected skill. Every standard has many (as many as needed) performance indicators. There are several expected results (outcomes) for each indicator. All students are expected to demonstrate all of the competencies but not to the same level of proficiency or at the same speed. Some disciplines may place greater emphasis on the mastery of certain competencies. US - Information Literacy Standards for Student Learning (K-12) – AASL & AECT, 1998; US - Information Literacy Competency Standards for Higher Education – ACRL, 2000; Australia & New Zealand - Information Literacy Framework: principles, standards and practice.

ANZIIL & CAUL, 2004; and International Standards – IFLA, 2006 are some IL standards implemented and practised.

9.5.1 UNESCO IL Standard



9.5.2 Swiss Standards for Information Literacy

The Swiss standards and the associated competency grid enable consistent placement and promotion of IL at various universities. They guide the design of courses and course offerings and enable the development of compatible

university cross-training concepts. These standards support the collaboration between library staff and faculty of various disciplines and facilitate agreements between libraries and university administration. This shows that information literacy can be understood as an interaction of different sub-competencies, and various information literacy models emphasise this aspect by presenting a procedural sequence of sub-competencies. Despite some widespread definitions, there is no generally accepted understanding of information literacy. Reasons for this are the interdisciplinary nature of the mediated skills and strong connections to neighbouring interdisciplinary skills such as media literacy.

With the UNESCO definition as a base, the Swiss standards were developed using the "Australian and New Zealand Information Literacy Framework" of the Australian and New Zealand Institute for Information Literacy ANZIIL (Bundy 2004) and the internationally established "Information Literacy".

"Competency Standards for Higher Education" of the American Association of College and Research Libraries (ACRL 2000). Studies in recent years have shown that information literacy must be fully understood and not restricted to library tools (Leibniz- Informations-Zentrum Wirtschaft 2011, Madray 2007). Specifically, the aspects of "Use of Information" and "Responsibility to Information" have moved to the foreground and won academic importance. Including these aspects in existing concepts of IL was timely and included the development of six standards accordingly. By formulating the new standards, content can be simultaneously adjusted to the culture of the Swiss audience. Considering the three linguistic cultures (German, French, and Italian), the developed concepts were limited to the essentials.

Thus, the content for all three cultures remains understandable and experiences wider acceptance and implementation. Standards can be regarded as generally recognised objectives formulated on an abstract level and describing an area of competence in a few words. For teaching purposes, standards must be supplemented by a more detailed description of skills required by specific target groups.

With a modular grid that included skills on three levels (beginner, advanced, and expert), the necessary specifications for different environments were realised. The level "Beginners" describes the skills needed for a first-year student, while the level "Advanced" focuses on the skills needed for students in the transition from bachelor to master. The "Expert" level is aimed at students who pursue further scientific work in research or industry. The competency grid is to be used per its modular design; depending on the context, the corresponding requirements may be configured differently and require different prioritisation.

The IL requirements for a student of jurisprudence are different from those for a student of electrical engineering. The present Swiss standards for IL at Swiss universities are to be understood as a common basis for recommending and implementing IL into university programs.

Subject-specific integration into study programmes and courses is essential for IL's successful placement and promotion. The competency grid is a

horizontally and vertically coordinated approach to broad information literacy objectives. It can be used to develop individual lessons, teaching modules, and performance checks. Each of the six standards includes three to four learning objectives that can be prepared and detailed by the technical requirements of the competency grid. The Competency Grid Guide explains what knowledge is expected at the three levels. A technical adjustment is recommended since no subject-specific features are included in the competency grid.

In the information society, IL is regarded as one of the most important skills for success in study and work. To achieve consistency in the impartation and promotion of information literacy at Swiss universities, the "Information Literacy at Swiss Universities" project developed the Swiss Standards of Information Literacy. These six standards were supplemented by related learning objectives (course objectives).

Standard One: The information-literate person recognises the need for information and determines the nature and extent of the information needed

Need: The information literate person

- defines and articulates the information need referring to a defined purpose
- understands the purpose, scope, and appropriateness of a variety of information sources
- selects and uses diverse sources of information to inform decisions

Standard Two: The information-literate person finds needed information effectively and efficiently

Retrieval: The information literate person

- selects efficient methods or tools for finding information
- constructs and implements effective search strategies
- obtains information using appropriate methods

Standard Three: The information-literate person critically evaluates information and the information-seeking process

Assessment: The information-literate person

- defines and applies criteria for evaluating information
- assesses the usefulness of the information obtained
- re-evaluates the nature and extent of the information need
- reflects on the information-seeking process and revises search strategies as necessary

Standard Four: The information literate person manages and shares information collected or generated

Organisation: The information-literate person

- records information selected and its sources
- organises, classifies, and stores information using appropriate methods
- shares information with others
- keeps up to date with information sources, information technologies, and investigative methods

Standard Five: The information-literate person applies prior and new information to accomplish a specific purpose

Application: The information-literate person

- applies new and prior information to the creation of new knowledge or a particular product
- communicates the new knowledge or product effectively to others
- revises the creation and communication process of knowledge or product

Standard Six: The information-literate person acts as a responsible member of the information society

Responsibility: The information-literate person

- Acknowledges cultural, ethical, and socio-economic issues related to the use of information
- Conforms with conventions and etiquette related to the use of information
- Legally obtains, stores, and disseminates all kinds of information

9.5.3 The Nine Information Literacy Standards for Student Learning

From: Information Power: Building Partnerships for Learning By the American Association of School Librarians and the Association for Educational Communications Technology.

Information Literacy

Standard 1: The information-literate student accesses information efficiently and effectively. **Standard 2:** The information-literate student evaluates information critically and competently. **Standard 3:** The information-literate student uses information accurately and creatively.

Independent Learning

Standard 4: The student who is an independent learner is information literate and pursues information related to personal interests.

Standard 5: The student who is an independent learner is information literate and appreciates literature and other creative expressions of information.

Standard 6: The student who is an independent learner is information literate and strives for excellence in information seeking and knowledge generation.

Social Responsibility

Standard 7: The student who contributes positively to the learning community and society is information literate and recognises the importance of information to a democratic society.

Standard 8: The student who contributes positively to the learning community and society is information literate and practices ethical behaviour regarding information and information technology.

Standard 9: The student who contributes positively to the learning community and society is information literate and participates effectively in groups to pursue and generate information.

9.6 LIBRARY'S ROLE IN IL INSTRUCTION

In higher education, library instruction's role is to create lifelong learners, and the path to that goal is through information literacy skills. Two goals of information literacy instruction are to teach students how to learn and how to become independent learners. Librarians have offered many names for library instruction, including bibliographic instruction. In recent years, library instruction has been called "information literacy" instruction. Whatever the name, the core concerns are the access and use of information.

Grassian and Kaplowitz report a long list of methods for library instruction in IL including signage, maps, site maps, kiosks, guided tours, self-guided tours, virtual tours, exhibits, flipcharts, blackboards, whiteboards, overhead transparencies, presentation slide shows, slides/tapes and videotapes, point-of-use guides, pathfinders, exercises, computer-assisted instruction, reference questions, individual research consultations, course-integrated or standalone one-shot group sessions, formal courses, discussion boards, chat, e-mail/ listservs, and web pages/sites.

A successful library instruction program will incorporate online databases (both OPAC and subscription databases) and the World Wide Web. The goal is to make the students active participants in the library instruction rather than passive listeners. In this regard, the library is a facilitator, enabling the students to foster their information literacy. In turn, information literacy, thus achieved, provides two advantages to the host institution. Subjectively, it promotes a learning-centered environment for the students. Objectively, it provides measurable, quantifiable data for the institution to gauge its goals and meet accreditation criteria. The instructional librarian should use available technology to help students identify search terms. The librarian can ask the students to use the abstracts from the citations to find broader and narrower search terms (and solicit suggestions from the class), then point out how the results differ depending on the search terms entered. The students can be divided into groups and then asked to differentiate between a website and a journal article. Secondly, the librarian can instruct the groups to distinguish between a magazine and scholarly journal articles. Finally, the librarian can assign the students the task of using Library of Congress subject headings to find primary sources on the Web.

In academic libraries, the Information Literacy Competency Standards for Higher Education are the professional standards that guide the practice of information literacy instruction. Developed by the Association of College and Research Libraries (ACRL) in 2000 and endorsed by the American Association for Higher Education (AAHE) and the Council of Independent Colleges, these standards offer guidance to librarians who plan to deliver and assess information literacy instruction to students.

9.7 INFORMATION LITERACY COMPETENCY STANDARDS FOR HIGHER EDUCATION: USE OF THE STANDARDS

Information Literacy Competency Standards for Higher Education provide a framework for assessing the information-literate individual. It also extends the work of the American Association of School Librarians Task Force on Information Literacy Standards, thereby providing higher education an opportunity to articulate its information literacy competencies with those of K-12 so that a continuum of expectations develops for students at all levels. The competencies presented here outline how faculty, librarians and others pinpoint specific indicators that identify a student as information literate.

Students will also find the competencies useful because they provide students with a framework for gaining control over how they interact with information in their environment. This will help sensitise them to the need to develop a metacognitive approach to learning, making them conscious of the explicit actions required for gathering, analysing, and using information. All students are expected to demonstrate all the competencies described in this document. Still, not everyone will demonstrate them to the same level of proficiency or at the same speed.

Furthermore, some disciplines may emphasise the mastery of competencies at certain points in the process, and therefore, certain competencies would receive greater weight than others in any rubric for measurement. Many competencies are likely to be performed recursively. Each standard's reflective and evaluative aspects will require the student to return to an earlier point in the process, revise the information-seeking approach, and repeat the same steps.

To fully implement the standards, an institution should review its mission and educational goals to determine how information literacy would improve learning and enhance its effectiveness. Faculty and staff development is also crucial to facilitating acceptance of the concept.

9.8 INFORMATION LITERACY PRACTICES

ACRL Information Literacy: Standards, Performance Indicators, Outcomes with Objectives and Practices Old Dominion University (ODU)

Standards, Performance Indicators, and Outcomes

Standard One

The information-literate student determines the nature and extent of the information needed.

Performance Indicators:

1. The information-literate student defines and articulates the need for information.

Outcomes Include:

- a. Confers with instructors and participates in class discussions, peer workgroups, and electronic discussions to identify a research topic or other information need
 - b. Develop a thesis statement and formulate questions based on the information needed.
 - c. Explores general information sources to increase familiarity with the topic
 - d. Defines or modifies the information needed to achieve a manageable focus
 - e. Identifies key concepts and terms that describe the information need
 - f. Recognises that existing information can be combined with original thought, experimentation, and/or analysis to produce new information
2. The information-literate student identifies various types and formats of potential sources for information.

Outcomes Include:

- a) Knows how information is formally and informally produced, organised, and disseminated.
 - b) Recognises that knowledge can be organised into disciplines that influence the way information is accessed
 - c) Identifies the value and differences of potential resources in a variety of formats (e.g., multimedia, database, website, data set, audio/visual, book)
 - d) Identifies the purpose and audience of potential resources (e.g., popular vs. scholarly, current vs. historical)
 - e) Differentiates between primary and secondary sources, recognising how their use and importance vary with each discipline
 - f) Realises that information may need to be constructed with raw data from primary sources
3. The information-literate student considers the costs and benefits of acquiring the needed information.

Outcomes Include:

- a) Determines the availability of needed information and makes decisions on broadening the information-seeking process beyond local resources (e.g., interlibrary loan; using resources at other

- locations; obtaining images, videos, text, or sound)
- b) Considers the feasibility of acquiring a new language or skill (e.g., foreign or discipline-based) to gather needed information and understand its context
 - c) Defines a realistic overall plan and timeline to acquire the needed information
4. The information-literate student re-evaluates the nature and extent of the information needed.

Outcomes Include:

- a) Review the initial information needed to clarify, revise, or refine the question.
- b) Describes criteria used to make information decisions and choices

Standard Two

1. *The information-literate student accesses needed information effectively and efficiently.*

Performance Indicators:

- a) The information-literate student selects the most appropriate investigative methods or information retrieval systems for accessing the needed information.

Outcomes Include:

- a. Identifies appropriate investigative methods (e.g., laboratory experiment, simulation, fieldwork)
- b. Investigates the benefits and applicability of various investigative methods
- c. Investigates the scope, content, and organisation of information retrieval systems
- d. Selects efficient and effective approaches for accessing the information needed from the investigative method or information retrieval system

2. *The information-literate student constructs and implements effectively designed search strategies.*

Outcomes Include:

- a) Develops a research plan appropriate to the investigative method
- b) Identifies keywords, synonyms and related terms for the information needed
- c) Selects controlled vocabulary specific to the discipline or information retrieval source
- d) Constructs a search strategy using appropriate commands for the information retrieval system selected (e.g., Boolean operators, truncation, and proximity for search engines; internal organisers such as indexes for books)
- e) Implements the search strategy in various information retrieval

systems using different user interfaces and search engines with different command languages, protocols, and search parameters

- f) Implements the search using investigative protocols appropriate to the discipline

3. *The information-literate student retrieves information online or in person using various methods.*

Outcomes Include:

- a. Uses various search systems to retrieve information in a variety of formats
- b. Uses various classification schemes and other systems (e.g., call number systems or indexes) to locate information resources within the library or to identify specific sites for physical exploration
- c. Uses specialised online or in-person services available at the institution to retrieve information needed (e.g., interlibrary loan/document delivery, professional associations, institutional research offices, community resources, experts and practitioners)
- d. Uses surveys, letters, interviews, and other forms of inquiry to retrieve primary information

4. *The information-literate student refines the search strategy if necessary.*

Outcomes Include:

- a. Assesses the quantity, quality, and relevance of the search results to determine whether alternative information retrieval systems or investigative methods should be utilised
- b. Identifies gaps in the information retrieved and determines if the search strategy should be revised
- c. Repeats the search using the revised strategy as necessary

5. *The information-literate student extracts, records, and manages the information and its sources.*

Outcomes Include:

- a. Select among various technologies the most appropriate one for the task of extracting the needed information (e.g., copy/paste software functions, photocopier, scanner, audio/visual equipment, or exploratory instruments)
- b. Creates a system for organising the information
- c. Differentiates between the types of sources cited and understands the elements and correct syntax of a citation for a wide range of resources.
- d. Records all pertinent citation information for future reference
- e. Uses various technologies to manage the information selected and organised

The information-literate student critically evaluates information and its sources and incorporates selected information into their knowledge base and value system.

Performance Indicators:

- 1. The information-literate student summarises the main ideas to be extracted from the information gathered.**

Outcomes Include:

- a. Reads the text and selects main ideas
- b. Restates textual concepts in his/her own words and selects data accurately
- c. Identifies verbatim material that can be then appropriately quoted

- 2. The information-literate student articulates and applies initial criteria for evaluating the information and its sources.**

Outcomes Include:

- a. Examines and compares information from various sources to evaluate reliability, validity, accuracy, authority, timeliness, and point of view or bias
- b. Analyses the structure and logic of supporting arguments or methods
- c. Recognises prejudice, deception, or manipulation
- d. Recognises the cultural, physical, or other context within which the information was created and understands the impact of context on interpreting the information

- 3. The information-literate student synthesises the main ideas to construct new concepts.**

Outcomes Include:

- a. Recognises interrelationships among concepts and combines them into potentially useful primary statements with supporting evidence
- b. Extends initial synthesis, when possible, at a higher level of abstraction to construct new hypotheses that may require additional information
- c. Utilises computer and other technologies (e.g. spreadsheets, databases, multimedia, and audio or visual equipment) for studying the interaction of ideas and other phenomena

- 4. The information-literate student compares new knowledge with prior knowledge to determine the information's value-added, contradictions, or other unique characteristics.**

Outcomes Include:

- a. Determines whether information satisfies the research or other information need
- b. Uses consciously selected criteria to determine whether the

information contradicts or verifies information used from other sources

- c. Draws conclusions based on information gathered
- d. Tests theories with discipline-appropriate techniques (e.g., simulators, experiments)
- e. Determines probable accuracy by questioning the source of the data, the limitations of the information-gathering tools or strategies, and the reasonableness of the conclusions
- f. Integrates new information with previous information or knowledge
- g. Selects information that provides evidence for the topic

5. The information-literate student determines whether the new knowledge impacts the individual's value system and takes steps to reconcile differences.

Outcomes Include:

- a. Investigates differing viewpoints encountered in the literature
- b. Determines whether to incorporate or reject viewpoints encountered

6. The information-literate student validates understanding and interpretation of the information through discourse with other individuals, subject-area experts, and/or practitioners.

Outcomes Include:

- a. Participates in classroom and other discussions
- b. Participates in class-sponsored electronic communication forums designed to encourage discourse on the topic (e.g., e-mail, bulletin boards, chat rooms)
- c. Seeks expert opinion through a variety of mechanisms (e.g., interviews, e-mail, listservs)

7. The information-literate student determines whether the initial query should be revised.

Outcomes Include:

- a. Determines if original information need has been satisfied or if additional information is needed
- b. Review the search strategy and incorporate additional concepts as necessary.
- c. Review information retrieval sources used and expand to include others as needed.

Standard Four

The information-literate student uses information effectively to accomplish a specific purpose, either individually or as a member of a group.

Performance Indicators:

The information-literate student applies new and prior information to plan and create a particular product or performance.

Outcomes Include:

- a. Organises the content in a manner that supports the purposes and format of the product or performance (e.g. outlines, drafts, storyboards)
- b. Articulates knowledge and skills from prior experiences to planning and creating the product or performance.
- c. Integrates the new and prior information, including quotations and paraphrasings, in a manner that supports the purposes of the product or performance
- d. Manipulates digital text, images, and data, as needed, transferring them from their original locations and formats to a new context

The information-literate student revises the development process for the product or performance.

Outcomes Include:

- e. Maintains a journal or log of activities related to the information-seeking, evaluating, and communicating process
- f. Reflects on past successes, failures, and alternative strategies

The information-literate student communicates the product or performance effectively to others.

Outcomes Include:

- g. Chooses a communication medium and format that best supports the purposes of the product or performance and the intended audience
- h. Uses a range of information technology applications in creating the product or performance
- i. Incorporates principles of design and communication
- j. Communicates clearly and with a style that supports the purposes of the intended audience

Standard Five

The information-literate student understands many of the economic, legal, and social issues surrounding the use of information and accesses and uses information ethically and legally.

Performance Indicators:

1. **The information-literate student understands many ethical, legal and socio-economic issues surrounding information and information technology.**

Outcomes Include:

- a. Identifies and discusses issues related to privacy and security in both the print and electronic environments
- b. Identifies and discusses issues related to free vs. fee-based access to information. Objectives:

1. Demonstrates an understanding that not all information on the Web is free, i.e., some Web-based databases require users to pay a fee or to subscribe to retrieve full text or other content.
 2. Demonstrates awareness that the library pays for access to databases, information tools, full-text resources, etc., and may use the Web to deliver them to its clientele.
 3. Describes how the terms of subscriptions or licenses may limit their use to a particular clientele or location.
 4. Describes the differences between the results of a search using a general Web search engine (e.g., Yahoo, Google) and a library-provided tool (e.g., Web-based article index, full-text electronic journal, Web-based library catalogue).
 - c. Identifies and discusses issues related to censorship and freedom of speech
 - d. Demonstrates an understanding of intellectual property, copyright, and fair use of copyrighted material
2. **The information-literate student follows laws, regulations, institutional policies, and etiquette related to accessing and using information resources.**
- Outcomes Include:***
- a. Participates in electronic discussions following accepted practices (e.g. "Netiquette")
 - b. Uses approved passwords and other forms of ID for access to information resources.
 - c. Complies with institutional policies on access to information resources
 - d. Preserves the integrity of information resources, equipment, systems and facilities
 - e. Legally obtains, stores, and disseminates text, data, images, or sounds
 - f. Demonstrates an understanding of what constitutes plagiarism and does not represent work attributable to others as his/her own
 - g. Demonstrates an understanding of institutional policies related to human subjects research
3. **The information-literate student acknowledges using information sources to communicate the product or performance.**

Outcomes Include:

- a. Selects an appropriate documentation style and uses it consistently to cite sources

Objective:

1. Describes how to use documentation to record bibliographic

- information from an item retrieved through research.
2. Identifies citation elements for information sources in different formats (e.g., book, article, television program, Web page, and interview).
 3. Demonstrates an understanding that there are different documentation styles published or accepted by various groups (1).
 4. Demonstrates an understanding that the appropriate documentation style may vary by discipline (e.g., MLA for English, University of Chicago for history, APA for psychology, CBE for biology)
 5. Describes when the format of the source cited may dictate a certain citation style.
 6. Uses correctly and consistently the citation style appropriate to a specific discipline.
 7. Locates information about documentation styles in print or electronically, e.g., through the library's Web site.
 8. Recognises that consistency of citation format is important, especially if a course instructor has not required a particular style
- b. Posts permission granted notices, as needed, for copyrighted material

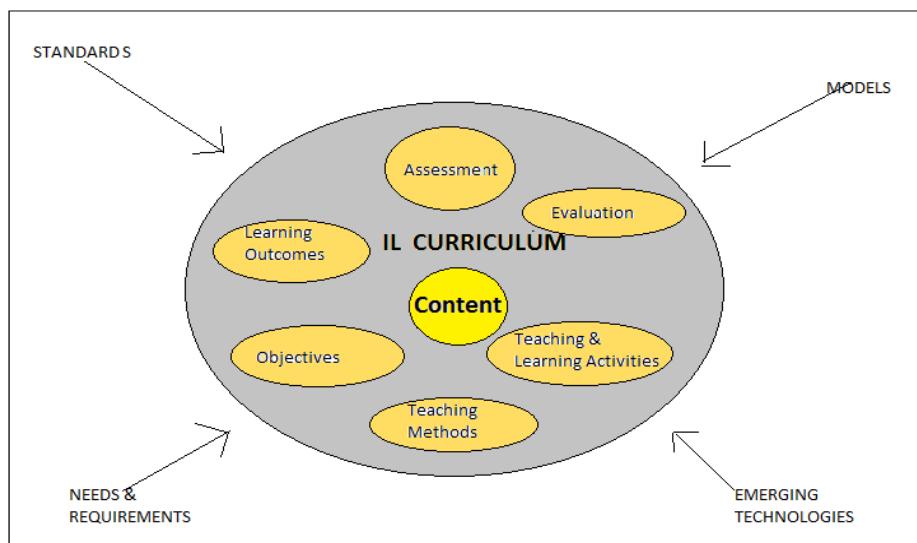
9.9 INFORMATION LITERACY RUBRICS

Academic librarians should explore new approaches to the assessment of information literacy skills. Satisfaction surveys and input/output measures must provide librarians with adequate information about what students know and can do. Standardised multiple-choice tests and large-scale performance assessments also fail to provide the data librarians need to improve instruction locally. Librarians, facing accountability issues and wanting to improve student learning, require a new approach to library instruction assessment. Applying rubrics to assess research skills and information literacy efforts is fairly new in academic libraries. A selection of studies has reported using rubrics to assess information literacy components.

Rubrics are "descriptive scoring schemes" created by educators to guide the analysis of student work. They are usually employed when educators must judge the quality of performances or constructed-response items and can be used across a broad range of subjects. Haffner writes, "In the educational literature and among the teaching and learning practitioners, the word 'rubric' is understood generally to connote a simple assessment tool that describes levels of performance on a particular task and is used to assess outcomes in a variety of performance-based contexts from kindergarten through college. Rubric assessment may be a good match for library instruction assessment needs. It is well suited to measure student learning outcomes, especially those focusing on higher-level thinking skills. Rubrics can be developed that are

both general enough to be shared by multiple groups and analytic enough to apply to specific instructional activities.

9.10 INFORMATION LITERACY CURRICULUM OUTLINE



Check Your Progress: 2

Note: 1) Use the space below for your answers.

2) Compare your answers with those given at the end of this unit.

1. Evaluate the effectiveness of information literacy rubrics in assessing students' information literacy competencies.

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2. Explain the concept of information literacy practices and provide examples of how they can be applied in academic and professional contexts.

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9.11 LET US USM UP

ISO (International Organization for Standardization) defines a standard as a document that provides requirements, specifications, guidelines or characteristics that can be used consistently to ensure that materials, products,

processes and services fit their purpose. International Standards bring technological, economic and societal benefits. According to The British Standards Institution (BSI), a standard is an agreed way of doing something. It could be about making a product, managing a process, delivering a service or supplying materials – standards can cover a huge range of activities undertaken by organisations and used by their customers. BSI equates standards to the distilled wisdom of people with expertise in their subject matter who know the needs of the organisations they represent. The IL standards take us a step ahead, and we discuss the optimal use of information for enhancing personal and societal productivity and efficiency.

Information literacy seeks to provide students with knowledge, access, evaluation, use, and ethics of information sources. The outcomes attached to Literacy Standards are achievable partially by a well-constructed program of library instruction, and the online delivery of resources will play an increasing role in this process. Library instruction alone, however, cannot guarantee information literacy. This goal depends on the cooperation of the parent institution, faculty, library staff, and the individual student.

IL models and standards serve as guidelines for developing information literacy curricula and can be used to frame curriculum objectives, learning outcomes, course content, and assessment criteria. If implemented and followed systematically, IL standards can make the students, professionals and citizens at large global citizens who can lead us to an information society as they are equipped with self-confidence, skills, competencies, better decision makers, more aware with clarity of mind.

9.12 KEYWORDS

Information Literacy: Information literacy is the ability to identify, evaluate, and effectively use information from various sources. It involves critical thinking skills to navigate the vast amount of information available, leading to informed decision-making and lifelong learning.

IL Standards: Information literacy standards are guidelines that define the skills and competencies individuals should possess to be information literate. They provide a framework for educators to develop curricula and assessment tools, ensuring consistency and quality in information literacy education.

IL Models: Information literacy models are theoretical frameworks that describe the process of acquiring and applying information literacy skills. These models may outline sequential steps or emphasise specific aspects of information seeking behaviour, serving as a guide for educators and learners.

Swiss Standard: The Swiss Standard refers to a set of guidelines developed by the Swiss Library Association for promoting information literacy. It outlines the core competencies and learning outcomes expected of individuals at different educational levels, serving as a reference for curriculum development and assessment.

IL Rubrics: Information literacy rubrics are assessment tools used to evaluate individuals' information literacy skills. They consist of criteria and

performance levels for various aspects of information seeking and use, providing a structured way to measure proficiency and identify areas for improvement.

SCONUL: SCONUL, the Society of College, National, and University Libraries, is a UK-based organization that promotes collaboration and sharing of best practices among academic libraries. It developed the SCONUL Seven Pillars of Information Literacy, a widely used framework for defining and assessing information literacy skills.

IL Curriculum: An information literacy curriculum outlines the content, objectives, and instructional methods for teaching information literacy skills. It may include topics such as search strategies, evaluation of sources, and ethical use of information, tailored to the needs and educational levels of learners.

IL Instruction Programme: An information literacy instruction program is a structured series of activities and resources designed to teach information literacy skills. It may consist of workshops, tutorials, online modules, and individual consultations, delivered by librarians, educators, or instructional designers.

ACRL Standards: The ACRL (Association of College & Research Libraries) Standards refer to the Information Literacy Competency Standards for Higher Education. These standards define the abilities and knowledge required for information literacy in higher education settings, guiding curriculum development and assessment practices.

9.13 FURTHER READINGS

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9.14 CHECK YOUR PROGRESS: POSSIBLE ANSWERS

Check Your Progress: 1

1. Information literacy is the ability to access, evaluate, and utilise information effectively in various contexts. In higher education, it's crucial for students to develop these skills to conduct research, critically analyse sources, and make informed decisions. It empowers learners to navigate the vast amount of information available, equipping them to succeed academically and professionally.
2. The SCONUL 7 Pillars and UNESCO IL Standard are two prominent models of information literacy. While both emphasise critical thinking and lifelong learning, they differ in their approach. SCONUL focuses on seven key areas of information literacy development, tailored specifically for higher education, whereas UNESCO provides a broader framework applicable across different educational levels and cultural contexts.
3. Libraries play a vital role in information literacy instruction by providing access to diverse resources, offering guidance on research strategies, and facilitating workshops and tutorials. They serve as hubs for information discovery, fostering a culture of inquiry and lifelong learning among students.
4. The nine information literacy standards for student learning encompass

various competencies, including determining the extent of information needed, accessing information effectively, evaluating information critically, and using information ethically. These standards serve as benchmarks for assessing students' information literacy skills and guiding instructional practices in higher education settings.

Check Your Progress: 2

1. Information literacy rubrics are valuable tools for assessing students' proficiency in information literacy. They outline specific criteria and performance levels, enabling educators to evaluate students' ability to locate, evaluate, and use information effectively. Rubrics provide transparency and consistency in assessment, guiding students towards achieving higher levels of information literacy competency.
2. Information literacy practices refer to the application of information literacy skills in real-world scenarios. Examples include critically evaluating sources, synthesising information from multiple perspectives, and effectively communicating findings. These practices are essential for success in academic research, professional endeavours, and lifelong learning.

UNIT 10 APPLICATIONS OF INFORMATION LITERACY

Structure

- 10.0 Introduction
- 10.1 Learning Outcomes
- 10.2 Information Literacy
 - 10.2.1 Concept
 - 10.2.2 Importance
 - 10.2.3 Application of Information Literacy
 - 10.2.4 Characteristics of an Information Literate Person
 - 10.2.5 Historical Development of Information Literacy
 - 10.2.6 Threshold Concepts
 - 10.2.7 Metaliteracy
 - 10.2.8 Media and Information Literacy
 - 10.2.9 Information Disorder
- 10.3 Digital Citizenship and Education
- 10.4 Role of Library Professionals and Teachers
- 10.5 Let Us Sum Up
- 10.6 Keywords
- 10.7 Further Readings
- 10.8 Check Your Progress: Possible Answers

10.0 INTRODUCTION

Information is a vital component required in all activities and operations of different sectors of day-to-day life, education, research, governance, banking, defence, and business, among many others. Information refers to facts, numerical data, and knowledge narrative accounts. It is relevant when the receiver interprets, understands, and implements it. All individuals and organisations need the information to ensure their effectiveness in their work. Further, they need the right information to respond, adjust and adapt to their environment. Information acts as a catalyst in driving change from the present state to the desired state of affairs.

It is important to underline that the information should be authentic, reliable, current and appropriate. Users must be competent enough to retrieve the right information from authentic sources. That is why the topic of Information Literacy is important. People must have the requisite skills to locate and retrieve the required information and use it to make informed decisions and choices. If the people have the right information, they may raise their concerns and get them addressed appropriately. These skills, values, and competencies to retrieve the right information to address the need in context are collectively known as information literacy. The information literate

people are the individuals who have become conversant in learning; they have learnt how to learn. The information literacy skills support and nurture the lifelong learning goals of the governments worldwide.

In an information society, people have access to information and communication technologies and know how to use the different information resources to accomplish their personal, professional and social goals effectively. The people may obtain information in their preferred format and share it with others as and when they want to. They are well equipped to access, browse, use, create, distribute, disseminate, diffuse, exploit and share information for their personal, economic and cultural activities. An information society uses information communication technologies as an enabler for the overall development of people. Information plays an important role in all the activities of an information society. An information society is one where the creation, generation, distribution, dissemination, use, integration, sharing, adding, and enhancing information is a common and significant activity. The information society aims to use information creatively, meaningfully and productively. In other words, the information society strives to use information for informed decision-making. In today's era, the global dissemination and communication of information happen at an amazing speed due to information communication technologies. Their vast potential and easy availability have caused information deluge or information overload. Information Communication Technologies enable the creation, publication and circulation of content on the Internet.

10.1 LEARNING OUTCOMES

After completing this Unit, you should be able to:

- Explain the concept and meaning of information literacy;
 - Understand its importance and trace its development;
 - Describe the skills of an information-literate person;
 - Analyse that information literacy and lifelong learning are interlinked;
 - Understand the meaning of threshold concepts; and
 - Discuss the different types of information disorders.
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10.2 INFORMATION LITERACY

10.2.1 Concept

Information Literacy is the set of integrated abilities covering the reflective discovery of information, how information is produced and valued and the use of information in creating new knowledge and participating ethically in communities of learning and understanding. The Alexandria Proclamation (2005) has defined information literacy as a means to “empower people in all walks of life to seek, evaluate, use and create information effectively to achieve their personal, social, occupational and educational goals”.

Shapiro and Hughes (1996) emphasised that information literacy education is essential for all citizens to ensure any country's smooth, successful

functioning. They have mentioned seven integral components of information literacy.

Tool literacy is understanding and applying IT tools relevant to education or work.

Resource literacy is understanding the different forms, formats, locations, and access methods of relevant information resources.

Social literacy: Structural literacy is figuring out how the information is socially situated and produced.

Research Literacy: Research Literacy is the ability to use IT-based tools for locating and retrieving information for one's research activities

Publishing Literacy is the ability to format, publish, and disseminate research findings to a wide audience through authentic outlets or media.

Emerging technology Literacy is the ability to continuously evaluate, understand, adapt, and adopt emerging tools, techniques, and resources for one's work.

Critical literacy critically evaluates information technologies' intellectual, human, and social strengths, weaknesses, advantages, and costs.

Check Your Progress: 1

Notes: 1) Use the space below for your answer.

2) Compare your answers with those given at the end of this Unit.

1. What is Information Literacy?

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10.2.2 Importance

The importance of information literacy can be succinctly expressed through the axiom—knowledge is power. This means that your potential or ability to succeed in pursuing your objectives will be enhanced if you know.

Information literacy competencies are essential in education and research and for being a lifelong learner. Further, Information literacy skills are required for all children, adolescents, adults, and senior citizens as information is available.

Further, people, including students, spend considerable time on the Internet, and there are no intermediaries-teachers or library professionals to guide them through the information deluge of textual, audio and video content. Moreover, in the online environment, people access, consume, generate, disseminate and share information quickly without hesitation or obstruction.

If users consume wrong information, it becomes the foundation for synthesising and generating more fraudulent information, which is further shared and triggers more wrong information in circulation.

The users are responsible for distinguishing, identifying, filtering, using, and sharing authentic and credible information.

The Alexandria Proclamation of 2005 has underscored that information literacy is essential for lifelong learning. Further, information and lifelong learning are the beacons of an information society and accelerate development, prosperity and freedom. Information literacy equips people with competence and instils confidence to seek, locate, evaluate, use and generate information efficiently to achieve their personal, social, occupational and educational goals. It is a basic human right in a digital world and promotes inclusiveness for all nations.

Information literacy allows learners to become more informed, prudent and evolved as they continuously learn. When individuals control their learning, they retrieve the required information, implement it, and incorporate it into their existing knowledge base to meet their educational professional or daily goals and aspirations.

Citizens, communities, and nations require new skills to browse, access, locate, retrieve, and use information to create new content for further dissemination and reuse. This is done to achieve their social, professional, and educational goals (Forest Woody Horton, 2013).

Information literacy also leads to self-empowerment, which entails learning and knowing where to seek help, from whom to ask, and how to quickly and easily search, locate, retrieve, read, understand, and use the right information at the right time to resolve a problem or address a concern. Information literacy involves thinking and evaluating critically.

The Prague Declaration describes information literacy as essential for the social, cultural, and economic development of nations, communities, institutions, organisations, and people in the 21st century.

Check Your Progress: 2

Notes: 1) Use the space below for your answer.

2) Compare your answers with those given at the end of this Unit.

1. What is the importance of Information Literacy?

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10.2.3 Application of Information Literacy

Lifelong learning is the broad term for education conducted beyond the formal channels of schools, colleges, and universities. The term is used for

any form of self-taught learning. It is voluntary, not compulsory, completely self-motivated, and has the main purpose of personal or professional development.

The two concepts of information literacy and lifelong learning are interrelated. Both of them are self-motivated and self-directed, and they do not require outside intervention. However, it is important to mention here that the guidance at the initial stage is essential for individuals to pick up skills and implement them. These concepts are self-empowering and help individuals irrespective of caste, colour, creed, gender, religion, ethnic group or geographical location. They are also self-actuating, which means that if a person is information literate, he will be more inclined towards learning. The person will be motivated to learn more and become knowledgeable to make informed decisions. The International Alliance for Information Literacy considers lifelong learning a basic human right and underlines that information literacy skills should be used to ensure that information-literate individuals actively participate and contribute to an information society. The power of information can be harnessed only after evaluating it for its currency, relevance and authenticity. The information evaluation process is a crucial life skill and a basis for lifelong learning.

Information Literacy extends skills needed for searching, evaluating and putting information into a specific context. The skills are applied in all walks of life by one and all students, researchers, policymakers and citizens. Students and researchers need information skills to search, discover, locate, evaluate, and use information ethically. Further, people actively use the Internet and social media; they need skills to evaluate the information for currency, authenticity, and reliability before applying it to problem-solving and decision-making.

Check Your Progress: 3

Notes: 1) Use the space below for your answer.

2) Compare your answers with those given at the end of this Unit.

1. What do you understand by lifelong learning?

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10.2.4 Characteristics of an Information-Literate Person

An information-literate person is capable of recognising when information is needed. The individual can locate, evaluate, retrieve, and use information effectively to fill the gap. Information-literate citizens of any country contribute to enhancing its development indices. This happens because people can make informed decisions and retrieve the right information promptly.

An information-literate person can

- Recognise an information need.
- Determining the level and range of required information
- identify and locate the pertinent sources of information
- critically evaluate the quality and authenticity of the source
- use technology prudently
- use information ethically.
- Share and disseminate information by adhering to the principles of integrity.

An information literate person is fully aware of all the important scholarly work of his field, builds his work on them, and is conversant in referencing and citation skills. IFLA has established an Information Literacy Section to foster international cooperation in developing information literacy education. UNESCO aims to create information-literate societies by creating and maintaining policies for information literacy. The people do not become information literate because they are unaware of the detrimental effects of information illiteracy.

10.2.5 Historical Development of Information Literacy

Paul G. Zurkowski introduced the term information literacy in 1974. Zurkowski used the term to refer to the techniques and skills people use to retrieve and use information for problem-solving. The term gained momentum as people began understanding the importance of a democratic, productive, and egalitarian society (Sample,2020).

Owens (1976) observed, "Information literacy differs from context to context. All men are created equal, but voters with information resources are in a position to make more intelligent decisions than citizens who are information illiterate. The application of information resources to the process of decision-making to fulfil civic responsibilities is a vital necessity."

In 1989, ALA formed a national forum on information literacy to spread awareness about its significance for individual communities, enhance governance, and promote democratic values.

In 1991, the Second White House Conference on Libraries and Information Services (WHCLIS) focused on Information Literacy. It acknowledged the efforts of Libraries and Information Centres in supporting a literate and democratic society.

In 1997, Christine Bruce focused on seven aspects of information literacy: information technology, information sources, information process, information control, information construction, extension, and wisdom.

In 1999, Information Skills in Higher Education: A SCONUL Position Paper underscored the seven major components of Information Literacy: Recognising an information need, identifying ways of addressing the information gap, constructing search strategies, locating and accessing

information, comparing and evaluating it, organising, applying, and disseminating, and finally synthesising and creating new content based on it.

In 2000, the ACRL, a division of ALA, launched "Information Literacy Competency Standards for Higher Education." This document describes five standards for implementing Information literacy programmes in higher education.

In 2011, the model was revised and expanded to represent more clearly the different aspects of information literacy. The new model was a core model for higher education, and different lenses may be applied. A lens denotes a particular group of learners. In 2011, a research model was introduced with the core model.

Learning is an ongoing activity that involves acquiring information, reflecting, engaging, and applying it as the situation or context warrants. Developing an information-literate person entails simultaneous activities or processes within the seven pillars of Information Literacy. Within each pillar, a learner may develop from novice to expert. The model spells out learners' core skills and competencies (ability), attitudes, behaviours, and perceptions in information literacy development in higher education. The model considers that information literacy is not a linear activity. A learner may develop within several pillars simultaneously and independently. The teachers may use the model to impart training in information literacy to the learners.

Addison and Meyers (2013) grouped different definitions of IL into three categories:

- A set of skills
- A way of thinking
- A social phenomenon or practice.

In the initial phase, the concept of IL was skill-based. Gradually, with the introduction of cognitive models, the definitions focused on IL as a way of thinking. The reference of constructivist theories with critical theory focused on IL as a social practice.

The experts felt that the scope of information literacy needed to be broadened to include the concepts of meta-literacy and transliteracy (Mackey & Jacobson, 2011). Metaliteracy is an umbrella term that integrates emerging technologies and covers different literacies, such as digital, media, visual, and information technology fluency.

Thomas(2008) defined transliteracy as " the ability to read, write and interact across a range of platforms, tools and media from signing and orality through handwriting, print, TV, radio and film to digital social networks."It stresses the relationship between people and various technologies, especially how people use social media, but it does not focus on particular literacy. It focuses on unifying all literacies required for reading, writing, and interacting with people and technologies.

The Information Literacy Competency Standards for Higher Education were published in 2000, underlining the importance of information literacy in higher education.

The Task Force, appointed in 2011 to review the standards, released two drafts of the framework and received feedback and comments from researchers in LIS and other disciplines, higher education associations, accrediting agencies, library associations and consortia. The Task Force recommended that the standards be revised and the scope of information literacy be expanded to include transliteracy, media literacy, digital literacy, etc. The Information Literacy Competency Standards for Higher Education were rescinded in 2016

The ACRL Framework for Information Literacy for Higher Education (2016) comprises six frames and different threshold concepts important to Information Literacy (ACRL,2016)

The ACRL Framework for Information Literacy for Higher Education underlines that the full potential of Information Literacy will be harnessed if some core concepts or ideas, also known as threshold concepts, are implemented. The framework includes the concepts of knowledge practices and ways to increase their understanding of information literacy, as well as dispositions describing means by which the affective attitudinal or valuing dimensions of learning are assessed. It guides libraries on how to use and implement strategies for enhancing the competencies of the learners.

It considers the concept of IL as meta literacy and spells out six threshold concepts which are essential in information literacy, knowledge practices, and dispositions, as given below:

- Authority is constructed and contextual.
- Information creation is a process.
- Information has value
- Research is inquiry
- Scholarship as conversation
- Searching as strategic exploration.

Library professionals and faculty may use these frames to design courses, instruction sessions, and assignments that impart education and training in information literacy to students. The administration may encourage faculty and committees related to teaching and learning to use concepts from the framework.

The framework extends an understanding of knowledge practices and dispositions that information-literate students should have. It focuses on the important role of collaboration and student participation in knowledge creation and scholarship. The framework serves as a heuristic resource to make visible the processes and practices in knowledge-making that may be tacit or unintelligible to the learners.

10.2.6 Threshold Concepts

The threshold knowledge or concepts are core concepts in a subject area, which, when understood, completely transform a learner's understanding or perception of the subject. Understanding threshold concepts is crucial for understanding the more advanced concepts of the field. They are like portals or gateways that lead to new knowledge or ways of thinking previously unknown. The threshold concepts are troublesome, transformative, irreversible, integrative and bounded. They involve knowledge that is difficult or complex to understand. Initially, the students find them very challenging to understand and gain proficiency; they must put much effort into understanding them. The threshold concepts are transformative- meaning that once the students understand them, their understanding of the subject changes completely and phenomenally. They are irreversible, meaning that once the students gain a complete understanding or knowledge of the threshold concepts, the knowledge gained cannot be unlearnt. They are also integrative, which means that once the concepts are clear, the different components and connections or relations among them become intelligible and enable the students to understand that the concepts are integrated into a body of knowledge, forming a new knowledge matrix that was previously unclear. The integrated nature of the threshold concepts shows that the difficult concepts are important for gaining command over the subject. If a student does not clearly understand the threshold concepts, these may snowball and create difficulty for the student to understand the subject. The threshold concepts may circumscribe a particular conceptual field and create a specific space of expertise within each field.

Check Your Progress: 4

Notes: 1) Use the space below for your answer.

2) Compare your answers with those given at the end of this Unit.

1. What are threshold concepts?

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10.2.7 Metaliteracy

The evolution of the scope of information literacy has led to the emergence of the term meta literacy, which describes the different literacies or competencies required for people to engage and participate in the information ecosystem and contribute to developing societies and countries. Metaliteracy requires critical thinking and reflection to participate in the online environment as creators, collaborators and disseminators of content. It considers the online or digital ecosystem participants as consumers and generators of new information in collaborative space- in the online milieu, wherein the users collaborate, interact, and coordinate to generate new

content –textual, audio or video. In other words, meta-literacy considers information literacy as an overarching set of abilities that enable participants to become users and generators of information in an online environment. It entails cognitive, meta-cognitive, behavioural and affective involvement in the online milieu.

10.2.8 Media and Information Literacy

The Internet and social media have facilitated easy communication and dissemination of information, as well as the sharing of videos and pictures globally in no time, eliminating the barriers of time and geography. However, it has also been observed that they act as a double-edged sword. If genuine or authentic information is disseminated, it may help in judicious and informed decision-making. However, when people share information or forward messages and videos without knowing their integrity or authenticity, it may exacerbate a problematic or sensitive situation or threaten the law and order situation in society. In other words, the rapid circulation and spread of wrong, dubious information, rumours, hate speeches, sinister, malicious images and videos may cause severe harm to individuals, groups, communities, institutions, societies and nations. It is more pertinent to a country like India, with 692 million Internet users, which will go up to 900 million by 2025. Rural India has 351 million active users, while urban India has 341 million (Mint,2022). Further, 66 million kids aged between 5 and 11 also use adults' devices online. The use of social media has been growing by leaps and bounds. The constitution of India guarantees freedom of speech to all its citizens, and social media acts as a platform for people to get information and voice their thoughts, ideas, and views freely. The Indians spend an average of 2.36 hours daily on Social media. There are 534.30m, 503.37m and 491.52m Indians on WhatsApp, Instagram and Facebook, respectively (Global Statistics,2022)

Media and information literacy have relevance for all to understand; what is on social media assimilates, generates content, and shares with others responsibly. It underscores that the pitfalls of social media in the form of misinformation, disinformation and fake news can be combated with MIL competencies. Media and information literacy requires proficiency in identifying, evaluating, and scrutinising the different media types and understanding the content they publish. These competencies enable individuals to create content and be prudent purveyors of information. The whole society –children, teenagers and adults- needs to have media and information literacy competencies. They all need to be prudent consumers of social media content and become responsible producers of their content.

The Sustainable Goals(SDGs), seventeen in number, aim to strengthen and include an egalitarian, equitable, and fair society by 2030 by eliminating poverty and inequality. Society must have the right, genuine, and authentic information at the right time to achieve them.

MIL refers to the proficiency required to read, write, comprehend, print, non-print, audio, and video content, navigate the Internet and social media platforms and generate one's content responsibly and judiciously for further dissemination and sharing(Das and Tripathi,2022)

Check Your Progress: 5

Notes: 1) Use the space below for your answer.

2) Compare your answers with those given at the end of this Unit.

1. What is Media and Information Literacy?

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10.2.9 Information Disorder

The whole world is connected through the Internet, and access to real-time information should be a boon for humanity and bring desirable and constructive changes. In reality, the information ecosystem is contaminated and is dividing the people instead of connecting and uniting them. This contamination of the information ecosystem is known as information disorder. It refers to developing or creating false information with or without any intention of harming or misleading others. Distorting facts, manipulating information, sharing or forwarding wrong information without understanding its grave repercussions, and reviling others' beliefs, faiths and reputations intentionally or unintentionally all these activities or actions refer to information disorder.

There are three categories of information disorder, as listed below.

Misinformation is false or wrong information spread without knowledge of its accuracy. The person who circulates the information does not know that it is false.

Disinformation is false or wrong information spread deliberately to mislead or harm people.

Misinformation is the right information, but it is shared to harm a person's image or reputation.

Fake news refers to false balance, false content-text or visuals or images, false context, propaganda, disinformation, news satire, news parody, fabrication, and manipulation. Another characteristic feature of fake news is that it is circulated online. The free flow of ideas and information is a precondition for any society to flourish. This requires the free functioning of media without any fear or intervention; the government provides only the required regulatory framework. Fake news poses a serious challenge to normal functioning as it misleads the public, which consumes information, creates problems for governments, and dents the credibility of media in general. The government has initiated steps to stem fake news and prevent it from affecting the functioning of the media.

Check Your Progress: 6

- Notes:** 1) Use the space below for your answer.
2) Compare your answers with those given at the end of this Unit.
- What do you understand about information disorder?

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10.3 DIGITAL CITIZENSHIP AND EDUCATION

Digital citizenship alludes to the expertise or aptitude to engage positively, critically and competently in the digital environment; this expertise includes the capability to evaluate, read, assimilate, synthesise, generate, create and disseminate content ethically while respecting the rights of others. The essence of digital citizenship is behaving responsibly and prudently in an online environment. The users' right to social participation in the online environment comes with some responsibility.

Individuals' competencies to navigate the online milieu are not automatically acquired. The core competencies must be taught, explained, learned, understood, practised, and implemented.

Digital Citizenship education focuses on teaching students to work, live and share in an online environment positively and constructively.

In many countries, schools impart digital citizenship education to young children to develop online proficiency and engagement and to educate them about the legal implications of their online behaviour. Digital citizenship education ensures that individuals benefit from the online world without becoming vulnerable to its downsides or detrimental effects.

Check Your Progress: 7

- Notes:** 1) Use the space below for your answer.
2) Compare your answers with those given at the end of this Unit.
- What is digital citizenship? Please explain.

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10.4 ROLE OF LIBRARY PROFESSIONALS AND TEACHERS

Teachers are responsible for designing curricula and assignments that foster enhanced engagement with the core ideas about information and scholarship

within their subject areas.

Library professionals are responsible for identifying core ideas within their knowledge domain that can extend students' learning, create a new cohesive curriculum for information literacy, and collaborate more extensively with the faculty.

The library professionals should impart education and training to the students on the different aspects of information given below:

- Characteristics and importance of information
- Different sources of information
- Evaluation of sources of information
- Various ways of searching and retrieving information
- Due attribution to the sources of information

Students are more responsible for creating new knowledge, understanding the contours and changing dynamics of the information world, and ethically using information, data, and scholarship.

University Grants Commission (UGC), India, has introduced two-credit courses entitled Research and Publication Ethics as part of coursework for Ph.D. students. The theory has theory and practice components. It intends to impart education and training in philosophy and ethics, publication ethics, open-access publishing, publication misconduct, citation databases, and research metrics. The course will provide research scholars with an awareness and understanding of conducting research and disseminating its findings; this course will enhance their information literacy competencies.

10.5 LET US SUM UP

In this Unit, you have learnt about the concept and importance of information literacy. People at all levels should have requisite information literacy skills to address their needs through informed decision-making. Information Literacy extends skills needed for searching, evaluating and putting information into a specific context. The skills are applied in all walks of life by one and all students, researchers, policymakers and citizens. Students and researchers need information skills to search, discover, locate, evaluate, and use information ethically. The Unit has also dwelt upon the historical development of the concept of information literacy. The Alexandria Proclamation advocates and supports information literacy for lifelong learning. The two concepts are important for the social inclusion of all nations. The Unit also explained threshold concepts, media and information literacy, digital citizenship, and education.

10.6 KEYWORDS

Information literacy: Information literacy is the ability to find, evaluate, organise, use, and communicate information in all its various formats for decision-making, problem-solving, or the acquisition of knowledge.

Digital Information Literacy: Digital Information Literacy is the ability to access, store, organise, transmit and use digital information for various professional, educational and social activities

Metacognition: Metacognition means thinking about one's thinking and examining one's biases and fixed mindset or ideas. It means becoming critically aware of what one thinks. It involves monitoring or observing how one perceives and understands things. It is about understanding oneself as a learner or thinker. Personal beliefs, feelings, and opinions should not govern objective thinking and reasoning. Metacognition is empowering as it provides individuals with insights about their thinking but encourages them to make the required changes in their learning activities.

Digital Citizens: Digital Citizens are the people who have the competencies and knowledge to use the Internet and other digital technologies to participate in society and politics effectively and responsibly.

10.7 FURTHER READINGS

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10.8 CHECK YOUR PROGRESS: POSSIBLE ANSWERS

Check Your Progress: 1

Information literacy is recognising the need for information and effectively locating, evaluating, and using the required information. Information is abundant in different formats. Individuals must have the competencies to retrieve and use the right information promptly. A person is called information literate when he has all the required skills to access and use the information.

Check Your Progress: 2

Information literacy competencies help users identify the right sources of information, critically evaluate them, retrieve the required information, make informed decisions, and become successful lifelong learners and responsible citizens. The people access knowledge that they need to improve their daily lives and achieve their full potential. Information literacy is crucial in enabling people to deal with the challenge of making good use of information communication technologies. Computers, the Internet, and handheld devices are driving profound changes in how pictures, voice, and information are created, transmitted, accessed, and stored today.

Check Your Progress: 3

Lifelong learning is the ongoing, voluntary, self-directed, self-motivated education or pursuit of knowledge to accomplish personal or developmental goals.

Check Your Progress: 4

The threshold concepts are core or basic concepts of a field which must be understood before learning difficult or advanced concepts of a subject area or discipline.

Check Your Progress: 5

Media Information Literacy is an umbrella term covering information, media, and digital literacy. It also refers to individuals' competencies for critically evaluating different dimensions of media literacy.

Check Your Progress: 6

1. Information disorder refers to sharing false information with or without the intention of harming others. It involves different types of information, including disinformation and misinformation.

Check Your Progress: 7

1. Digital citizenship is the ability or competency to access and use digital technologies responsibly, reasonably, and safely. Digital citizens have the competencies to use digital technologies and the Internet to engage and participate in society, politics, and the ecosystem around them.

UNIT 11 LEARNING ENVIRONMENT AND INFORMATION LITERACY

Structure

- 11.0 Introduction
 - 11.1 Learning Outcomes
 - 11.2 Online Learning: Concept and Advantages
 - 11.3 Determinants of Online Learning Environment
 - 11.4 Enabling Technologies and Tools for Online Learning
 - 11.5 Information Seeking Behaviour in Online Environment
 - 11.6 Information Literacy and Digital Literacy
 - 11.7 Information Literacy for Researchers
 - 11.8 Importance of Place-Based Library Collections and Services
 - 11.9 Importance of Access-Based Library Services
 - 11.10 Let Us Sum Up
 - 11.11 Keywords
 - 11.12 Further Readings
 - 11.13 Check Your Progress: Possible Answers
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11.0 INTRODUCTION

An online learning environment is a virtual platform facilitating learning and teaching through the Internet. It allows students and teachers to interact and engage with each other in digital spaces by using tools such as video conferencing, virtual whiteboards, online assignments and discussion forums. In the online environment, the students may access educational material like lectures, readings, and videos at any time, from anywhere, at their convenience, if they have an Internet connection. The online learning environment is technology-driven. The instructors may create and share course content, provide feedback and communicate with students through various online tools. Self-regulated learning is an essential feature of an online learning environment because it enables the learners to take control of their learning process, adapt to the changing learning contexts and develop the skills and strategies needed to succeed in an increasingly complex and dynamic world. The online learning environment may support traditional academic courses, vocational training, professional development or continuing education. In other words, it supports lifelong learning. The online learning environment extends content flexibility, pace and time, enabling opportunities for collaboration, interactivity, and personalised learning experiences.

Further, the emergence of COVID-19, followed by the worldwide lockdown of educational institutions, has experienced a paradigm shift in delivering education and training. E-learning has gained acceptance and popularity and

has become indispensable. Online learning has various determinants, like the availability of disruptive technologies and information literacy. In this unit, we will learn about various disruptive technologies and information literacy which facilitate and enhance the online learning experience.

11.1 LEARNING OUTCOMES

After completing this Unit, you should be able to:

- Understand the concept and advantages of online learning;
- Identify the determinants of the online learning environment;
- Evaluate enabling technologies and tools used in online learning;
- Analyse information-seeking behaviour in the online environment; and
- Develop awareness of information literacy and digital literacy skills necessary for successful participation in online learning.

11.2 ONLINE LEARNING: CONCEPT AND ADVANTAGES

An online learning environment is a virtual platform where learners and instructors may connect, interact, and communicate over the Internet. It involves using various digital tools, technologies, resources, activities, and good information literacy skills to support and enhance the learning experience.

The COVID-19 pandemic forced educational institutions worldwide to rapidly transition to remote teaching and virtual learning to maintain the continuity of education. The sudden shift to online learning has been a significant challenge for many educators as well as learners. Still, it has also led to the adoption of new technologies and teaching practices, which have the potential to transform education forever. Educators have realised the potential of online learning and are exploring new ways of integrating various tools and technologies into their teaching practices. Further, online or virtual learning can expand access to education, particularly in remote and far-flung areas. It may provide learners with flexibility and autonomy in their learning endeavours.

The Covid 19 has accelerated the adoption of online learning, which has many advantages, as listed below:

Increased access to education: Online learning has the potential to make education accessible to learners who may not have access to traditional in-person learning environments, such as those who live in far-flung areas, have mobility issues and have family obligations.

Increased flexibility: Online learning offers greater flexibility in scheduling and pacing, allowing learners to study at their own pace and on their schedule. This is especially helpful for adult learners.

Increased use of technology: Online learning has accelerated the use of

technologies in education, such as online platforms, videoconferencing tools, and digital learning resources. These technologies can enhance the learning experience and provide new opportunities for collaboration and engagement.

Emphasis on self-directed learning: Online learning entails taking responsibility for one's learning and developing self-regulated learning skills, enabling one to become independent.

COVID-19 has significantly impacted virtual learning, accelerated the adoption of new technologies and highlighted disparities in access and equity. While online or virtual learning has provided greater flexibility for learners, it has also presented challenges for instructors, educators, and learners alike as they adapt to the new learning environment.

11.3 DETERMINANTS OF ONLINE LEARNING ENVIRONMENT

The online learning environment's determinants can impact the learning experience's quality and effectiveness. Some of the key determinants are listed below:

Technological Infrastructure: The quality and reliability of technological infrastructure, such as Internet connectivity, hardware, and software, can greatly impact the online learning experience.

Course Design and Delivery: The design and delivery of the course content, use of multimedia resources, and interactivity and engagement strategies may affect student motivation, commitment, and learning outcomes.

Instructor presence and engagement: The degree of the instructor's engagement and communication with the learners may impact their motivation, engagement, and success.

Learner readiness and engagement: Motivation and engagement with the course content affect learning outcomes.

Assessment and feedback: The quality and frequency of assessment and feedback certainly influence the learning experience in an online environment.

Support services: The availability of support services, such as technical support, academic mentoring, and tutoring, may influence the learning experience in the online environment.

Accessibility and inclusiveness: The degree to which the online learning environment is accessible and inclusive to all learners, regardless of their backgrounds, abilities, and needs, can impact the learning outcomes and satisfaction levels of the learners.

11.4 ENABLING TECHNOLOGIES AND TOOLS FOR ONLINE LEARNING

There are several technologies which facilitate an online learning environment. Some of the most common technologies used in the online learning environment are listed below:

- **Learning Management Systems (LMS):** These software platforms help educators create and deliver courses online. An LMS may include features such as course management, content creation and management, assessment tools, and student tracking; some examples are Moodle, Canvas, and Blackboard.
- **Video Conferencing software:** Platforms like Zoom, Microsoft Teams, and Google Meet enable instructors and learners to participate in live and virtual classroom sessions to conduct meetings and discussions.
- **Multimedia Content Creation Tools:** Instructors should be familiar with Adobe Creative Suite, Canvas, and Prezi to create engaging multimedia content for the programs and courses they teach.
- **Online Collaboration Tools:** Platforms like Dropbox, Google Docs, and Trello facilitate student collaboration.
- **Virtual and Augmented tools:** These tools provide immersive learning experiences, like virtual field trips or simulations, enabling learners to understand complicated concepts and interact with virtual objects.
- **Social Media:** Social media platforms like Twitter, Research Gate, and LinkedIn may be used to connect with learners and instructors to share resources, discussions and expertise.
- **Mobile Devices and Apps:** Mobile devices and apps enable learners to access courses and digital libraries on the go.
- **Educational Apps:** These allow instructors to create quizzes, flashcards, and other interactive activities; some examples are Kahoot, Quizlet, Duolingo, and Mentimeter.

Activity- 1

1. Please create a quiz of three questions on Information Literacy by using Mentimeter, <https://www.mentimeter.com/>
2. Please create an account in Research Gate <https://www.researchgate.net/login> and upload your publications.

11.5 INFORMATION SEEKING BEHAVIOUR IN ONLINE ENVIRONMENT

The stages of information-seeking behaviour in an online learning environment may be delineated as follows:

Initiation: This stage involves recognising a need for information which a given assignment, a query, or a personal interest could trigger. The learners may start by brainstorming potential topics, generating more queries or identifying gaps in their existing knowledge.

Exploration: The learners search for information from various sources, such as online databases, library catalogues, search engines, and online discussion forums. They may use keywords, subject headings, and Boolean operators to refine their search results and locate the required and relevant information.

Formulation: The learners plan to find relevant information, including identifying keywords and search terms, deciding on search tools, and determining search criteria, such as data range and publication type, etc. The learners evaluate and analyse the information that they come across and select relevant and credible sources.

Executing the search involves searching online databases, search engines and other resources. The learners may modify their search strategies or criteria as they navigate ahead and come across the results.

Collection: The learners collect and organise the information they find using note-taking techniques and reference management tools to keep track of their sources.

Presentation: The learners read, understand, assimilate, and synthesise the information they have collected and generate their ideas and thoughts as an essay, term paper, or research report. They must also cite their sources in any of the prescribed citation styles.

Evaluation: The final stage involves evaluating the effectiveness of the information-seeking process and reflecting on what could be improved for future assignments or projects. The learners may assess the quality and coverage of the resources, the efficiency of the search strategies, and the overall success or quality of their final product—an essay, term paper, or project report.

For students or students to show successful information-seeking behaviour in an online learning environment, they should be aware of information sources other than Google and Wikipedia. They should be conversant with academic conventions like peer review systems, scholarly journals, academic databases, and proper search strategies to browse, locate, access and use academic content. Research has shown that using dance search strategies leads to better performance and grades in higher education examinations (Weberetal,2018). The different stages of information-seeking behaviour in an online learning environment may help learners become more effective at browsing, finding, accessing, retrieving, and using information to meet their needs, as well as helping them develop critical thinking and analytical skills.

Check Your Progress: 1

Notes: 1) Use the space below for your answer.

2) Compare your answers with those given at the end of this unit.

1. What are the different stages of information-seeking behaviour in the online environment?

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2. What are the determinants of the online learning environment?

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11.6 INFORMATION LITERACY AND DIGITAL LITERACY

Information literacy is understanding, identifying, accessing, browsing, locating, evaluating, and using information effectively, efficiently, and ethically. It is particularly important in an online environment because students must know how to navigate and understand the vast amount of online information to succeed and achieve their goals.

Good levels of information literacy are crucial in an online learning environment for the following reasons:

- **Information literacy ensures quality research work:** The learners must know how to distinguish between reliable and unreliable sources of information and use the information ethically.
- **Communicating information:** Communication is the essence of any research work. Researchers must know how to communicate their research findings, ideas, and opinions through various scholarly and digital media. Information literacy helps learners communicate precisely and persuasively.
- **Evaluating information:** Information literacy skills help learners analyse, evaluate, read, understand, assimilate, and synthesise information from various sources and generate ideas. Students learn to think critically and make informed decisions to solve real-life problems.
- **Avoiding plagiarism:** Information literacy skills help learners understand the importance of citing sources and avoiding plagiarism. This is especially important in an online learning environment, where copying and pasting information and passing it off as one's own without acknowledging the source is easy.
- **Lifelong Learning:** Information literacy skills are essential for lifelong learning, as they enable learners to continue to learn and adapt to new information throughout their lives. This is particularly true in an online learning environment, where technology and information are dynamic and ever evolving.
- Information literacy is crucial for academic success, effective engagement in a digital society and effective information access and use in the workplace. People's competency to locate, assess, and use information in all spheres of their lives is based on their information literacy abilities, including the capacity to conduct information searches

in offline print sources and online databases. Information literate people can distinguish reliable information from false or misleading information and are skilled and ethical users. These abilities are essential for both literacy and overall quality of life. The emphasis has switched from information literacy to digital literacy as the information landscape has changed from one based on paper to one digital. The ability to live, learn, and operate in a digital society is called digital literacy. It also suggests that a person is competent enough to manoeuvre through an online environment. Digital literacy abilities, particularly effective use of digital sources of information, are crucial for success in the workplace and business. They also play a crucial role in students' personal growth and information literacy.

- Information literacy is a collective term for a set of literacies related to finding, analysing, absorbing, and sharing information. Digital literacy is the skills needed to use digital resources, such as social media and information and communication technologies, to apply information literacy.

Credit information literacy courses may be specially designed to teach students the skills and knowledge required to locate, evaluate, and use information effectively and responsibly. These courses may be offered as part of a university's curriculum at different levels, such as introductory, intermediate or advanced and may have academic credit. The course-integrated information literacy programs or sessions are short, more focused, and incorporated into a specific course or assignment. They are designed to help students develop the information literacy skills required to complete a particular assignment or project successfully. These sessions may be handled by the library staff or faculty teaching the course and may cover topics like search strategies, research methods and citation management. (Karnad,2013)

Check Your Progress: 2

Notes: 1) Use the space below for your answer.

2) Compare your answers with those given at the end of this unit.

1. Why is information literacy essential for learners in an online environment?

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2. What are the advantages of Information Literacy in the online learning environment?

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3. What is the difference between the credit information literacy course and course-integrated information literacy sessions?
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11.7 INFORMATION LITERACY FOR RESEARCHERS

Knowledge About the Sources of the Field	General databases Subject-specific databases Aggregator and publisher databases Abstract and citation databases E-books E-journals Open Access journals Electronic theses and dissertations Open Educational Resources
Knowledge about the Library resources and services	Access and place-based collections and services
Knowledge about how to evaluate and select the right journal	https://www.edanz.com/journal-selector https://journalfinder.elsevier.com/
Knowledge about how to access and browse the online resources	Single Window Search Single Sign-on Facility OPAC (Online Public Access Catalogue) Saving results or bibliographical details from OPAC
Knowledge about conducting a search Simple and Advanced	Using the right keywords –specialised and subject terms Refining search Using Boolean operators to expand or narrow down results Using Wildcard, * Use of filters and tabs Downloading full texts of journals and e-books
Knowledge about Scholarly Communication	UGC (Promotion of Academic Integrity and Prevention of Plagiarism in Higher Educational Institutions) Regulations, 2018 https://www.ugc.gov.in/pdfnews/7771545_a

	<p>academic-integrity-Regulation2018.pdf</p> <p>UGC-CARE</p> <p>https://ugccare.unipune.ac.in/apps1/home/index</p> <p>Difference between legitimate and predatory journals</p> <p>UGC guidance document</p> <p>https://www.ugc.gov.in/e-book/UGC_GARP_2020_Good%20Academic%20Research%20Practices.pdf</p> <p>Impact Factor</p> <p>H Index</p> <p>ORCID</p> <p>Research Data policies of universities and fund granting bodies</p> <p>Different models of publishing –Gold and Green</p> <p>Author Processing charges</p>
Knowledge about the referencing	<p>Use of Reference Management tool – Mendeley, Zotero</p> <p>Inserting in-text citations</p> <p>Creating bibliographies by selecting one of 7000+ citation styles.</p> <p>Installing MS Word Plugin, Web importer</p> <p>Downloading and saving references</p>
Knowledge about the different modes of publishing	<p>Knowledge about the peer review process</p> <p>Green, Gold, hybrid publishing</p> <p>Knowledge about DOAJ</p> <p>Knowledge about how to identify credible sources</p> <p>Difference between traditional and digital publishing.</p>
Knowledge about Keeping up to date using online networking sites	<p>Using blogs, RSS feeds, ResearchGate, AcademiaEdu</p>
Knowledge about various social media and professional networking sites	<p>Twitter, Instagram, Facebook Snap chat</p> <p>LinkedIn</p> <p>Social Searcher</p>
Knowledge about project collaboration	<p>Microsoft Teams: This is part of Office 365. Users can have all project documents in one place and use it for meetings and chats.</p> <p>Google's G Suite: Users may use various apps to store documents, collaborate, and meet with peers.</p> <p>Zoom or Skype: For team meetings</p>

	Kanbans: Microsoft planner, part of Office 365; Trello is freely available online.
Selecting the right online tool	<p>https://www.moovly.com/ For video creation</p> <p>https://www.dropbox.com/ For storing and sharing files</p> <p>https://www.rememberthemilk.com/ For creating and managing task lists</p> <p>Use ACCEPTS to select the right tool.</p> <ul style="list-style-type: none"> ● A Access - how will you access it? Laptop, phone, iPad, etc.? ● C Comparisons - are there other similar tools that would do the job better or better? ● C Cost—Many tools start free but require payment later or offer a 'lite' version free with a fuller version that you need to pay for. ● E Ease of use - how long will you spend learning this tool? Will it be intuitive? ● P Purpose - how much functionality do you need? ● T Trust - does the site look trustworthy? Who put it there? Who is using it? ● S Shelf-life: Is it important that it's still there in 3, 6, or 12 months? What would happen if it disappeared?

The table above shows the different types of competencies and knowledge the researchers should have to pursue online scholarship.

Activity -2

- What is the impact factor of new media on society? Please write down all your steps to locate the information or give screenshots.
- How will you determine if *New Media and Society* is listed in the UGC-CARE List? Please write down all the steps and provide screenshots of what you have followed to locate the information.
- Please create an account in ORCID <https://info.orcid.org/> and update your profile.

Awareness of Copyright Laws in the Online Learning Environment

Copyright rules are crucial in the online learning environment to ensure that learners and educational institutions behave responsibly and ethically while using copyrighted material or content. Digital technology has facilitated cutting, copying, pasting, and distributing content in the online environment. The learners must understand and abide by copyright laws to enhance their

learning experience and thus support the development of a vibrant and diverse culture of intellectual property. The copyright laws impact the online learning in the following manner:

- Copyright laws protect the rights of authors, creators, and owners of original works such as books, articles, videos, and images. Since online learning involves using these materials, it is essential to know the country's copyright laws and obtain permission to use copyright material.
- Fair use is a legal doctrine that permits limited use of copyrighted material for teaching, research, and scholarship. It allows instructors and learners to use copyrighted material in their coursework, provided that the use is transformative, non-commercial, and does not infringe the copyright holder's rights.
- Universities and libraries have licensing agreements with commercial publishers and content providers that permit instructors and learners to use copyrighted material in their coursework. Instructors and learners must know about and abide by the terms and conditions of the licensing agreements.
- It is very easy to systematically download the full texts of journals or share copyrighted material online. However, engaging in digital piracy is unlawful and unethical. Instructors and learners must be aware of the ethical and legal implications of piracy, and digital content must be used to ensure compliance with copyright laws.

Activity - 3

Please go to the following link and write what the Act says about the "Fair dealing with any work."

https://copyright.gov.in/Documents/Notification/Copyright_Amendment_2012.pdf

11.8 IMPORTANCE OF PLACE-BASED LIBRARY COLLECTIONS AND SERVICES

The libraries offer place-based collections and services which have tremendous importance in an online learning environment

Access to physical resources: The physical libraries facilitate access to a range of physical resources like books, journals, magazines, newspapers and other materials. This is helpful for learners who prefer to work with physical resources or who need to access content unavailable online.

Access to Technology: The physical libraries provide access to technology, such as computers, printers, scanners, text-to-speech software, Braille embossers, digital voice recorders, and other equipment, which can be particularly helpful for visually impaired online learners who may not have access to these resources at home.

Support for research and learning: The physical libraries provide various

services to support research and learning, including research assistance, reference services, and training workshops. These services are very beneficial for online learners who may not have access to on-campus resources or support.

Study spaces or collaborative work areas: Libraries provide study spaces and collaborative work areas that online learners can use. These spaces provide focused and quiet areas for academic and research activities and offer opportunities for collaboration and networking with other learners.

Community building: Physical libraries provide a sense of community and connection to online learners who may feel disconnected from their peers and instructors. Libraries also host events, exhibitions, workshops, and training sessions that can help foster community and engagement among online learners.

11.9 IMPORTANCE OF ACCESS-BASED LIBRARY SERVICES

Libraries also extend access-based services, significantly supporting and enhancing the online learning environment.

Online Public Access Catalogue (OPAC) Libraries extend the facility of OPAC, which may be browsed and accessed to find out the details of the libraries' holdings.

Access to a wide range of resources: Online libraries offer access to a wide array of resources, including e-journals, e-books, articles, and multimedia content. They permit students to access content that is not available in their collections.

24/7 availability: Online libraries and digital collections are available 24/7, allowing learners and instructors to access information at their convenience of time and place. The flexibility is particularly useful for students who balance work, family and social obligations.

Search tools and databases Online libraries offer powerful search tools and databases that make it easier for learners to search and find the required information quickly and efficiently, saving their precious time. For instance, the libraries offer the capability of single-window search, which helps users search across the various databases' resources, e.g., journals, theses and dissertations, and OPAC simultaneously.

Remote Access: Online libraries and digital collections may be accessed remotely through a single sign-on facility; by using a single name and password, the learners may access different library resources whenever they want to, irrespective of time and location.

Online support: Libraries also offer online support to learners to help them navigate the collections, find relevant resources, and guide research strategies. This support includes research assistance, reference services, and online tutorials.

Customisation and personalisation: Libraries often tailor their collections

and services to the needs of online learners. They provide customised research guides, create subject-specific collections, and host online workshops and training sessions.

Virtual Reference Services: Libraries offer virtual reference services to support learners' academic pursuits. By connecting learners with reference staff, libraries provide access to key resources and experts and thus enhance the online learning experience.

Collaboration and networking: Libraries extend opportunities for collaboration and networking to online learners through online discussion forums, chat rooms, and social media groups. These resources help learners connect with others with similar learning interests and goals.

Activity - 4

1. Give a screenshot of your library's remote access facility.
2. Conduct a search in your library's OPAC for books on open science.
Give its screenshot

11.10 LET US SUM UP

An online learning environment is a virtual platform or space where learners and teachers can connect, interact and learn over the Internet. Various digital tools, resources and activities are designed to support and enhance the learning experience. In an online learning environment, the students may access course materials, participate in discussions, submit assignments, take quizzes and exams and receive feedback from their teachers, all from the comfort of their homes or any location with Internet access. The online learning environment may use various enabling technologies like Learning Management systems (LMS), Virtual classrooms, webinars and social media platforms. The online learning environment facilitates learning from school to higher education levels. The learners should be information literate to succeed and thrive online. Information literacy is essential for success in an online learning environment. It helps learners access, browse, evaluate, and use information effectively, efficiently, and ethically. The unit has also covered some networking tools, although others are out there. The learners may use them to develop and share their expertise and experience, communicate with others and collaborate on projects. The online tools help learners communicate, network, share lists, manage projects, and create and publish content.

11.11 KEYWORDS

Digital Literacy refers to skills, knowledge and attitudes required to access digital information efficiently. Digital literacy includes finding and using information (otherwise known as information literacy). Still, it goes beyond this to encompass communication, collaboration and teamwork, social awareness in the digital environment, understanding e-safety, and creating new information. Both digital and information literacy are underpinned by

critical thinking and evaluation. Digital literacy skills empower individuals to work effectively and safely online, whether at work, studying or home. It defines those capabilities that fit an individual's needs for living, learning, and working in a digital society.

Virtual reality (VR) is the use of computer graphics systems in combination with various display and interface devices to provide the effect of immersion in an interactive 3D computer-generated environment. Immersive virtual reality is a technology that allows learners to experience a computer-generated environment as if they were there. It involves wearing a special headset that covers the learners' eyes and ears and displays the virtual environment in 3D.

The impact factor is commonly used to measure the frequency with which an average article in a journal is cited in a year.

The document provides a general framework for enhancing research integrity, focusing on potential threats and best practices. It addresses how plagiarism, misrepresentation, and fabrication can be checked. UGC released it in 2020 and may be accessed at https://www.ugc.gov.in/e-book/UGC_GARP_2020_Good%20Academic%20Research%20Practices.pdf.

H index: A scientist has an index of h if h papers have at least h citations each and the other $(N_p - h)$ papers have $\leq h$ citations each.

ORCID, Which stands for Open Researcher and Contributor ID, is a free, unique, persistent identifier (PID) for individuals to use as they engage in research and scholarship. <https://info.orcid.org/>

A virtual learning environment (VLE) provides rich teaching patterns and teaching content; it helps improve learners' ability to analyse problems and explore new concepts. Integrated with immersive, interactive and imaginative advantages, it builds a shareable virtual learning space which can be accessed by all kinds of learners of the virtual community

11.12 FURTHER READINGS

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11.13 CHECK YOUR PROGRESS: POSSIBLE ANSWERS

Check Your Progress: 1

1. In the online environment, information-seeking behaviour typically progresses through several stages. Firstly, there's the recognition of a need for information, often sparked by curiosity or a specific task. This leads to the search stage, where individuals utilize search engines, databases, or social media platforms to find relevant information. Following this is the evaluation stage, where the credibility, relevance, and reliability of sources are assessed. Subsequently, there's the decision-making stage, where individuals choose which information to engage with or incorporate into their knowledge. Finally, there's the utilization stage, where the acquired information is applied to fulfil the initial need or task. These stages may not always occur linearly, as individuals might revisit previous stages based on new information or changing needs, showcasing the dynamic nature of information-seeking behaviour in the online realm.
2. The online learning environment is influenced by various determinants that shape its effectiveness and functionality. Technological infrastructure plays a crucial role, encompassing aspects such as internet connectivity, device accessibility, and software compatibility. Pedagogical design and instructional strategies are equally significant, impacting how content is delivered and engaged with by learners. Moreover, the socio-cultural context, including factors like language diversity and cultural sensitivities, influences the inclusivity and relevance of online learning experiences. Learner characteristics, such as motivation, prior knowledge, and digital literacy skills, also contribute to the success of online learning endeavours. Additionally, institutional support, including administrative policies, technical support services, and faculty development initiatives, significantly influence the quality and sustainability of the online learning environment. Understanding and addressing these determinants are essential for creating enriching and equitable online learning experiences.

Check Your Progress: 2

1. In an online environment, information literacy becomes paramount due to the vastness and accessibility of digital information. Firstly, it enables learners to discern credible sources amidst the abundance of information available online. This skill ensures the accuracy and reliability of their research, fostering academic integrity. Secondly, information literacy equips learners with the ability to effectively navigate digital platforms and databases, optimizing their learning experience. Moreover, it cultivates critical thinking skills, enabling students to evaluate, analyse, and synthesize information effectively. In essence, information literacy in an online setting empowers learners to become discerning consumers and creators of digital content, enhancing their academic pursuits and preparing them for the demands of the digital age.
2. Information literacy confers numerous advantages in the online learning environment. Firstly, it empowers learners to effectively locate, evaluate, and utilize digital resources, enriching their educational experience. By honing their ability to discern credible sources amidst the vast expanse of online information, students cultivate critical thinking skills and ensure the integrity of their research. Furthermore, information literacy equips learners with the tools to navigate digital platforms and databases proficiently, facilitating seamless access to educational materials. Additionally, it fosters digital citizenship by promoting responsible and ethical use of online resources. Ultimately, information literacy enhances students' ability to engage with course content, collaborate effectively in virtual environments, and adapt to the evolving landscape of online education.
3. The primary distinction between a credit information literacy course and course-integrated information literacy sessions lies in their scope and delivery. A credit information literacy course typically constitutes a standalone, comprehensive program offered for academic credit. It covers a broad range of topics, including information retrieval, evaluation, citation, and ethical use of sources. Such courses often provide in-depth instruction, assignments, and assessments to ensure students develop robust information literacy skills. On the other hand, course-integrated information literacy sessions are designed to complement specific courses within the curriculum. These sessions are often shorter in duration and focus on integrating information literacy skills directly into course content. Faculty members collaborate with librarians or information literacy specialists to tailor sessions to the specific learning objectives of their courses. Course-integrated sessions may include workshops, tutorials, or assignments that reinforce information literacy concepts within the context of the course material. Overall, while both approaches aim to enhance students' information literacy skills, they differ in their level of comprehensiveness and integration within the academic curriculum.

UNIT 12 DIGITAL INFORMATION PROCESSING

Structure

- 12.0 Introduction
 - 12.1 Learning Outcomes
 - 12.2 Digital Information
 - 12.3 Digital Information Processing
 - 12.4 Storing of Digital Information
 - 12.5 Online Databases
 - 12.6 Media and Information Literacy
 - 12.6.1 Social Media
 - 12.7 Artificial Intelligence
 - 12.8 Creative Commons
 - 12.9 Let Us Sum Up
 - 12.10 Keywords
 - 12.11 Further Readings
 - 12.12 Check Your Progress: Possible Answers
-

12.0 INTRODUCTION

In today's world, information plays a crucial role in our daily lives. Regardless of our field or social status, we rely on information for our functioning and survival. Access to information has become the norm, especially for students and researchers, as it is essential for their academic and research endeavours. In the digital era, an abundance of information is growing rapidly. The ease of creating and sharing information digitally has further contributed to this growth.

With the widespread use of social media, everyone must verify information before sharing it or making decisions based on it. Furthermore, Artificial Intelligence (AI) has gained popularity across various sectors, including education, research, industry, and healthcare. Researchers should be aware of AI tools that can enhance their educational and research activities.

Access to the right information at the right time aligns with Sustainable Development Goal 4 (SDG4) - Access to Quality Education. Achieving this goal requires easy access to quality information. Research scholars must also understand different licenses when using and generating information online. In this unit, you will learn about digital information, its characteristics, how people process digital information, licenses and different AI tools that can be helpful for your academic and research purposes.

12.1 LEARNING OUTCOMES

After reading this unit, you should be able to

- Explain the concept of information and its characteristics;
 - Understand the concept of digital information processing;
 - Understand the importance of Information Literacy;
 - Know about the importance of Media Information Literacy;
 - Understand the various types of licenses of Creative Commons; and
 - Know about various AI-based tools.
-

12.2 DIGITAL INFORMATION

Information encompasses facts and opinions gathered in daily life. It is acquired from interactions with others, mass media, social media, and observations of the environment. Individuals use this information to generate further insights, which they may communicate to others through conversations, instructions, written correspondence, and various media.

Digital information refers to data stored, transmitted, and processed digitally, typically using computers or other digital devices. This includes text, images, audio, video, and other types of data that have been converted into binary code (0s and 1s) for computer processing. Digital information can be easily copied, shared, and manipulated, making it a versatile and important part of modern communication and technology.

Digital information is characterised by its binary representation, where data is stored and processed as sequences of 0s and 1s. This form allows for discrete values, enabling each unit of digital information to represent a specific value. It is easily reproducible without losing quality, making it simple to share and distribute. Its ease of manipulation means digital content can be edited, analysed, and transformed with digital devices and software. It is also efficiently stored, as digital devices can store large amounts of data in a small physical space. Furthermore, digital information can be easily transmitted over digital networks, such as the Internet, facilitating fast and efficient global communication over long distances. Its versatility allows it to represent a wide range of data types, including text, images, audio, video, and more, enabling the creation of multimedia content and interactive digital experiences.

Digital information can be easily shared, copied, edited, and moved without losing quality. Copies retain the same quality as the original, ensuring no loss of information provided that the file is not compressed, corrupted, or inaccessible due to hardware or software-related issues. Access to digital information is independent of its physical storage location. Data can be stored in the cloud or on remote servers, allowing for remote access and use. Digital information can be aggregated, linked, and searched. Dashboards can aggregate and integrate information for reporting purposes. New information can be generated by combining data streams, enabling new types of analytics.

It can be updated in real time. Dashboards provide direct access to summary information.

Check Your Progress: 1

- Note:** 1) Use the space provided below for your answers.
2) Compare your answers with those given at the end of this unit.

1. What is Digital Information?

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12.3 DIGITAL INFORMATION PROCESSING

Digital information processing involves manipulating digitised data using computers and other digital electronic devices, collectively known as information technology (IT). Information processing systems encompass application software, operating systems, computers, networks, and mainframes. This process is called information processing whenever data needs to be transferred or manipulated. Computers process information to generate understandable outcomes, including acquiring, recording, organising, retrieving, or distributing information. For instance, when printing a text file, an information processor translates and formats digital data into a printed format.

Information processing encompasses acquiring, recording, organising, retrieving, displaying, and disseminating information. It also refers to how individuals retrieve, assimilate, understand, record, store, and act on information to generate more knowledge. This process influences the motivation and behaviour of individuals, which in turn impacts society as a whole. The actions and behaviour of individuals play a significant role in shaping and influencing broader societal trends and developments.

Check Your Progress: 2

- Note:** 1) Use the space provided below for your answers.
2) Compare your answers with those given at the end of this unit.

1. What is Digital Information Processing?

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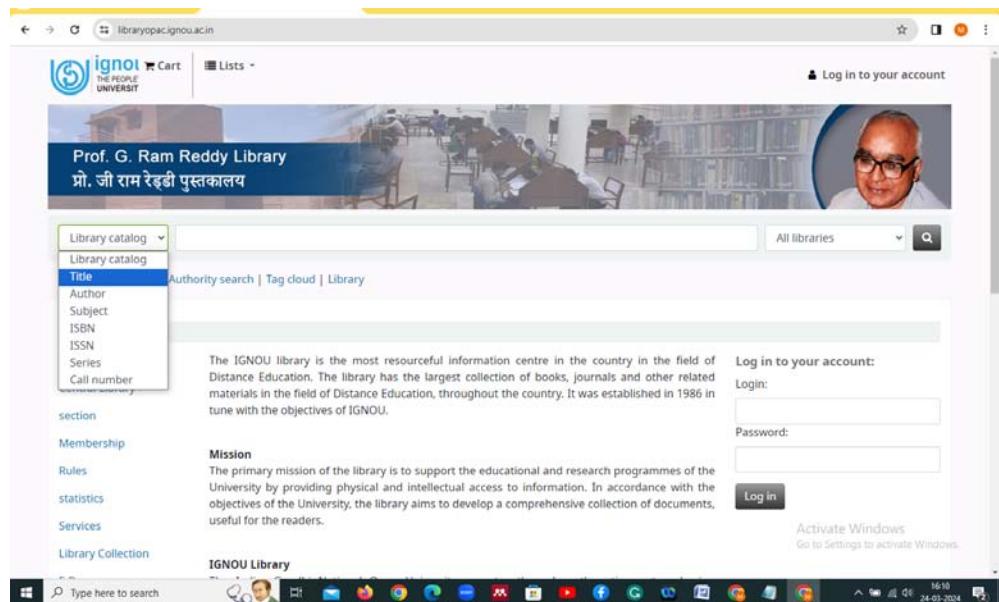
12.4 STORING OF DIGITAL INFORMATION

Storing and recording human knowledge began over 5000 years ago with the emergence of recording media and techniques. The Library of Alexandria, established in the 3rd century BC, contained papyri detailing citizens' property and the taxes they paid. The invention of the printing press in the 17th century accelerated the growth of the printing and publishing industry. Since then, literature, or written text, has been the primary medium for disseminating knowledge. The term "literature" encompasses various formats such as newspapers, monographs, conference and seminar proceedings, scholarly journals, reports, theses, and dissertations. The first scholarly journal, *Journal des Savants*, was published in 1665. Currently, more than 46,736 journals are published worldwide. The vast amount of published information exceeds what any researcher can read, understand, and assimilate. To aid researchers in locating relevant information, tools like table of contents, summaries, bibliographies, and indexing services have been developed, known as secondary periodicals.

12.5 ONLINE DATABASES

Digital technologies have revolutionised how information is recorded, stored, and retrieved. Developments in computer storage, telecommunications, computer networking, and automated indexing and searching have accelerated the growth of online databases. These technologies have also enabled the development of online public access catalogues (OPACs), union catalogues, and consortia. Online databases store digital information in a relational structure.

Users can browse and search databases using keywords and filters through a user-friendly interface. Hypertext and hypermedia links are available to navigate the databases. When a query is entered, the information is searched, and the results are displayed as a list with hyperlinks. The screenshot of the IGNOU Library is given below.



The screenshot given below shows how filters and advanced search may be used to retrieve the required information.

12.6 MEDIA AND INFORMATION LITERACY

There are more than 1.2 billion Internet users in India, and this is likely to grow to 1.6 billion by 2050. In 2022, there were 399 million Internet users in rural India, while 360 million were there in urban India. India has more than 497 million Facebook users, growing to 970 million by 2040. Further, 362 million Instagram users and 535.8 million active WhatsApp users will increase to 795.67 by 2025 and 26 million X/Twitter users in the country(Statista, n.d.). Further, a survey has highlighted that 60% of children in India in the age bracket of 9 to 17 spend over three hours daily on social media and gaming(TNN,2023).

Media and Information Literacy (MIL) is relevant for all. It helps people understand, assimilate, further synthesise, generate, and share their content responsibly.

MIL skills can mitigate the negative effects of social media, such as false information, misinformation, and fake news. Being media and information literate is knowing how to recognise, assess, and examine various media platforms and the information they broadcast. These competencies allow people to be responsible information providers and content creators.

Social media's broad usage allows information to reach millions of people instantly. While accurate and positive information can be helpful, maliciously disseminated false information can also have negative impacts, putting law and order in jeopardy and causing social unrest. Many people can be tricked by propaganda and fake news since social media companies find it difficult to filter out false information.

Teenagers' personalities are greatly shaped by media, which also has an impact on their socio-emotional, psychological, cognitive, moral, and physical development. Media projections frequently serve as the source of

their notions of bravery, beauty, prosperity, and prestige. Since students are always plugged into a global online ecosystem, it is essential to give them the tools they need to succeed in this setting. As a result, it is of the utmost importance to encourage critical engagement with media information through Media Information Literacy (MIL). To ensure children use social media judiciously, they must be proficient in deciphering, evaluating, and utilising Media Information Literacy, which involves accessing, analysing, and creating content from various texts.

During the pandemic, there was a considerable amount of misinformation circulating. X/Twitter has responded by implementing labels and warning messages to alert users to the accuracy of the content. Studies have shown that misinformation spreads rapidly on social media, particularly affecting public health and social harmony. Users should be cautious when sharing content on Twitter, avoiding disseminating manipulated or suspicious material on WhatsApp and Facebook. Accountability for online posts remains challenging despite Facebook's efforts to identify and remove false advertising, such as homoeopathic remedies claiming to prevent or cure diseases. Instagram, owned by Facebook, has also identified hashtags commonly used in posts containing false or misleading information.

Check Your Progress: 3

Note: 1) Use the space provided below for your answers.
2) Compare your answers with those given at the end of this unit.

1. What is Media and Information Literacy?

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2. How do media influence adolescents?

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12.6.1 Social Media

On social media, information processing is a multifaceted process that begins with users creating and sharing diverse content, such as text, images, videos, and links. This content is then distributed to users' networks through algorithms considering factors like relevance and engagement. User interactions, including likes, comments, shares, and reactions, provide feedback that influences content visibility. Platforms collect user interactions, demographics, and behaviour data to personalise content and advertisements. This data is analysed to gain insights into user preferences and trends, which inform content curation and platform improvements. Algorithms process user

data and content to personalise the user experience, recommend content, and target advertisements. Platforms use feedback from user interactions and data analysis to refine algorithms, improve content curation, and enhance user engagement. Privacy and security concerns related to user data, including data breaches and privacy policies, are also managed by social media platforms. Overall, information processing on social media is a dynamic process that aims to enhance user engagement and platform performance through content creation, distribution, user interaction, data collection, analysis, algorithmic processing, and feedback mechanisms.

Misinformation on social media spreads easily due to the platform's inherent characteristics, such as the ability to share content with a wide audience quickly. Algorithms that prioritise engagement can inadvertently promote sensational or false information. Additionally, users often form echo chambers, interacting primarily with like-minded individuals, which can amplify misinformation within specific communities. The lack of robust fact-checking mechanisms and the ease of creating fake accounts or using bots further spread false information. This is exacerbated by confirmation bias, where individuals are more likely to accept and share information that aligns with their existing beliefs. While social media companies are taking steps to address this issue, including fact-checking partnerships and content moderation, combating misinformation remains a significant challenge in the digital age.

Meta has employed 15,000 content reviewers for Facebook, Instagram, and threads, covering over 70 languages, including 20 Indian languages. It has initiated fact-checking programs to combat misinformation. Meta has collaborated with the Election Commission of India, allowing the commission to flag illegal content. It has enlisted experts from various fields, such as intelligence, data science, engineering, research operations, content policy, and law, to detect potential threats. It removes content that could incite violence or disrupt social harmony. Meta conducted an eight-week-long safety campaign called "Know What's Real" to educate users on identifying misinformation on WhatsApp and Instagram. The campaign promoted the best digital practices and highlighted the available safety tools. Users can double-check information by sending it to WhatsApp tip lines. Meta has also joined the Misinformation Combat Alliance (MCA) and introduced a WhatsApp helpline to combat AI-generated misinformation. WhatsApp has limited users' ability to forward messages to multiple groups simultaneously. It has implemented Community Standards and Guidelines that dictate permissible content on Facebook and Instagram. Content that does not comply with these guidelines is removed. Meta also labels photorealistic content generated using AI tools. At the Munich Security Conference (MSC) in February 2024, the twenty leading technology companies committed to mitigate deceptive AI content that could harm people during the general elections in 40 countries, where more than 4 billion people will cast their votes. The Tech Accord to Combat Deceptive Use of AI in the 2024 Elections is a set of commitments to implement technology solutions to counter harmful AI-generated content to mislead voters worldwide.

12.7 ARTIFICIAL INTELLIGENCE

Artificial Intelligence (AI) has become ubiquitous in our daily lives. Whether we're searching online databases for scholarly content or shopping on platforms like Amazon or Myntra, AI systems recommend articles or products based on our search or shopping history. These examples illustrate how AI is now a global driver of change, impacting businesses, societies, and governance. Computers able to solve problems through reasoning, learning, and incorporating various human functions and activities are poised to bring about the next industrial revolution, akin to the transformational impact of the steam engine and electricity. Artificial Intelligence (AI) will serve as a catalyst, permeating all sectors of society. Generative Artificial Intelligence (GAI) is a type of AI that can create new content, such as stories, images, videos, and music, using machine learning algorithms. These algorithms learn patterns from existing data and then generate new data similar but not identical to the training data. Some of the examples of emerging Generative AI Technologies have been tabulated below.

Tool	Type of Data	Type of results
ChatGPT, Replika, Sudowrite, Writesonic	Textual	Provide answers to questions according to the training data
DALL-E,DALL-E2,Imagen	Text and images	Generate realistic images based on text input
Co-Pilot, DeepCode, Intellicode, Code Whisperer	Software Programmes	Generate codes according to the text input

Kar et al. (2023) have extensively reviewed generative AI technologies.

Estimates suggest that AI will contribute around \$1.5 trillion to India's GDP by 2030. AI is catalysing inclusive development, breaking traditional barriers, and driving large-scale social transformation by providing services to everyone, regardless of geographical or socio-economic constraints. The National Strategy for Artificial Intelligence in India focuses on leveraging AI for economic growth, social development, and inclusive growth. The strategy aims to position India as a leader in AI, emphasising the concept of "AI for All" to ensure that the technology benefits the country's unique needs and aspirations. Key sectors targeted for AI implementation include healthcare, agriculture, education, smart cities and infrastructure, and smart mobility and transportation. The strategy emphasises the transformative potential of AI and the need for balanced adoption strategies that consider both financial impact and societal benefits.

Some initiatives leveraging AI are tabulated below.

Name	Scope	Department
UMANG(Unified Mobile Application for New-age Governance https://web.umang.gov.in/	To provide a one-stop window to access all government services from Central to local government bodies	Ministry of Electronics and Information Technology (MeitY) and National e-Governance Division (NeGD)
Digiyatra https://www.india.gov.in/spotlight/digi-yatra	Facial recognition-based boarding system for Indian airports	Ministry of Civil Aviation
Bhashini https://bhashini.gov.in/	Speech-to-speech machine translation systems enable people to access the Internet in their vernacular languages.	Ministry of Electronics and Information Technology
ATMAN AI(Ai Based Intelligent Covid 19 Detector Technology For Medical Assistance) https://www.drdo.gov.in/drdo/ai-based-intelligent-covid-19-detector-technology-medical-assistance-atman	Detecting COVID-19 by analysing the chest X-rays.	Ministry of Defence
CottonAce https://www.wadhwaniai.org/programs/pest-management/	This is to eliminate Pink and American ballworm and preserve cotton cultivation.	National Entrepreneurship Network (NEN)
Shiksha Setu	For recording the digital attendance of teachers and students.	Assam Government

The Ministry of Electronics and IT has published a compendium of 75 success stories to elaborate on the use of AI in delivering services and governance to the people. Generative AI may play a significant role in the digital transformation of society and governance.

Ensuring the FATE principles (Fairness, Accountability, Transparency, and

Ethics is very important, so the government has implemented many rules.

Information Technology (Intermediary Guidelines and Digital Media Ethics Code) Rules, 2021

The Information Technology (Intermediary Guidelines and Digital Media Ethics Code)

Rules 2021, amended in 2022 and 2023, have laid down rules and obligations for the platforms or intermediaries to follow. The platforms or intermediaries are supposed to prevent the dissemination of misinformation and not publish any content which may disturb or violate the law and order situation in the country or violate copyright.

Digital Personal Data Protection Act, 2023 (DPDP Act)

The Digital Personal Data Protection Act, 2023 (DPDP Act) is a law in India that governs how digital personal data can be used. It aims to balance people's right to protect their data with the need to use it legally.

India AI

MEITY has launched the "India AI" program to consolidate various national initiatives and foster innovation in Artificial Intelligence (AI) in India. MEITY is implementing the National Program on Artificial Intelligence (NPAI) as part of this program. MEITY has also asked the Ministry of Skills Development & Entrepreneurship (MSDE) to create a plan for skill development in AI in India.

There are many tools of AI which help the researcher in their academic and research endeavours. Some of them are listed below:

Sl. No.	Name	Website	Function
1.	Semantic Scholar	https://www.semanticscholar.org	Provides access to more than 200 million full-text academic papers
2.	Site	https://scite.ai/	It checks manuscripts for quality references.
3.	OpenAI Codex	https://openai.com	It translates natural language commands into code.
4.	Jenni	https://jenni.ai	It helps in writing, editing and generating citations.
5.	Write full	https://www.writefull.com/	It revises paraphrases and corrects the language.
6.	Abstract Generator	https://x.writefull.com/	It prepares the abstract for the full

			manuscript.
7.	CORD 19 (COVID-19 Open Research Dataset)	https://github.com/allenai/cord19	It is a corpus of academic papers about COVID-19 and related coronavirus research. The Semantic Scholar team at the Allen Institute for AI curates and maintains it to support text mining and NLP research.
8.	Scholarly	https://www.scholarcy.com/	It summarises the full text, including methodology, findings, etc.
9.	Paper Digest	https://www.paperdigest.org/	It helps in preparing reviews.
10.	Semrush	https://www.semrush.com/	It generates summaries.
11.	Resoomer	https://resoomer.com	It highlights the key concepts of the full texts
12.	Summariser	https://www.summarizer.org/	It summarises the full texts.
13.	TLDRLthis	https://www.tldrthis.com/	It summarises information.
14.	IRIS.ai	https://iris.ai/	It searches, prepares summaries and extracts data.
15.	Consensus	https://consensus.app/	It makes expert knowledge accessible and consumable to all.
16.	Elicit	https://elicit.com/	It summarises papers, extracts data and gives findings.
17.	Scispace	https://typeset.io/	It explains academic texts in simple words.
18.	Grammarly	https://www.grammarly.com/	It reviews spelling, grammar, punctuation, clarity, engagement, and delivery mistakes in English texts, detects

			plagiarism, and suggests corrections and substitutes for the mistakes.
19.	Quillbot	https://quillbot.com/	It paraphrases, checks grammar and plagiarism, generates citations
20.	CURIE	https://www.aje.com/curie/	It provides suggestions, improves writing structure, enhances flow, and generates citations.
21.	Rayyan	https://www.rayyan.ai/	It helps organise and manage systematic literature reviews.
22.	Research Rabbit	https://www.researchrabit.ai/	It helps researchers discover relevant academic papers and articles by allowing users to search for research papers, articles, and other academic content across various disciplines.
23.	Journal Recommender	https://journal-recommender.sagepub.com/	It helps in finding the right journal of Sage for publishing the manuscript.
24.	Journal Finder	https://journalfinder.elsevier.com/	It recommends the Elsevier journals that match the scope of the manuscript.
25.	Journal Suggester	https://authorservices.taylorandfrancis.com/	It recommends the Taylor and Francis journals that match the scope of the manuscript.
26.	Journal Finder	https://journalfinder.wiley.com/	It recommends the Wiley journals that match the scope of the manuscript.

Artificial intelligence (AI) has some downsides and challenges. One of the main concerns is the shift of jobs because AI can replace some human labour, leading to unemployment and economic disruption in some sectors. Another problem is the bias in AI systems, which can reflect and perpetuate social biases in the data used to train them. AI also raises ethical concerns, such as breach of privacy and the possibility of abuse, including surveillance and autonomous weapons. In addition, there are concerns about the impact of AI on human decision-making processes, as the dependence on AI can sometimes reduce critical thinking and creativity. Finally, AI has a broader social impact, including problems relating to the distribution of benefits and risks and its effects on social interactions and standards. AI technology requires careful consideration and regulations to address these shortcomings.

Deep fakes are synthetic media, typically video or audio, that have been altered using deep learning techniques to depict a person saying or doing something that never occurred. These alterations are often highly realistic and can be difficult to detect with the naked eye or ear. They are created using artificial intelligence (AI) algorithms that analyse and manipulate existing images, videos, or audio recordings to superimpose someone's likeness onto another person's body or to change their voice. While they can be used for harmless entertainment, such as creating videos of famous people singing different songs, they also raise significant concerns about misinformation, identity theft, and privacy, as they can be used to create convincing but entirely fabricated content that appears genuine.

12.8 CREATIVE COMMONS

Creative Commons is a not-for-profit organisation that provides Creative Commons (CC) licenses and public domain tools to individuals and organisations to grant copyright permissions for creative and academic works. These licenses ensure proper attribution and enable others to copy, distribute, and utilise these works.

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7. CC0(CC Zero)

It is a public dedication tool that enables creators to give up their copyright and put their work in the public domain. Users are free to distribute, remix, adapt, and build upon the material in any medium or format without any terms or conditions.

Check Your Progress: 4

Note: 1) Use the space provided below for your answers.

2) Compare your answers with those given at the end of this unit.

1. What are the different types of licenses?

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The Creative Commons License Chooser helps creators to select the right Creative Commons license for their work. It provides a simple interface where users can choose the permissions they want to grant -whether others can use the work commercially or create derivative works and the conditions they want to apply (such as requiring attribution). Based on these selections, the License Chooser generates the appropriate license text, which can then be added to the creator's work to communicate the permissions granted to others. The screenshot of the License chooser is given below.

The screenshot shows the Creative Commons License Chooser interface. At the top, there's a navigation bar with links for 'WHO WE ARE', 'WHAT WE DO', 'LICENSES AND TOOLS', 'BLOG', and 'SUPPORT US'. On the far right of the bar are 'Search', 'Donate', and 'Explore CC' buttons. Below the navigation, the page title 'LICENSE CHOOSER' is displayed in bold capital letters. A sub-header below it says 'Follow the steps to select the appropriate license for your work. This site does not store any information.' The main content area is a vertical stack of three cards. The first card, titled '1 Do you know which license you need?', contains two radio button options: 'Yes, I know the license I need.' and 'No, I need help selecting a license.', with a 'NEXT' button at the bottom. The second card, titled '2 Attribution', and the third card, titled '3 Commercial Use', are partially visible behind the first one.

Source: <https://chooser-beta.creativecommons.org/>

Implications for Researchers

With the rapid emergence of AI-based tools, researchers need to upskill and reskill themselves to leverage these tools for their academic and research needs. Researchers must be competent in using ever-evolving technologies to conduct effective research, learn, problem-solve, and critically analyse data. They should be able to locate, evaluate, organise, and implement relevant information from various print and electronic resources, choosing the right tool from a spectrum of available options.

Information literacy programs are of tremendous importance for quality research, teaching, and learning. Researchers must be well-versed in accessing and critically using information and IT tools for their academic and research endeavours. Researchers may be considered well-educated if they are information literate. They should be well aware of the information sources in their field and familiar with all components of the Research Publication Ethics (RPE) course. This 2-credit course was introduced by the UGC in 2019 to make researchers aware of the rules and regulations of scholarly communication and to ensure strict adherence to them.

Individuals are considered information literate if they can identify an information need and have the expertise to browse, locate, evaluate, and retrieve relevant information. In other words, an information-literate person has learned how to learn.

Digital Literacy skills prepare individuals for independent learning, decision-making, and navigating an online environment.

Digital literacy includes finding and using information (otherwise known as information literacy). Still, it goes beyond this to encompass communication, collaboration and teamwork, social awareness in the digital environment, understanding e-safety, and creating new information. Both digital and information literacy are underpinned by critical thinking and evaluation.

Digital literacy skills empower people to work effectively and safely online, whether at work, studying or home.

Exploring your information landscape

Knowledge About the Sources of the Field	General databases Subject-specific databases Aggregator and publisher databases Abstract and citation databases E-books E-journals Open Access journals Electronic theses and dissertations Open Educational Resources
Knowledge about the Library resources and services	Access and place-based collections and services
Knowledge about how to evaluate and select the right sources	The integrity of content and authenticity of sources
Knowledge about how to access and browse the online resources	Single Window Search Single Sign-on Facility OPAC Saving results or bibliographical details from OPAC
Knowledge about conducting a search Simple and Advanced	Using the right keywords –specialised and subject terms Refining search Using Boolean operators to expand or narrow down results Using Wildcard, ?, * Use of filters and tabs Downloading full texts of journals and e-books
Knowledge about Scholarly Communication	UGC (Promotion of Academic Integrity and Prevention of Plagiarism in Higher Educational Institutions) Regulations, 2018 https://www.ugc.gov.in/pdfnews/7771545_academic-integrity-Regulation2018.pdf UGC-CARE https://ugccare.unipune.ac.in/apps1/home/index Identifying the right journal for disseminating research findings

Knowledge about the referencing	<p>Use of Reference Management tool –Mendeley, Zotero</p> <p>Inserting in-text citations</p> <p>Creating bibliographies by selecting one of 7000+ citation styles.</p> <p>Installing MS Word Plugin, Web importer</p> <p>Downloading and saving references</p>
Knowledge about how to use Anti-plagiarism tools	Turnitin, Drillbit, authenticate
Knowledge about Keeping up-to-date using online networking sites	Using blogs, Email alerts, RSS feeds, ResearchGate, AcademiaEdu
Knowledge about various social media and professional networking sites	<p>Twitter, Instagram, Facebook Snap chat</p> <p>LinkedIn</p> <p>Social Searcher</p>
Knowledge about project collaboration	<p>Microsoft Teams: This is part of Office 365. Users can have all project documents in one place and use it for meetings and chats.</p> <p>Google's G Suite: Users may use various apps to store documents, collaborate, and meet with peers.</p> <p>Zoom or Skype: For team meetings</p> <p>Kanbans: Microsoft planner, part of Office 365; • Trello is freely available online.</p>
Selecting the right online tool	<p>https://www.moovly.com/ For video creation</p> <p>https://www.dropbox.com/ For storing and sharing files</p> <p>https://www.rememberthemilk.com/ For creating and managing task lists</p> <p>Use ACCEPTS to select the right tool.</p> <ul style="list-style-type: none"> • Access - how will you access it? Laptop, phone, iPad, etc.? • C Comparisons - are there other similar tools that would do the job better or better? • C Cost—Many tools start free but require payment later or offer a 'lite' version free with a fuller version that you need to pay for. • Ease of use - how long will you spend learning

	<p>this tool? Will it be intuitive?</p> <ul style="list-style-type: none">• P Purpose - how much functionality do you need?• T Trust - does the site look trustworthy? Who put it there? Who is using it?• S Shelf-life: Is it important that it's still there in 3, 6, or 12 months? What would happen if it disappeared?
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Check Your Progress: 5

Note: 1) Use the space provided below for your answers.
2) Compare your answers with those given at the end of this unit.

1. What is the importance of information literacy?

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.....
.....

2. What are the characteristics of an information-literate person?

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.....
.....

12.9 LET US SUM UP

Digital Information Processing has revolutionised how information is acquired, stored, retrieved, and disseminated. In an era dominated by digital technologies, information processing is crucial in various fields, including education, business, healthcare, and entertainment. This process involves the technical aspects of handling digital data and encompasses how individuals interact with and use this information. Understanding digital information processing is essential for navigating the complexities of the digital age and harnessing its potential for innovation and advancement. In this unit, you have learned about digital information, its characteristics, and the importance of information literacy programs, including media and information literacy, types of licenses, and various AI tools available for educational purposes. It is also important to understand the government's policies to control and combat the circulation of misinformation on social media. The unit has provided an overview of the various policies formulated by the government to address misinformation and deep fakes and to alert internet users.

12.10 KEYWORDS

Artificial Intelligence: The ability of computers to simulate human behaviour and intelligence.

Machine Learning: Algorithms and statistical models are designed to learn from data, enabling computers to recognise and infer patterns within the data.

This allows computers to perform specific tasks without requiring instructions from a human operator.

Media Information Literacy (MIL) encompasses skills and competencies required to read, write, comprehend, print, non-print, audio, and video content, navigate the Internet and social media platforms and generate one's content responsibly and judiciously for further dissemination and sharing. In modern information ecosystems, citizens should be well-trained to process the news that reaches them. It includes how they take, process, and respond to it.

12.11 FURTHER READINGS

1. Slamecka, V. (2024). Information processing. In Encyclopædia Britannica. <https://www.britannica.com/technology/information-processing>
2. Statista. (2024). Internet market. <https://www.statista.com/markets/424/internet/>
3. The Times of India. (2023). 60% of children spend 3 hours a day on social media: Study. http://timesofindia.indiatimes.com/articleshow/103878956.cms?utm_source=contentofinterest&utm_medium=text&utm_campaign=cppst

12.12 CHECK YOUR PROGRESS: POSSIBLE ANSWERS

Check Your Progress: 1

1. Digital information is data available in a digital format, allowing it to be processed and stored using computers or other digital devices. It can include text, images, audio, video, and different data types. Digital information is characterised by its binary representation, with data being stored and processed as sequences of 0s and 1s. It can be easily copied, shared, and manipulated, making it a fundamental component of modern technology and communication.

Check Your Progress: 2

1. Digital Information processing encompasses acquiring, recording, organising, retrieving, displaying, and disseminating information. It also refers to how individuals retrieve, assimilate, understand, record, store, and act on information to generate more knowledge. This process influences the motivation and behaviour of individuals, which in turn impacts society as a whole. The actions and behaviour of individuals play a significant role in shaping and influencing broader societal trends and developments.

Check Your Progress: 3

1. Media and information literacy (MIL) is the ability to access, analyse, evaluate, and create various forms of media and information. It

encompasses the skills needed to understand media messages, assess information sources critically, and use media and information effectively and responsibly. It enables individuals to become informed and engaged citizens, capable of interacting with media and information thoughtfully and ethically.

2. Media can influence adolescents in various ways, primarily through social influence, body image, violence, sexuality, consumerism, and education. Firstly, media can shape adolescents' perceptions of social norms, values, and behaviours, leading them to imitate what they see impacting their attitudes and actions. Secondly, media portrayals of idealised body types can contribute to body image issues, such as low self-esteem and unhealthy behaviours like disordered eating. Thirdly, exposure to media violence can desensitise adolescents to real-life violence and increase aggressive behaviour. Further, media messages often promote consumerism and materialism, influencing adolescents' purchasing habits and priorities. Media may also provide information and education to adolescents by extending access to various topics and perspectives.

Check Your Progress: 4

1. Please visit <https://creativecommons.org/share-your-work/cclicenses/>

Websites:

- Ministry of Electronics and Information Technology. (2021). Information Technology (Intermediary Guidelines and Digital Media Ethics Code) Rules, 2021 (updated 06.04.2023). <https://www.meity.gov.in/writereadda/files/Information%20Technology%20%28Intermediary%20Guidelines%20and%20Digital%20Media%20Ethics%20Code%29%20Rules%2C%202021%20%28updated%2006.04.2023%29-.pdf>
- Ministry of Electronics and Information Technology. (2023). Digital Personal Data Protection Act, 2023. <https://www.meity.gov.in/writereadda/files/Digital%20Personal%20Data%20Protection%20Act%202023.pdf>
- University Grants Commission. (n.d.). Report on NPAI Skilling Framework. https://www.ugc.gov.in/pdfnews/5732498_Report-on-NPAI-Skilling-Framework.pdf

Block

4

PARTICIPATION IN INTERACTIVE MEDIA

UNIT 13

Participation in Media Systems

UNIT 14

Political Participation and Digital Media

UNIT 15

Film Genres and Storytelling

UNIT 13

Advertising Literacy

BLOCK 4 INTRODUCTION

In the previous Blocks, we discussed the nature of media, how to access media and information, and the ability to critically understand media content. Let's move on to the last and most important dimension of media literacy—engaging with the media. Participating in the communication system and, more importantly, participating with a purpose are the core focal points of this Block. We contextualise this Block from the individual's abilities and opportunities in the contemporary digital environment.

Unit 13: Participation in Media Systems. In this Unit, we explore the fusion of media and information systems in the modern 'Information society,' where information is both currency and culture. From the traditional mediums of films, television, and newspapers to the expansive realms of social media and the Internet, we dissect how these platforms shape our understanding of the world and facilitate the exchange of ideas. We investigate the evolving role of audiences, transitioning from passive consumers to active participants, and the emergence of prosumers and participatory cultures. Focusing on citizen journalism, we analyse the various forms of participatory culture and media while examining the ethical responsibilities inherent in our interactions with social media.

Unit 14 Political Participation and Digital Media. This Unit explores the fusion of political participation and digital media. In this Unit, you will understand the diverse avenues through which citizens engage in political discourse, both online and offline. We'll dissect the dimensions of political participation, from traditional forms to the dynamic landscape of online activism. By examining digital media tools, we'll uncover how platforms like social media and online petitions empower individuals to shape political agendas and mobilise communities. Additionally, we'll analyse the evolving role of the digital public sphere in fostering political debates and influencing public opinion. Throughout our exploration, we'll emphasise the importance of media and information literacy as a prerequisite for meaningful political participation in the digital age.

Unit 15: Film Genres and Storytelling. In this Unit, we explore the captivating realm of cinema, dissecting its structure, grammar, and storytelling techniques. From the evolution of visual entertainment to the modern-day influence of social media, we unravel the intricacies of film production and its impact on audience expectations. Through an in-depth analysis of various genres and their stereotypes, we decipher the codes and conventions that shape cinematic narratives. Furthermore, you will understand the art of scriptwriting and storyboarding, equipping you with the tools to craft compelling visual stories. Whether you're an aspiring filmmaker, a passionate cinephile, or simply curious about the magic of cinema, this Unit offers a comprehensive understanding of film as both an art form and a medium of communication.

Unit 16: Advertising Literacy. Advertising, a cornerstone of commercial communication, promotes products, services, and societal messages. Despite

criticisms of time and resource consumption, understanding advertising's intricacies is essential for aspiring professionals. Throughout this Unit, we explore its evolution, objectives, advantages, and limitations, spanning various media channels from print to online platforms. We dissect advertising techniques, appeals, and communication processes, equipping you with critical analysis skills. Embracing advertising literacy, we decode complex messages, fostering a deeper appreciation for their societal impact. By integrating previous coursework insights, you'll navigate the advertising landscape adeptly and confidently, planning and evaluating strategies.

Media literacy's ultimate goal is to make any individual a responsible citizen and enable them to engage with other institutions to better democratic systems. This course will give you a holistic understanding of media literacy and empower you individually.

UNIT 13 PARTICIPATION IN MEDIA SYSTEMS

Structure

- 13.0 Introduction
- 13.1 Learning Outcomes
- 13.2 Changing Profile of Audience
 - 13.2.1 Active and Passive Audience
 - 13.2.2 Changing Role of Audience in New Media Landscape
- 13.3 Prosumers and Participatory Culture
 - 13.3.1 Understanding Participatory Systems
 - 13.3.2 Characteristics of Prosumers
- 13.4 Participatory Options of Users
 - 13.4.1 Forms of Participatory Culture
 - 13.4.2 Types of Participatory Media (Citizen Journalism)
- 13.5 Citizen Journalism and Empowered Audience/Users
- 13.6 Audience and Their Changing Relationship with Media
 - 13.6.1 Social Media as a Site for Citizen Journalism
 - 13.6.2 Understanding Social Media Rights and Ethics
 - 13.6.3 Social Media Ethics
- 13.7 Let Us Sum Up
- 13.8 Keywords
- 13.9 Further Readings
- 13.10 Check Your Progress: Possible Answers

13.0 INTRODUCTION

An 'Information society' is one in which information creation, distribution, diffusion, use, and manipulation is a significant economic, political and cultural activity (Webster, 1995). The processes and systems that combine media and information-gathering mechanisms for collecting and disseminating information and ideas are known as media and information systems. On the one hand, we have media such as films, television, newspapers and books to gain information about the world. On the other hand, we have social media and the Internet to disseminate our ideas, exchange our thoughts, and comment on relevant issues. These, along with companies, institutions and organisations engaged in manufacturing, transmitting and exchanging information in all forms (cartoons, videos, printed word, pictures, PowerPoint slides, audio, etc.), comprise our media and information systems.

13.1 LEARNING OUTCOMES

After completing this Unit, you should be able to:

- Understand how audience roles have evolved in media and information systems;
- Describe the characteristics of prosumers and participatory culture;
- Identify different forms of participatory media, such as citizen journalism;
- Analyse the changing relationship between audiences and media, focusing on social media ethics; and
- Summarise key concepts related to participation in media and information systems.

13.2 CHANGING PROFILE OF AUDIENCE

Media and information systems play a vital role in this networked society. They are crucial agents for making sense of one's environment, seeking desired information and facilitating complete participation in activities around ourselves. Social media platforms have recently emerged as a base for obtaining and sharing most of our information. Not only is new media changing the way we interact with our surroundings, but it is also dictating 'how' we do it. It facilitates sharing in several ways, including text, video, pictures, graphs, illustrations, audio, etc., asking users to engage with the online content more deeply and uniquely.

13.2.1 Active and Passive Audience

Once defined as unidirectional or passive receivers of media messages, the audience/user has become an active media content producer. Schäfer (2010) mentions that media and information manufacturing industries have now provided new options to enhance the participation of users taking on the role of 'extended cultural industries'. However, this participation may be explicit or implicit. While an implicit participant merely uses sites for leisure and work, the explicit participant forms a community to co-create content (Schäfer, 2010, as cited in Pistone, pg. 16).

This means they are actively producing content by either creating or forwarding information. A passive audience receives media messages and gets affected by them but does not react to the content in any way. On the other hand, an active audience constantly revisits media content to make new meanings, point out contradictions, express dissent or disagreement, and provide feedback to media content creators. The media content creation and delivery process has become instantaneous, and so can provide feedback. Thus, even users who do not maintain social media pages or are not frequent users of new media interact with content by providing feedback through opinion polls, voting for their favourite reality show contestants, etc.

13.2.2 Changing Role of Audience in New Media Landscape

The traditional media brought an organised gatekeeping and editorial process that demarcated news, opinion, and editorial. With the advent of new media, traditional media began to be considered anti-democratic and non-participatory. This new media offers interactivity, decentralisation, ubiquity,

media convergence, and non-linear representation of information in a non-hierarchical manner.

Though the new media did a good job widening the public sphere and enabling readers to engage with and comment upon information and news coming their way, they have failed miserably in ensuring information's accuracy, credibility, and authenticity.

The direction of communication has changed from top-down to both horizontal and vertical. Avenues for individual expression co-exist with space for social representation. This new space is more democratic and is believed to enhance participation from all sectors of society. The content generated by users pushes them from the traditional domain of consumer to 'prosumer' (producer + consumer), where they are generating and consuming information at the same time. They are individuals simultaneously involved in both producing and consuming information and media. Prosumers can now locate, dissect, associate, replicate, co-produce and share media and information with the sender and among themselves.

The consumer must be able to make sense of all this information and the pitfalls of online communication. As more citizens come online and rely on social media for news, it becomes imperative to equip them with the skills to become digital natives. They need skills to deal with demassification, glocalization, hyperreality, fake news, propaganda, misinformation, and post-truth.

13.3 PROSUMERS AND PARTICIPATORY CULTURE

Ideas about the consumer becoming a producer due to the coming of electric technology were first put forward by Marshall McLuhan and Nevitt (1972). However, Alvin Toffler coined the word 'prosumer' in his seminal work 'The Third Wave'. The posts, pictures, texts, videos and information put up by users on the Internet are known as User Generated Content (UGC). The coming of Web 2.0 added functionalities for the users and created avenues for participation, and a new 'participatory culture' has emerged. Jenkins et al. (2009) state that " a participatory culture is emerging as the culture absorbs and responds to the explosion of new media technologies that make it possible for average consumers to archive, annotate, appropriate and re-circulate media content in powerful new ways" (pg. 8).

Participatory culture is the one that encourages all members of society to engage with the media in ways that are comfortable for them. Few barriers exist to artistic expression and civic engagement in a participatory culture. Users are encouraged to share their creations and collaborate with other individuals. The common examples of such a space are sites such as Facebook, YouTube, etc. (and other social networking sites) that rely upon users to create and share information. The creator of Facebook controls the flow, not the content. Wikipedia is another such site where all of the data is created and modified by readers. E-commerce sites rely upon users to sell and buy products.

13.3.1 Understanding Participatory Systems

However, the participatory system has a few characteristics that set it apart from traditional top-down 'culture industries' (Huybrechts, 2014).

- Both makers and participants work with different disciplines, consciously exiting their comfort zone.
- This may not necessarily be true for products made by 'culture industries' because they work in a set paradigm with fixed conventions and rules oriented towards 'mass culture' instead of the 'demassification' that the produsers strive to obtain.
- Makers are consciously handing over part of the control, as their ideas can be discussed, adapted and even changed by participants.
- The produsers know their content could be replicated as memes, mash-ups, or other forms. However, they are open to experimentation and ideas even if they radically alter the original product. This differs from traditional media, where all information is presented through a structured, rigid, and hierarchical protocol.
- The project is open to a larger group of potential participants, and the best way to address and involve this audience in the process has not been known from the beginning.
- Participatory projects are developed within a network and thus have to deal with the expectations and opinions of several subjects.
- There is no clear separation between makers and participants, as they are all actors in the same process.

13.3.2 Characteristics of Prosumers

As more and more prosumers create content, the old structures of content creation are being challenged continuously. Content, like other things, has moved on from customization to co-creation. Axel Bruns defines this "*collaborative and continuous building and extending of existing content in pursuit of further improvement*" as '*produsage*' (2006; 2008). Tapscott and Williams (2006) use the term "*prosumption*" (production/consumption) to describe the activities of prosumers. Some characteristics are unique to presumption (Pistone, pg 8).

1) Dominance of User-led content production

With the enhanced capabilities offered by new media, there has been a rapid increase in the number of websites allowing products (Facebook, Twitter, YouTube, etc.). There has also been an increase in collaboration-friendly sites such as wikis and games such as Second Life that permit building upon the original structures.

2) Collaborative engagement

Even new cryptocurrencies such as Bitcoin work on a collaboration model where each participant has significant and unique contributions to

make. Users are encouraged to share real-time information and use open-source software.

3) Palimpsest development

The stories on new media come through with instant updates, allowing users to build a timeline and see the content being developed, modified and represented. This feature is special because, in traditional media, one can only see the story's final form delivered to us. A prosumer is thus more engaged and invested in the information process.

4) Alternative approaches to intellectual property

With new media's expanding and pervading nature, sustaining and ensuring the protection of Copyrights and royalties became difficult. Thus, new types of licences, such as Creative Commons, were created to democratise the new space while simultaneously creating a system to acknowledge the contributions of prosumers.

5) Heterarchical structure

Prosumers across the spectrum are given equal value and importance regardless of the actual worth of their contributions. This system ensures that all contributors are simultaneously leaders and participants.

Activity – 1

Find out and list any four projects/websites that are collaborative/participatory.

List the licences available with Creative Commons.

Check Your Progress: 2

Note: 1) Use the space below for your answers.

2) Compare your answers with those given at the end of this unit.

1. What is participatory culture, and what are its characteristics?

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.....
.....

2. What are the characteristics of presumption?

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.....
.....

13.4 PARTICIPATORY OPTIONS OF USERS

13.4.1 Forms of Participatory Culture

There are many ways in which prosumers can participate as citizens. All prosumers have opportunities to participate in citizen engagement, production of media and creating 'culture' (Schäfer, 2010). Jenkins et al.

mention the following forms of participatory culture:-

- Affiliations — formal and informal memberships in online communities centred around various forms of media, such as Friendster, Facebook, message boards, metagaming, game clans, or MySpace).
- Expressions — producing new creative forms, such as digital sampling, skinning and modding, fan video making, fan fiction writing, zines, and mash-ups).
- Collaborative Problem-solving — working in formal and informal teams to complete tasks and develop new knowledge (such as through Wikipedia, alternative reality gaming, and spoiling).
- Circulations — Shaping media flow (such as podcasting and blogging). (as cited in Jenkins et al., pg. 3)

Participatory culture has significant ramifications for a democratic society. Over the past few years, there has been a significant rise in participatory or citizen journalism.

13.4.2 Types of Participatory Media (Citizen Journalism)

Bowman & Willis (2003) define participatory journalism as the act of a citizen, or group of citizens, playing an active role in collecting, reporting, analysing and disseminating news and information. This participation intends to provide independent, reliable, accurate, wide-ranging and relevant information that a democracy requires (pg 9). Brown mentions (1997), "In an era when anyone can be a reporter or commentator on the Web, 'you move to a two-way journalism.' The journalist becomes a 'forum leader' or a mediator rather than simply a teacher or lecturer. The audience becomes not consumers, but 'prosumers,' a hybrid of consumer and producer."

Participatory journalism happens when any ordinary person, as a citizen of a nation, takes the initiative to express ideas irrespective of his educational or professional background. It is an act of citizens actively collecting, reporting, analysing, and disseminating news and information.

Lasica (2003) has specified many types of participatory journalism:-

1. Audience participation (such as user comments attached to news stories, personal blogs, photographs or video footage captured from personal mobile cameras, or local news written by community residents). E.g.: - ohmynews.com, CGNet Swara, Gramvaani and the hyper-local newspaper Khabar Lahariya
2. Independent news and information Websites (altnews.in, wikileaks.com)
3. Full-fledged participatory news sites (Citizen Matters, 'Fair Observer')
4. Collaborative and contributory media sites (Slashdot, Merinews, Youthkiawaaz, Newsvine)
5. Other kinds of "thin media" (mailing lists, email newsletters)
6. Personal broadcasting sites (video broadcast sites such as KenRadio)

Activity - 2

Identify presumption activities you do during the day and list them with the type.

Check Your Progress: 3

Note: 1) Use the space below for your answers.

2) Compare your answers with those given at the end of this unit.

1. What are the different forms of participatory culture?

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2. Explain various types of participatory media.

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3. What is citizen journalism?

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.....
.....

13.5 CITIZEN JOURNALISM AND EMPOWERED AUDIENCE/USER

The enhancement in technology has facilitated citizens to speak their minds even when traditional media outlets do not support their narratives by giving time to their issues/stories. They use social media to communicate their views and facts using simple technology such as cell phones. Videos/photographs and tweets from citizens have become primetime news topics. This is especially prevalent in remote areas or strife-torn regions that are inaccessible for long periods. The news content is predominantly urban-centric. With the increasing alienation citizens face, they have resorted to using social media to broadcast their views or facts that have been reported otherwise. Mainstream media outlets also rely upon these to compensate for the lack of time, resources, and logistics to cover the last mile in reporting.

Though readers earlier interacted with media through avenues such as Letter to the Editor, those letters were more reactive rather than participative. Today, videos and posts from readers/viewers form the basis of editorial decisions about coverage and airtime. Viewers are quick to refute any false claims and point out misreporting. So, the 'watchdog' of democracy now has a 'watchdog' for itself.

Many features set participatory media apart from mainstream media. While mainstream media has a typical, hierarchical, gatekeeping model for

selection, editing and publishing stories, participatory media does not have any such structure for gatekeeping. Citizen journalism is carried out by untrained participants who may or may not be educated or technically sound, while media persons are often trained in camera, recording, editing, etc. A regular media outlet publishes/ airs only the final version and selected story, thereby not giving information regarding all issues received by the organisation/media outlet and no justification for rejection/omission of certain issues. In participatory journalism, the stories are put in the public domain, where other members annotate, edit, build upon and share stories. The members do not need to choose or omit any stories as they do not have professional constraints.

Media relies upon the packaging of news using videos/pictures/audio and infographics. In contrast, news posted by citizens is raw. It allows users to participate in its production through commentaries, annotations, filtering and editing, fact-checking, grassroots reporting, peer-review and open-source reporting and broadcasting their version of events through tweets, audio and video. Since media outlets work under many constraints, they deal with issues of accessibility and other limitations (e.g.: - inability to contact local authorities and verify claims) at the site of stories (Eg:-floods, riots, etc.) and paucity of resources for coverage such as opposed to the citizen journalist who reports from grassroots as he/she has access to the site of the incident in a much better way. They use any/all technologies present to air the news and reduce the time and complexity of the news presented, as it does not need to go through traditional gatekeeping. The resulting news is not very structured and polished but is 'straight from ground zero'.

Mainstream media outlets have started recognizing the power of citizen journalism and the challenges it poses. Participatory media has brought about deeper democratisation of media, so much so that it is loosely referred to as the 'fifth' pillar of democracy (the fourth being mainstream media). The hegemony of mainstream media is now facing a real challenge. News organisations must now be serious about upholding values such as accuracy, credibility, and story sourcing. The agendas earlier set by mainstream media are now challenged, and members of the public question expert opinions. The skills of journalists need to be sharper and flexible enough to adjust to this new type of participatory journalism ecosystem. Mainstream media must maintain its presence and popularity in real and virtual worlds while remaining competitive, profitable and adaptive.

Activity - 3

Mention four examples of citizen journalism that have created a difference in society.

Check Your Progress: 4

Note: 1) Use the space below for your answers.

2) Compare your answers with those given at the end of this unit.

1. How has citizen journalism impacted traditional media?

13.6 AUDIENCE AND THEIR CHANGING RELATIONSHIP WITH MEDIA

13.6.1 Social Media as a Site for Citizen Journalism

In the initial years of news in India, mainstream news outlets were the source of information for social media and other online news portals. However, with technological advancements, social media is fed stories as they are broadcast and even before broadcast most of the time. Breaking news has shifted from TV to the online domain due to the participatory nature of the Internet. Often, unverified stories go viral on social media, resulting in them being picked up by mainstream news outlets. Sometimes, these go on air without going through the traditional newsroom grind. This can be attributed to several factors, such as the absence of the traditional gate-keeping model in the news coming out of social media, the tendency to share information without fact-checking and the lack of responsibility regarding accuracy from the end of readers and content creators. Fake news, misinformation and propaganda are an even bigger threat in this day and age.

Misleading videos going viral have resulted in brutal mob lynching incidents and have caused communal flare-ups needlessly. In the year 2018, over 12 people died in mob lynching incidents after they were falsely accused of being child lifters, sexual offenders and cow slaughterers on social media. In November 2016, WhatsApp messages regarding salt shortage triggered a four-fold price rise and panic buying, leading to chaos and looting of grocery shops. Videos of two Bangladeshi men being assaulted were re-circulated on Facebook in an entirely new context as the video of a Hindu being killed by Muslims (Sharma, 2018). The accompanying text was false, misleading and directed towards inciting violence. Many such texts have been circulated recently.

Children as young as eight have become victims of deadly suicide games such as the 'Blue whale'. Challenge videos that ask viewers to pull off stunts or do the impossible keep surfacing regularly (Ice bucket challenge, #kikichallenge). Suicides and murders have been live-streamed on Facebook.

The danger of breach of privacy and sharing of our private data by social media companies has presented itself many times, as in the case of the recent Cambridge Analytica- Facebook scandal. Facebook was accused of sharing the private data of its members with Cambridge Analytica without obtaining their consent. The companies often dictate the terms of service and privacy policies per their requirement, and readers have little or no say in changing them. They are also unaware of their virtual identities and how data mining

firms use them.

Similarly, other social networking sites often collect and share information with third-party users. However, we cannot control this since failure to accept these policies often results in the inability to sign up or access these sites and applications. Thus, we reveal much more about ourselves online than planned simply because we do not care to go through the privacy settings or disclosure agreements when downloading apps or accessing social media.

The least users can do is read and understand these carefully, limiting the amount and type of personal information they upload. The increasing cyber disinhibition, or the loosening of social restrictions and inhibitions in the virtual world, is a major cause of ethical and legal violations.

The government has stepped in and is trying to bring accountability by making social media platforms share the responsibility for content posted on them. They are also mulling a Data Protection law that empowers citizens to have complete control over the data they post. This results from unfettered participation opportunities that social media offers its prosumers. However, as the space becomes more and more open for all, the onus of protecting oneself from online crimes while fully participating in the information society also falls upon the prosumer.

Much content is being created online, and it is important that the Internet remains open and transparent and protects the rights of individuals contributing to sharing and exchanging knowledge. This allows them to create content freely and fosters creativity while making knowledge accessible to everyone. The temptation to copy or modify easily available content is difficult to fight. Ownership, privacy, confidentiality, and intellectual property must be respected in virtual life, just like in real life.

Collaborative websites such as Wikis and YouTube and social media sites such as Facebook, MySpace, Weibo, and Twitter all run with the help of user-generated content. Individuals who read the content also share, exchange, add, and publish the data they come across, thus becoming consumers and producers. This is unlike any other medium. For example, we use Facebook to share and 'like' pictures found on our friends' walls, creating data.

Thus, new media users must be protected from ethical violations as producers and creators of information. Let us first try to understand their responsibilities as creators.

13.6.2 Understanding Social Media Rights and Ethics

Digital Rights have become very important in this information age. The rights of the content creator and the consumer or reader must be protected. There are many challenges here, as Internet consumers are mostly prosumers. They must watch out for ethical violations as creators and consumers of online content. Since establishing ownership is easier, the content creator's rights are always discussed more fervently.

Copyright Infringement

Many websites are offering paid content online. This is done to ensure that artists/writers who are contributing content are compensated and motivated to contribute further. However, some file-sharing companies allow illegal downloading and sharing of files, which leads to piracy. The rampant music piracy, or copying digital goods such as audio files, videos, reports, articles, and so on, without the consent of the person who holds the copyright, is a major problem. As users, we tend to become careless about copying and pasting desired information, and sometimes, we inadvertently infringe on fellow netizens' copyrights.

Open Content Vs Free Content

David Wiley has specified that online content can be open or free. It is important to distinguish between the two. Any online content that can be accessed, revised, reused, redistributed, remixed and retained for later use is called open content. This means the online content need not be open even if it is free, implying that free content is not the same as 'open' content. Free means one can access the content free of cost, but 'open' means users are free to download, edit, and share the content without any ethical or legal limitations.

The problem of creating ethical guidelines for the Internet has risen because it is a relatively new medium. A vast amount of content is floating around on the Internet, and many conventions define our ethical boundaries concerning using online content. The automatic copyright of the online content lasts 70 years and becomes available for public use. However, new types of online copyright licensing now tell us how a particular content should be used. Creative Commons is one such organisation that works on providing people access to creative work and intellectual property while giving them the right to choose the conditions for making that work available to consumers.

In simple terms, whenever a user posts fresh information online, he/she can specify how it has to be used by mentioning whether the material is free for modification/download/sharing, etc., or partly available/ not available. This is done via symbols and attributions now commonly used on the Internet. Apart from legal considerations, there are many ethical issues that new media users must be aware of.

13.6.3 Social Media Ethics

Ethics are moral codes of conduct. They define how we behave online and help us decide about our 'netiquettes'. Social media ethics can be defined as ethical considerations defining our online conduct. They tell us how to appropriately use the new media without breaching any law or infringing on the online rights of other users. They provide a model code of conduct for creators, distributors and users of online content.

The guideline for good 'netiquette' is very simple. When we post something about a text, we should point to the original text while commenting so that our post is not taken out of context. We must be careful while posting any

data online. Before doing it, one must consider the long-term consequences. We should be mindful of different types of readers online. They may represent different beliefs, sensibilities and cultures. Hence, we should respect that. In case we have committed a mistake, we must immediately apologise and remove the concerned text from where it was posted. We should be gracious in disagreements also. Expressing any negative opinion online on a public forum can be disturbing for any individual. (<http://infosecawareness.in/students/internet-ethics>)

The foremost thing is to double-check the data we post online and be critical, observant, and watchful while sharing content or talking to strangers. We should also encourage our acquaintances and friends to point out any errors or mistakes we might have committed.

As new media users, we must understand the constantly changing online world and learn how to deal with emerging ethical challenges. We must also create policies to ensure no conflict of interest between content creators and online consumers. Users also need to be more aware of new crimes being committed online.

Most importantly, we must be aware of new media ethics and willing participants in making the Internet more productive, responsible, and happy for all users.

Activity – 4

Mention any recent ethical violations on social media and cite ways to prevent or improve the situation.

Check Your Progress: 5

Note: 1) Use the space below for your answers.

2) Compare your answers with those given at the end of this unit.

1. What is the difference between Free and Open content? What is Creative Commons?

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.....
.....

2. What do you understand about social media ethics?

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.....
.....

13.7 LET US SUM UP

An 'Information society' is one in which information creation, distribution, diffusion, use, and manipulation is a significant economic, political and

cultural activity (Webster, 1995). The processes and systems that combine media and information-gathering mechanisms for collecting and disseminating information and ideas are known as media and information systems. Media and information systems play a vital role in this networked society. They are crucial agents for making sense of one's environment, seeking desired information and facilitating complete participation in activities around ourselves.

Once defined as unidirectional or passive receivers of media messages, the audience/user has become an active media content producer. The direction of communication has changed from top-down to both horizontal and vertical. The content generated by users pushes them from the traditional domain of consumer to 'prosumer' (producer + consumer), where they are generating and consuming information at the same time. Participatory culture is the one that encourages all members of society to engage with the media in ways that are comfortable for them. Few barriers exist to artistic expression and civic engagement in a participatory culture. Users are encouraged to share their creations and collaborate with other individuals. As more and more prosumers create content, the old structures of content creation are being challenged continuously. Tapscott and Williams (2006) use the term "prosumption" (production/consumption) to describe the activities of prosumers. Some characteristics are unique to production.

Bowman & Willis (2003) define participatory journalism as the act of a citizen, or group of citizens, playing an active role in collecting, reporting, analysing and disseminating news and information. This participation intends to provide independent, reliable, accurate, wide-ranging and relevant information that a democracy requires. As new media users, we must understand the constantly changing online world and learn how to deal with emerging ethical challenges. We must also create policies to ensure no conflict of interest between content creators and online consumers. The users need to be more aware of new crimes being committed online. Most importantly, we need to be aware of new media ethics and be willing participants in making the Internet more productive, responsible, and happy for all users.

13.8 KEYWORDS

Ubiquitous: Present, appearing, or found everywhere.

Demassification Refers to restructuring the media industry into smaller independent operating entities. It means breaking (something standardised or homogeneous) into elements that appeal to individual tastes or special interests, e.g., to demassify the magazine industry into special-interest periodicals.

Media convergence: A phenomenon involving the interconnection of computing, communication, and content—and is a direct consequence of the digitization of media content and the popularisation of the Internet. Media convergence transforms established industries, services, and work practices and enables entirely new forms of content to emerge. It erodes the long-

established media industry and content "silos" and increasingly uncouples content from particular devices.

Glocalization: Products or services designed to benefit a local market while being developed and distributed globally. Glocalization is a mixture of and the result of combining globalisation and localization.

Post-truth: Relating to or denoting circumstances in which objective facts are less influential in shaping public opinion than appeals to emotion and personal belief

Misinformation: False or inaccurate information, especially that which is deliberately intended to deceive

Fake news: False, often sensational, information disseminated under the guise of news reporting

Hyper-reality is defined as the inability of consciousness to distinguish reality from a simulation of reality, especially in technologically advanced postmodern societies. It is a state in which real and fiction are seamlessly blended, so there is no clear distinction between where one ends and the other begins.

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13.10 CHECK YOUR PROGRESS: POSSIBLE ANSWERS

Check Your Progress: 1

1. A passive audience receives media messages and is affected by them but does not react to the content in any way. On the other hand, an active audience constantly revisits media content to make new meanings, point out contradictions, express dissent or disagreement, and provide feedback to media content creators.
2. Traditional media brought an organised gatekeeping and editorial process that demarcated news, opinion, and editorial. With the advent of new media, traditional media began to be considered anti-democratic and non-participatory. This new media offers interactivity, decentralisation, ubiquity, media convergence, and non-linear representation of information in a non-hierarchical manner.
3. They are individuals simultaneously involved in both producing and consuming information and media. Prosumers can now locate, dissect, associate, replicate, co-produce and share media and information with the sender and among themselves.

Check Your Progress: 2

1. Jenkins et al. (2009) state that " a participatory culture is emerging as the culture absorbs and responds to the explosion of new media technologies that make it possible for average consumers to archive, annotate, appropriate and re-circulate media content in powerful new ways" (pg. 8). The characteristics are:
 - Both makers and participants work with different disciplines, consciously exiting their comfort zone.
 - Makers are consciously handing over part of the control, as their ideas can be discussed, adapted and even changed by participants.
 - The project is open to a larger group of potential participants, and

the best way to address and involve this audience in the process has not been known from the beginning.

- Participatory projects are developed within a network and thus have to deal with the expectations and opinions of several subjects.
- There is no clear separation between makers and participants, as they are all actors in the same process.

2. Presumption Characteristics:

- Dominance of User-led content production
- Collaborative engagement
- Palimpsest development
- Alternative approaches to intellectual property
- Heterarchical structure

Check Your Progress: 3

1. Forms of participatory culture:-

- Affiliations — formal and informal memberships in online communities centred around various forms of media, such as Friendster, Facebook, message boards, metagaming, game clans, or MySpace).
- Expressions — producing new creative forms, such as digital sampling, skinning and modding, fan video making, fan fiction writing, zines, and mash-ups).
- Collaborative Problem-solving — working in formal and informal teams to complete tasks and develop new knowledge (such as through Wikipedia, alternative reality gaming, and spoiling).
- Circulations — Shaping media flow (such as podcasting and blogging).

2. Types of participatory media

- Audience participation (such as user comments attached to news stories, personal blogs, photographs or video footage captured from personal mobile cameras, or local news written by community residents). E.g.: - ohmynews.com, CGNet Swara, Gramvaani and the hyper-local newspaper Khabar Lahariya
- Independent news and information Websites (altnews.in, wikileaks.com)
- Full-fledged participatory news sites (Citizen Matters, 'Fair Observer')
- Collaborative and contributory media sites (Slashdot, Merinews, Youthkiawaaz, Newsvine)
- Other kinds of "thin media" (mailing lists, email newsletters)
- Personal broadcasting sites (video broadcast sites such as KenRadio)

3. Citizen journalism is the act of a citizen or group of citizens playing an active role in the process of collecting, reporting, analysing, and

disseminating news and information. This participation intends to provide independent, reliable, accurate, wide-ranging and relevant information that a democracy requires

Check Your Progress: 4

1. Impact of Citizen Journalism on traditional media – Mainstream media outlets have started recognizing the power of citizen journalism and the challenges it poses. Participatory media has brought about deeper democratisation of media, so much so that it is loosely referred to as the 'fifth' pillar of democracy (the fourth being mainstream media). The hegemony of mainstream media is now facing a real challenge. News organisations must now be serious about upholding values such as accuracy, credibility, and story sourcing. The agendas earlier set by mainstream media are now challenged, and members of the public question expert opinions. The skills of journalists need to be sharper and flexible enough to adjust to this new type of participatory journalism ecosystem. Mainstream media must maintain its presence and popularity in real and virtual worlds while remaining competitive, profitable and adaptive.

Check Your Progress: 5

1. Open and Free Content:- David Wiley has specified that online content can be open or free. It is important to distinguish between the two. Any online content that can be accessed, revised, reused, redistributed, remixed and retained for later use is called open content. This means the online content need not be open even if it is free, implying that free content is not the same as 'open' content. Free means one can access the content free of cost, but 'open' means users are free to download, edit, and share the content without any ethical or legal limitations.
2. Social media ethics can be defined as ethical considerations governing our online conduct. They tell us how to appropriately use new media without breaching any law or infringing on the online rights of other users. They provide a model code of conduct for creators, distributors, and online content users.

UNIT 14 POLITICAL PARTICIPATION AND DIGITAL MEDIA

Structure

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 - 14.1 Learning Outcomes
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 - 14.8 Let Us Sum Up
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14.0 INTRODUCTION

The term "political participation" encompasses a broad range of actions citizens take to express their political beliefs, influence public policy, and support the democratic process. The extensive availability of the Internet in the modern era has tremendously improved people's capacity to participate in political processes. Internet-based applications have shown that they can motivate millions of individuals to take part in political processes that have real-world consequences.

When individuals participate in their political system online or offline, they engage in individual and collective actions, occupying new levels of socio-political interaction. The proliferation of digital ecosystems has simplified political participation, catapulting the Media and Information Literacy (MIL) into the sphere of political culture. The ultimate goal of MIL in this setting is to strengthen ties between the state and the people.

The digital age information system makes available a plethora of data about political problems, candidates, parties, and government policies. Users can easily access a wide range of information, including news, analysis, and multiple points of view, allowing them to enlighten themselves better and make sound choices, thus being politically included in society. To achieve the objective of political inclusion, citizens must have easy access to information and political agencies that encourage them to participate in

policy making indirectly, influence the enforcement of laws, evaluate the performance of our government, and assist others in doing the same.

14.1 LEARNING OUTCOMES

After completing this Unit, you should be able to:

- Understand the basics of political participation in both traditional and digital contexts;
- Explore how digital media tools are used for political engagement;
- Examine how digital platforms influence political debates;
- Investigate the relationship between democracy and digital media; and
- Enhance media and information literacy for effective political participation.

14.2 CONCEPTUAL UNDERSTANDING OF POLITICAL PARTICIPATION

Van Deth (2014) defined political participation as "citizens' activities affecting politics". Citizens' participation is very important for democratic decision-making, and this has led to a significant increase in the study of political participation during the past few decades. Participation in politics involves a wide range of actions that allow people to have their voices heard, shape policy that affects their daily lives, and shape the world around them. Beginning with a heavy emphasis on voting and electoral engagement in the 1940s and 1950s, the repertoire of ways to acquire influence has expanded lately to include actions like signing petitions, blocking traffic, donating money, and even fighting with the police.

14.2.1 Dimensions of Political Participation

Traditional studies of citizen involvement in politics have centred on voting. However, contemporary conceptions of political participation have expanded to encompass a broader range of activities. Brady (1999) defined political engagement as ordinary citizens' actions intended to influence some political outcomes. Verba and Nie (1972) described participation in four typologies: voting, campaign activity for political parties, contact with public officials, and cooperative or communal activities related to local communities. A more comprehensive typology, including five dimensions, was proposed by Teorell et al. (2007). According to them, political participation is the act of voting, consumer participation (e.g. donating money, boycotting products, and buying political products), involvement with political parties (e.g. working for, volunteering with, or financially supporting a political party), participation in protest activities (e.g. demonstrations, strikes, and other forms of protest), and contact activity (e.g. reaching out to groups including organisations, politicians, and government officials). More recently, Ekman and Amnå's (2012) presentation distinguished between latent and manifest political participation.

Table 1. Latent and manifest forms of political participation (Ekman & Amna, 2012)

Latent political participation		Manifest political participation		
Involvement (attention)	Civic engagement (action)	Formal political participation	Activism (extra-parliamentary participation)	
Individual forms				
			Legal	Illegal
Interest in politics and social issues Keeping watch on current political events	Activities are based on a person's interest and focus on politics and societal concerns.	Election involvement and contact activities	To make one's voice known or to make a difference by personal methods (such as signing petitions or political consumption) through extra-parliamentary forms of participation.	Individually committed unlawful acts with a political motivation
Collective forms				
A feeling of membership in a group or collective with a distinct political profile or agenda. Lifestyle-related politics (for instance, identity, clothing, music, cuisine, and values)	Volunteer work is done outside of one's family and close circle of friends to enhance conditions in the local community, for charity, or to assist others.	Membership in conventional political parties, trade unions, and other organisations	Network-based political participation, e.g. new social movements, demonstrations, strikes, and protests	Protests and illegal and violent activities: Conflicts with the police or political opponents include protests, rioting, squatting, property destruction, and confrontations.

Only through latent forms of participation can new political behaviours and the chances for political involvement in various countries be comprehended, as Ekman and Amnå (2012) stated.

14.2.2 Online Political Participation

The Internet has enabled new types of mediated political engagement, thus broadening the scope of political participation. Such new online forms of participation raised hopes for a stronger engagement of politically underrepresented demographics like women, ethnic minorities, youth, the less educated, and low-income individuals.

Online political participation can be psychological (psychological engagement in politics using digital media) or behavioural (online political behaviours: attending civic events online, contacting officials online, volunteering online, or working in online campaigns). Verba, Schlozman, and Brady (1995) define political participation as psychological and behavioural involvement in civic and public affairs with the clear expectation of influencing government actions. Gibson and Cantijoch (2013) identified types of online and offline participation: passive engagement consists of news attention, discussion, and the expressive mode, whereas active participation includes voting, party or campaign activities, protest activities, contacting, communal actions, and consumerism.

Facebook, Twitter, and Instagram have evolved into potent instruments for online political engagement. Users can get their voices heard, disseminate political content, discuss contemporary topics, and make meaningful connections with others who share their views. People can band together for a common cause or a political campaign using online communities and grassroots movements made possible by social media. People can organise and sign online petitions to lobby for policy changes or support certain causes on digital media platforms. It is possible to influence policymakers by circulating and collecting signatures for these petitions. Political dialogues and debates on digital media platforms can now be held across geographic boundaries. Sharing opinions, posing questions, and conversing with others are all possible through internet forums, comment sections, and live streaming. Discussions like these help people learn more about politics, develop critical thinking skills, and affect public opinion.

Two main categories describe how an individual participates in politics via digital media. The three categories are:

- i) **Passive engagement:** An individual is exposed to information related to political affairs but is not compelled to take any kind of action.
- ii) **Active participation** means doing something to make a difference in the political system.

To be more specific, three distinct types of political influence can be attained through political participation: influence over particular policies (primary influence), influence over the selection of public officials responsible for making these policies (secondary influence), and influence over the political preferences and behaviours of other citizens (tertiary influence).

14.3 DIGITAL MEDIA TOOLS FOR PARTICIPATION

Digital media tools encourage digital participation by providing platforms and resources facilitating engagement, collaboration, and information sharing. They enable people to contribute their voices, perspectives, and expertise to various political and civic discussions and activities, nurturing a more inclusive and participatory democratic landscape. Digital media tools for political participation include social media platforms, online forums and discussion boards, crowdsourcing platforms, petitions and campaigns, and mobile applications.

Social media platforms: Social media platforms such as Facebook, Twitter, and Instagram enable individuals to connect, share, and engage with a larger audience. These platforms permit users to voice their opinions, discuss political issues, and generate public debates.

Online forums and discussion boards provide virtual locations for individuals to engage in conversations, debates, and knowledge exchange. These platforms enable individuals to pose queries, share information, and discuss topics of particular interest. They facilitate the development of communities and the exchange of diverse viewpoints. For example, "Youth4work" is an online forum to discuss political issues.

Crowdsourcing platforms: Digital media tools facilitate crowdsourcing, in which individuals collectively contribute to a project or acquire information. Crowdsourcing platforms and initiatives enable individuals to report news, document events, and share local perspectives that conventional media outlets might not cover. This encourages citizen participation in shaping the narrative of the news. For example, we can mention "participial," a collaborative crowdsourcing project that tracks democratic innovation and public engagement across the globe.

Online petitions and campaigns: Platforms such as Change.org, Avaaz, and other similar websites permit individuals to create and sign online petitions, thereby raising awareness about particular issues and advocating for change. These platforms amplify individual voices, mobilise support, and allow citizens to communicate their concerns and advocate for policy change.

Mobile applications: Mobile applications are crucial in encouraging digital participation, especially in regions with high mobile penetration. Mobile applications can provide features such as digital government facilities, election information, and engagement platforms. These applications provide citizens with easy and accessible methods to participate in political processes via their smartphones. For example, the MyGov (India) mobile application is a citizen engagement platform.

Activity 1

Creating an online political campaign

Create a unique hashtag related to a political topic you are interested in and use that hashtag in your social media posts to create awareness and encourage participation.

14.4 DIGITAL PUBLIC SPHERE AND POLITICAL DEBATES

An effective democracy demands a deliberative public sphere, an informal space for citizens to acquire information and communicate with one another to detect problems and bring them to the public's attention. The digital public sphere is the virtual space where people engage in public discourse, exchange ideas, and discuss various topics, including politics. It blurs the distinctions between professional journalists, politicians, and ordinary citizens. The digital public sphere significantly influences political debates by enhancing accessibility and amplifying voices. However, obstacles such as fragmentation, disinformation, and polarisation appear.

The features of digital public spheres are discussed as follows:

Inclusion: The digital public sphere has increased the accessibility and reach of political discussions. Online platforms and social media enable people from diverse backgrounds, locations, and social groups to engage in political discussions. It has democratised information access and facilitated interaction beyond traditional offline spaces.

Voice amplification: Digital media platforms enable individuals to amplify their voices and participate in political debates. Previously underrepresented or marginalised groups can now express their opinions, share their experiences, and challenge dominant narratives. This increased variety of perspectives contributes to a more inclusive and lively political discourse.

Fragmentation and echo chambers: While the digital public sphere enables a diversity of voices, it can also fragment political discourse. Online algorithms and personalised content delivery may generate echo chambers in which individuals are predominantly exposed to information and opinions supporting their beliefs. This can restrict exposure to diverse perspectives and impede productive political discourse.

Disinformation and propaganda: The digital public sphere has also witnessed the propagation of disinformation and the amplification of polarised perspectives. False information, propaganda, and misinformation can rapidly spread and influence political debates through social media. This threatens the quality and integrity of political discourse and necessitates critical media literacy skills for effectively navigating the online landscape.

Influencing public opinion: Digital platforms offer the opportunity to influence public opinion through political debates. Influencers, journalists, and opinion leaders can use digital media to share their perspectives, analyse

political events, and sway public opinion. Online conversations can influence public perception, affecting electoral outcomes and policy debates.

Accountability: The digital public sphere encourages citizen engagement and nurtures a sense of accountability among political actors. Citizens can express their concerns, hold politicians accountable, and demand transparency through online discussions. Public scrutiny in the digital space can increase political debates' transparency and responsiveness.

Check Your Progress: 1

Note: 1) Use the space below for your answers.

2) Compare your answers with those given at the end of this unit.

1. Explain the term "political participation" and discuss its significance in modern democratic societies. How has the availability of the Internet impacted political participation?

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2. What are the dimensions of political participation, and how do they manifest in both online and offline contexts?

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3. Discuss the role of digital media tools in facilitating political engagement. How do platforms like social media and online forums influence the dynamics of political participation?

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14.5 DEMOCRACY AND DIGITAL MEDIA

Individual political rights and liberties are at the heart of liberal democracy. According to cultural theory, democratic governance is supported by a culture in which all individuals can participate in social processes of meaning-making and access to diverse viewpoints (Balkin, 2015). The proliferation of online communication tools makes it easier for individuals to participate in politics. New kinds of political engagement and the role of digital media in making them possible are important lenses through which to view digital democracy. Young people are heavily represented and engaged online, especially on social media. Thus, Facebook, Twitter, and LinkedIn are just a few examples of the many online communication channels that enable citizens to participate in public and political debates in the modern era.

Digital media has been perceived both as a threat to democracy and as a potential boon to citizen participation in government. Participation, political awareness, trust, polarisation, populism, and echo chambers are six elements that shift significantly with digital media usage and significantly impact democracy (Lorenz-Spreen et al., 2022). In many cases, the first two factors have a favourable impact, whereas the remaining factors hurt democracy. However, the political environment of a State is crucial to evaluating the components. In countries where democracy is still in its formative stages, such as South America, Africa, and Asia, the favourable effects of digital media on political involvement and information consumption were most obvious. There was more evidence of the negative impacts in the well-established democracies of Europe and the United States, such as rising populism polarisation and falling political trust.

14.6 CITIZENSHIP AND PARTICIPATION

Voice, agency, and participation are transformed into meaningful experiences with citizenship status. To make participation more flexible, citizenship education is crucial. In an educational context, educational practice contributes to developing civic competencies, knowledge, and beliefs. After that, civic competencies give rise to political competencies. From the school learning stage onward, civic development concepts expand. Socio-political development theory explains that the civic development of students occurs in five steps: gaining knowledge (cognitive stage—social and emotional development) where social problems are introduced; logical skills where social problems are recognised; emotional abilities (capacity to contribute to social change) in the youth phase; political capabilities where youth learn to address problems civically; and social competencies where youth establish relationships. Citizens can contribute to decision-making when they acquire the skills to evaluate a problem from a civic and political perspective.

The strategic approach could be promoted at the community level to establish citizenship education, raise public awareness, and encourage participation from individuals of all ages. In the community context, citizenship education addresses civic literacy, diversity and intercultural understanding, environmental sustainability, democratic values, and human rights. Citizenship education must be inclusive of marginalised groups like minorities, expatriates, etc. Change agents such as the media, government, educational institutions, community centres, and libraries must promote it at the community level.

14.7 MEDIA AND INFORMATION LITERACY (MIL): A PREREQUISITE FOR POLITICAL PARTICIPATION

Media and information literacy empower citizens. Political participation enables citizens to actively engage with society's institutions and the public sphere, facilitating democratic participation in political activity.

The four prerequisite conditions for political participation are mutually reinforcing factors:

- i) **Relevant knowledge and skills:** Individuals must possess pertinent information. The knowledge source should be objective and exhaustive. If they wish to participate in the public sphere, they must have the disposition and the capacity to express their ideas and beliefs.
- ii) **Loyalty to democratic values and procedures:** The willingness to adhere to democratic principles supports the entire legal, political, and democratic governance system. Democracy will not function if the participants' worth and loyalty fail.
- iii) **Citizenship identities:** To participate, one must identify oneself as a citizen. The formal perspective of citizenship conceptually denotes political life in a democracy, whereas the social perspective of citizenship conceives citizenship in specific sets of practices and social agency.
- iv) **Respect for fundamental civil and political rights** There must be an appreciation for civil rights and the rights of minority groups, including the notion that fundamental rights can be freely exercised.

14.7.1 Discussion on Components

Renee Hobbs (2010) outlined five core skills for digital media literacy that promote active political engagement and participation through consuming and creating content. These five criteria are considered when Hobbs' elements are applied to the political arena. The skills are:

- i) **Access:** Locating and utilising appropriate media and technological resources to access political information and disseminating pertinent information to others.
- ii) **Analyse and evaluate:** Comprehending information and thinking critically about it to assess its quality, authenticity, reliability, and point of view, as well as the implications or consequences of such information.
- iii) **Create:** Creating or composing content with creativity and self-expression.
- iv) **Reflect:** Consider the application of social responsibility to one's self-identity and communication practices.
- v) **Act:** Participating individually or collectively in the political process at local, regional, national or international levels.

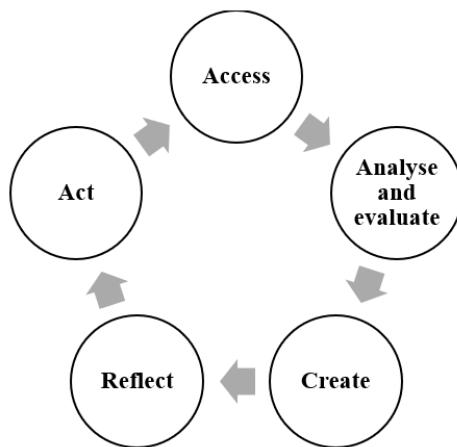


Figure 14.1: Essential competencies of Digital and Media Literacy (Hobbs, 2010)

Citizens with political differences can express themselves non-violently in a democracy through participation in political life and empowerment. It is necessary to evaluate the function of media and information literate citizens in information flow. A media and information literate citizen (i) understands the value of information in a democratic society; (ii) is aware of the role of information providers in a democracy; (iii) identifies the source of information; (iv) can evaluate information from any source; (v) knows when and where to share information; and (vii) can communicate effectively with the public.

14.7.2 Indian Context

The digital world of mobiles, the Internet, and big data either exacerbates or facilitates the political outcomes of information and communication technologies. Emerging information and communication norms foster nuanced and substantive conversations. Access to, consumption, and dissemination of information among communities has become spontaneous. In addition to the well-known media conglomerates, new organisations such as Google, Microsoft, and Meta assume control over the production of content and the engagement landscape. The new legacy organisations promote the global dissemination of information and communication. As a result, new connective platforms have evolved into a reservoir for sharing information, bringing together individuals who advocate for local, regional, and national causes.

In India, a citizen's ability to take part in the democratic process of their country depends on his or her familiarity with both state and civic issues. Participation in the administrative arena is essential to good governance from the top down. Civic and political knowledge, as well as the ability to shift relevant information from an ocean of information, are crucial for the citizens of India to participate in the political process effectively. National political participation is compromised due to the low MIL skills of its citizens. All citizens should be familiar with the paradox of information and media since it is through the media (print, radio, and online) that we learn about changes in government and society. Critical thinking about political messages and genuine engagement can be fostered by developing media and information

literacy (MIL).

Specifically, marginalised groups such as tribals, women, and religious minorities may benefit from online political participation. This improves prospects for fostering quality in all segments of society, as the Internet provides people from underrepresented groups a platform to share their stories and opinions, making political discourse inclusive. Nonetheless, MIL helps transform skills into valuable functioning, including public engagement in digital forms and using all available online communication channels.

Activity 2

Online political information access and analysis

Identify credible sources of online political information and differentiate between reliable news outlets, fact-checking websites, and opinion-based platforms.

Check Your Progress: 2

Note: 1) Use the space below for your answers.

2) Compare your answers with those given at the end of this unit.

1. Analyse the concept of the digital public sphere and its relevance in shaping political debates.

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2. Explore the relationship between democracy and digital media.

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3. Evaluate the importance of media and information literacy (MIL) for effective political participation.

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4. Reflect on the ways in which individuals can utilise digital media to influence policy making, evaluate government performance, and promote civic engagement.

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14.8 LET US SUM UP

In this Unit, we discussed the intricate relationship between political participation and digital media. Through this Unit, you have learnt a comprehensive understanding of the multifaceted nature of political participation, spanning traditional and digital realms. Also this Unit has explored the dimensions of political engagement, including individual and collective actions, within the context of the digital public sphere. Moreover, this Unit explained the various digital media tools that facilitate political participation, recognizing their role in shaping political debates and influencing democratic processes. It analysed the significance of media and information literacy (MIL) as a prerequisite for effective political engagement, particularly in the Indian context.

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14.10 CHECK YOUR PROGRESS: POSSIBLE ANSWERS

Check Your Progress: 1

1. "Political participation" refers to citizens' engagement in activities aimed at influencing public policy and supporting democratic processes. In modern democratic societies, it holds immense significance as it allows individuals to voice their opinions, contribute to decision-making, and hold elected officials accountable. The availability of the Internet has profoundly impacted political participation by expanding access to information, enabling grassroots organising, and fostering online activism. Citizens can now engage in political discourse, campaign for causes, and mobilise support more efficiently through online platforms, thus amplifying their voices and influencing political outcomes.
2. The dimensions of political participation encompass a wide range of activities, including voting, attending rallies, signing petitions, and engaging in political discussions. In both online and offline contexts, these dimensions manifest through various channels. For example, voting occurs offline at polling stations but can also take place online through electronic voting systems. Similarly, while attending political rallies and protests typically happens offline, individuals can also participate in virtual rallies and online campaigns through social media platforms like Twitter and Facebook.
3. Digital media tools play a crucial role in facilitating political engagement by providing platforms for communication, information dissemination, and mobilisation. Social media platforms like Twitter, Facebook, and Instagram enable individuals to connect with like-minded individuals, share political opinions, and organise collective action. Online forums and discussion boards allow for in-depth discussions on political issues, fostering a more informed citizenry. These platforms influence the

dynamics of political participation by amplifying voices, shaping public opinion, and providing a platform for marginalised groups to be heard.

Check Your Progress: 2

1. The concept of the digital public sphere refers to the online space where individuals engage in public discourse, exchange ideas, and participate in political debates. Digital platforms contribute to the democratisation of discourse by providing accessible and inclusive spaces for individuals to express their opinions, challenge dominant narratives, and hold public figures accountable. The accessibility of digital platforms allows for a diverse range of voices to participate in political discussions, thereby enriching democratic deliberation and fostering civic engagement.
2. The relationship between democracy and digital media is symbiotic, with the digital age information system playing a crucial role in promoting democratic values and principles. Digital media facilitate transparency, accountability, and civic participation by providing access to information, enabling citizens to scrutinise government actions, and fostering public deliberation. Online platforms also empower marginalised groups, amplify diverse voices, and facilitate political organising, thus strengthening democracy and promoting social change.
3. Media and information literacy (MIL) are essential for effective political participation in the digital age. MIL enables individuals to critically evaluate information, discern credible sources, and navigate the complex digital information landscape. Components of MIL include information literacy, which involves evaluating sources and verifying information, media literacy, which entails analysing media messages and understanding their impact, and digital literacy, which involves navigating digital platforms and tools effectively. MIL empowers citizens to make informed decisions, engage meaningfully in political discourse, and resist manipulation and misinformation.
4. Individuals can utilise digital media to influence policy-making, evaluate government performance, and promote civic engagement in various ways. For example, social media campaigns can raise awareness about pressing issues and mobilise support for policy changes. Online petitions and surveys can provide avenues for citizens to voice their concerns and preferences to policymakers. Moreover, digital platforms enable citizens to hold governments accountable by monitoring their actions, sharing information about governance issues, and participating in online discussions about public policies.

UNIT 15 FILM GENRES AND STORYTELLING

Structure

- 15.0 Introduction
 - 15.1 Learning Outcomes
 - 15.2 Introduction to Films
 - 15.2.1 Medium of Entertainment
 - 15.2.2 Medium of Communication
 - 15.2.3 Expectations of Audience
 - 15.3 Film Grammar
 - 15.3.1 Elements of Storytelling
 - 15.3.2 Audio Elements
 - 15.3.3 Visual Elements
 - 15.4 What is a Film Genre?
 - 15.4.1 Types of Genre - Codes and Conventions
 - 15.4.2 Stereotypes – Constructing and Deconstructing
 - 15.5 From Script to Storyboard
 - 15.5.1 What is a Script?
 - 15.5.2 Using Film Grammar
 - 15.5.3 Visualising a Storyboard
 - 15.6 Relevance of Script in Social Media Era
 - 15.7 Let Us Sum Up
 - 15.8 Keywords
 - 15.9 Further Readings
 - 15.10 Check Your Progress: Possible Answers
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15.0 INTRODUCTION

The advent of social media platforms has empowered the common Internet users to generate media content in multiple media formats. The affordable data plans and smartphone proliferation added functionality for common Internet users to share various contents online. One popular way of sharing on social media platforms is through visual content - shorts, reels, videos, and streaming. As part of the digital literacy course, this Unit lets us understand the basic grammar of visual media. The film is considered a novelty that borrowed the entertainment components from folk forms and used modern audio-visual technologies to create fantasy in the entertainment sector. Social media visual content is also a mere extension of this evolution of visual entertainment medium. Understanding the film genre would give you a broader perspective on handling the visual content from social media and online platforms.

Do you enjoy watching films? This Unit will introduce you to films as a medium of entertainment and communication. We will cover the aspects of film production, elaborating on how a film is made. We will also discuss different genres of storytelling in films and how they affect not only the content but also film grammar and audience expectations. Lastly, you will be taken through various scripting stages, from ideating to visualising a concept.

15.1 LEARNING OUTCOMES

After completing this Unit, you should be able to:

- Understand the various elements of film grammar;
- Differentiate between film genres;
- Understand the basic concepts behind the writing a script; and
- Know how to create a storyboard.

15.2 INTRODUCTION TO FILMS

Can you recall sitting in a theatre, excitedly waiting for the lights to go down and the chatter of people to end so the show could begin? And when the lights finally dimmed, trailers from forthcoming features would start playing, and you would be delighted to get something extra than just the film. Finally, when the film begins, you are transported into a world for a few hours, emotionally invested in the characters' lives on screen while simultaneously marvelling at its beauty. You would laugh, cry, be sacred, and even fall in love with the characters on screen. You would go home carrying more than just the story at the film's end. Such has been the experience of watching films on the larger screen, in a theatre.

The film industry is one of the largest industries in the country today, estimated to have a value of 183 Billion INR at the end of 2020. They are the most popular media product of today's time and influence the pop culture to a great extent. From when their screening was limited to the big screen to today when they are readily available on handheld smartphones in everyone's pocket, films have always succeeded in charming their audiences, and the COVID-induced lockdown period adversely affected many industries. Still, the most consumed product during this period was entertainment, especially films, even though the film production industry was also at a standstill. OTT platforms were bringing films and web series worldwide to our homes.

15.2.1 Medium of Entertainment

Invented due to a moving image camera, which was initially seen as a novelty, early films were just recordings of regular actions. Slowly, with the aid of narrative, that is, a story told with the help of putting visuals and, later, audio together, films became a popular entertainment medium. Early filmmakers started by recording theatre plays so they could be screened around the globe, a feat that earlier had to be achieved by having the entire troupe travel together. Slowly, film-makers started producing their own stories on film as well. Still being an expensive medium of production, initially, those

stories were chosen, and they had a sure shot at success. As a result, traditional folk tales, mythological stories or narratives from religious epics were converted into film scripts then. Gradually, these narratives became more complex and vivid with time, and with it, the masses adapted and accepted the narratives.

Cinema as a medium of entertainment has dominated almost the entire last century. In the olden days, film screenings were held in the open at night, under the star-lit sky, with the help of a projector and a simple white cloth acting as the screen. With theatres opening in the country's hinterland, watching a film on the big screen became a novel experience, limited to new releases or special occasions. When Television was launched, it was widely touted as a replacement for the bigger screen. However, it borrowed content from the films through weekly film screenings, film-based programs, and interviews. With the advent of cable networks, entire channels were devoted to films and filmy music, making cinema even more easily accessible to the public.

Films remain the most popular entertainment medium because they offer something to a wide audience base. Indian movies are packed with drama, romance, action, melodic songs, comedy, and suspense, thus catering to all segments of the audience. Films with such a wide mix of genres are called *masala* films.

15.2.2 Medium of Communication

Do you know what fashion trends were common in the 60's? Or do you know what the insides of space stations look like? You would recall scenes from a film to make that mental picture in your head. Right now, you are being asked to recall certain things, but films, like other media products, often subconsciously influence our concepts and thought formulation.

Film producers long ago realised the potential of films to communicate a message to the masses. The popularity and impact of movies have been utilised to discuss many social issues and entertainment. Many relevant issues have been found in the films, ranging from unemployment to gender ratio to the rights of citizens from various quarters. Few such films saw such huge success that they have also been responsible for starting various social rights movements. Candle marches and *dharna* protests became famous due to films like *Rang De Basanti* (2006) and *Lage Raho MunnaBhai* (2006).

Films like *Mother India* (1967) and several of Raj Kapoor's films, such as *Shree 420* (1954) and *Jagte Raho* (1956) etc., touched upon issues prevalent in Indian society at that time, such as the empowerment of women and unemployment. Films like these were responsible for spreading awareness about the issue in society and changing the masses' perspective ever so slightly. In recent years, films like *Taare Zameen Par* (2007), *Pink* (2016), and *Toilet Ek Prem Katha* (2017) have been responsible for bringing a sea change in the perspectives of society on the issues of dyslexia, consent and availability of proper sanitation in rural areas of the country respectively.

In times of media trials, where media platforms are widely responsible for

shaping public opinion, films like *No One Killed Jessica* (2011) and *Talwar* (2015) have helped bring relevant judicial cases back to the public's attention. Thus, films have been a powerful medium of mass communication.

15.2.3 Expectations of Audience

The film industry heavily depends on the audience's expectations and feedback. If the audience likes a film, the opinion spreads rapidly with word of mouth. The opposite is also true. There have been cases when films with huge budgets, mega-star casts, and interesting themes failed in the ticket window as the audience's reaction was not positive. Film-makers have tried chasing what the audience wants for decades, and scholars and critics have extensively researched and written about it.

When film-makers discover a plot that does extremely well at the box office, they try to rehash it repeatedly by adding and subtracting elements from the storyline or changing the setting. These are called formula films or films set on a basic formula or composition of elements. E.g., the old classical romantic tragedy of Romeo and Juliet, written by Shakespeare, has been remade several times. Films like *Qayamat Se Qayamat Tak* (1988), *Ishaqzaade* (2012) and *Ram Leela* (2013) have been based on the same theme, shifting the setting of the story each time but keeping the premise and the end same.

Activity 1

Can you identify any other formula in the films? Any storyline or themes that you think are replicated very often?

Check Your Progress: 1

Note: 1) Use the space below for your answers.

2) Compare your answers with those given at the end of this unit.

1. What are *masala* films?

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2. What are formula films? How do they cater to the expectations of the audience?

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3. Explain the basic expectations of common users from the reels and shorts of social media?

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15.3 FILM GRAMMAR

15.3.1 Elements of Storytelling

All stories follow a basic five-element structure. These five elements are Character, Setting, Goal, Conflict, & Resolution. The character around whom the story revolves is known as the protagonist. At times, the stories could have multiple protagonists, leading to complexity in the narrative. The setting is the environment, time, and place where the story occurs; it could be the medieval ages or a spaceship. The goal is the motivation that drives the protagonist; they could want to rob a bank or woo their romantic interest. Conflict is the roadblock between the goal and the character, adding spice to the story. In a few cases, it could be a person, a situation or, at times, a character's personality. Lastly, resolution is the character's due course to attain their goals. Sometimes, they achieve what they want and sometimes don't. In the latter case, the film is usually classified as a tragedy.

All these elements are tied down with the help of a narrative, which is told with the help of audio and visual elements. A narrative can be defined as a chain of interlinked events. These events are tied mostly to the story's beginning, middle, and end, making up the classical three-act structure. The beginning introduces the characters, setting, goal and conflict. The middle usually shows the impact of the conflict on the characters and them devising ways to solve it. The end culminates the story with the outcome of the struggle and efforts of the characters.

15.3.2 Audio Elements

Even when you are sitting alone in a quiet room, is everything ever completely silent? Audio is one of cinema's most underrated and seldom noticed elements and is dominantly seen as a visual medium. Films depend heavily on sound to create a cinematic world, and sound design is a specialised field dealing with the same in film production. It includes planning the audio layout for a particular scene. Four major audio elements are utilised in a film: human voice, music, sound effects and silence.

To begin with, the dialogue is the most important audio element. Imagine two characters whispering in a room full of people; the sound recordist would have to record their conversation in a manner that is louder than the chatter in the room, still sounds like a whisper and make sure that it appears that others cannot hear it. This is achieved by planning the sound design. The choice and placement of microphones to record on-location audio or to dub later are a few of the sound recording crew's choices. Next is the background score. Various instruments are played and recorded to create an ambience for the scene. Think of fast-paced, dramatic music for a car chase or a soft, soothing track to shoot a romantic scene. This music track is aided with the help of sound effects. Sound effects are added sounds to underline action on screen. For example, if you see a character drawing a sword from a sheath, you would expect to hear the sharp rubbing sound of metal against metal. The action doesn't seem real if you don't hear that sound. The last element is silence. You can recall the eerie silence in a horror film when the protagonist

is headed towards the kitchen at midnight or a character not saying anything but conveying a lot with a silent gaze.

Thus, these four audio elements are combined to create a sound design that simultaneously enhances the visuals seen on screen.

15.3.3 Visual Elements

Visual elements of a film can be classified into two major categories: Mise-en-scene and cinematography. Mise en scene is a French term roughly translated to putting on scene or frame and deals with all that you can see in a shot. It is mainly handled by the Production Design department, whose task is to create the look of the film based on the script, as per the director's vision. Anything and everything ranging from finding the right shooting location to creating the set or to acquiring the perfect props, the Production design department handles it all. It is aided by the casting department, which hires the actors based on their suitability in the role, while the Costumes, hair and make-up departments help design the actors' look. Thus, when you discuss Yash Chopra's famous romances, everything from the Swiss Alps to Sridevi to the Chiffon sari she is wearing is part of the Mise-en-Scene of the film.

On the other hand, cinematography comprises the creative choices made while shooting the scene. It is purely technical and derives a lot from photography. You may have the most beautiful scenery in front of the camera, but a bad photograph can completely ruin it. Difficult to identify by a regular viewer, this is where film art begins.

The cinematographer starts building the film's look from the most basic elements by the director's vision, starting with choosing the camera, lens, and film stock. Then comes how the camera is handled. The camera placement and angles decide the perspective the shot will take. Imagine the protagonist of the story looking through a peephole. You would automatically expect the next shot to be 'through' the peephole, showing the audience what the actor is seeing. Thus, the camera team must position the camera to get this shot. Next comes the shot size, ranging from an extreme close-up to show the sweat on the brow of the protagonist while trying to focus on a task to an extreme long shot where we can see the actors dancing on the cliff of a mountain. This is followed by camera movement. Think of a car chase sequence. Have you ever noticed that it is usually shot from various perspectives rather than just placing the camera in one place and watching the characters run? You would have a shot from inside the car, noticing the expressions of the driver, a shot from outside, showing the distance between two cars, maybe a close-up of feet pressing on the accelerator, another close-up of the actor looking in the back mirror and so on. All these decisions of choosing the camera placement, angle, movement and shot size help create the film's look and pace.

Next is lighting, which is usually a collaboration between the Production Design and Cinematography teams as it decides what to highlight in a frame and what mood to create. Think of a period drama, and you can't have very sharp light, as major light sources are sunlight or fire in the form of lanterns, candlesticks, or fireplaces. Think of a story set in an office; you would expect

the light to be the cool, fluorescent top light in most corporate offices. Thus, the set design team allows for light fixtures for the same, and the light team places the light sources to light up a shot.

Check Your Progress: 2

Note: 1) Use the space below for your answers.

2) Compare your answers with those given at the end of this unit.

1. What are the different audio elements of a film?

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2. What are the five elements of storytelling?

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15.4 WHAT IS A FILM GENRE?

You might be a fan of comedies, love action thrillers, or be inspired by biographical dramas. This means that you prefer watching one genre of film over others. A genre can be defined as a category of films that have thematic and stylistic similarities. It is one way of classifying films in film theory. The genre of the film not only affects its storyline but also impacts the filmmaking style and techniques.

Each genre has its visual grammar, such as dark sets and high contrast lighting for horror. You would take a look at the scene and would be able to guess if it is a horror film or not. This use of film grammar is known as codes and conventions of a particular genre. The genres could be based on the setting, the theme/mood of the film, or the target audience. These genres also help the audience make a viewing decision, as the audience may choose to watch a family drama or a romantic comedy based on their taste and occasion.

15.4.1 Types of Genre - Codes and Conventions

Here are a few popular genres and their established and accepted codes.

- **Action:** This film contains fast-paced action, dramatic music, chase sequences, and explosions. The actors are usually trained in martial arts; most films are in fight sequences.
- **Romance:** Based usually on themes of boy meets girl. Soft lighting and light mood are the markers of this type of cinema.
- **Comedy:** The film's plot is intended to make the audience laugh. It could also be combined with other genres, such as romantic comedy or action comedy.
- **Drama** Plays on the emotions of the audience. It contains the highs and

lows of human interaction and can also be divided into many subgenres, such as courtroom drama, Political drama, Historical drama, etc.

- **Adventure:** A narrative that takes the lead characters on a journey or a quest. The story is based on their experiences in an exotic location. It could also have action sequences.
- **Horror:** Narratives that intend to incite fear in the audience. They usually have supernatural elements and fantasy elements.
- **Science fiction,** also known as Sci-fi, relies on the imagination of future technologies and their impact on humanity.
- **Thrillers** are also known as mystery and suspense films because they rely on building suspense in the audience and have some reveal in the end. They could be further classified into psychological thrillers, detective thrillers, etc.
- **Western:** This genre, extremely popular in the West, includes depictions of places far from the reach of the law, where a villain terrorises the people, and the protagonist, who has shades of grey, takes the law into his own hands for justice. The most popular film in Indian cinema, *Sholay* (1975), can be classified in the Western genre.

15.4.2 Stereotypes – Constructing and Deconstructing

As genres are based on formulaic storytelling, they usually have a mix of characters and settings they are identified with. At times, these formulas and bracketing of many generalisations result in stereotypes. These stereotypes could be identified with gender, race, or regional or cultural identities. For example, a film from the romance genre would have actors playing stereotyped gender roles. The heroine would be a damsel in distress, and the hero would save her to win her love. And if and when the girl rejects the hero, he drowns himself in whiskey, *a la Devdas*, a famous character. The hero in any film genre would be a golden-hearted person; it doesn't matter if he is a good or a professional kidnapper. Pick up any film; the protagonist will be an upper-class Hindu male from a Brahmin or Punjabi clan.

Another stereotype related to occupation is connected to the depiction of police officers; they would always be shown to be so dedicated to their jobs that their wives would either be fighting with them, separated or dead. In stereotyping depiction of sexuality, characters who don't belong to either of the genders or are not heterosexuals are usually shown as the butt of the jokes in the narrative. Depicting a cultural stereotype, In a comedy, the hero would always have a friend, played by a Sikh actor, who would mouth Punjabi dialogues and break into *bhangra* at every given chance. Another Muslim character would say salaam or Allah hafiz very frequently. Characters from the southern part of the country would be shown wearing dhotis, with a tilak on the forehead and oiled hair. They would also be eating rice with their hands. Other than the stereotypes portrayed, one would never get to see a tribal character or a character from the northeastern North depicted in the story. Tribals would be portrayed as magical people with powers beyond science's scope if depicted.

These stereotypes limit representation and, thus, inclusion in popular cinema and affect the audience's perception of certain communities, genders, and occupations. This common bracketing also creates a hegemony of the mainstream narrative, which is at times broken by the alternate or parallel cinema movements, if at all.

15.5 FROM SCRIPT TO STORYBOARD

Producing every film begins with the same step, whether it's a mega-blockbuster or a documentary. The scriptwriters begin with a concept and then do the necessary research to develop it into a story. Only some concepts require more research than others; for example, a film set in a fantasy land or having a location-centric plot would require very little research and more creative imagination. On the other hand, for a biographical or historical piece of fiction, the research team would have to understand the era to situate the narrative.

15.5.1 What is a Script?

After the story is in place, the scriptwriters begin writing the script or screenplay. As the word suggests, a screenplay describes what all plays on the screen, from the position and movement of actors to their expressions and, of course, the dialogues. The scriptwriter or the team of scriptwriters compile the entire script and pitch it to the producers. The producers may like the script and decide to put funds in and produce the film, or ask the writers to make a few changes to make it more saleable or discard it altogether. Scriptwriters such as Salim Javed, who used to write scripts together in the 70s, are still recalled as the most successful writer duo as they delivered hit after hit for almost two decades. Many film-makers/directors today, such as Vishal Bhardwaj and Anurag Kashyap, write their scripts.

A film script is a detailed description of the visualisation of action on the screen. It is written scene by scene, as the narrative would play out in the film. It mentions the location and time of the day, describes the set, entry/exit, and other movements of actors, and describes the dialogues they will say with their expressions. There is a set format for writing the script, which is accepted and understood by the entire industry. After all the scenes are written down and the script is compiled, it is sent to various teams for further work. Actors are hired based on reading the script, and they refer to this bound script on the set to rehearse their lines and prepare for their scenes.

15.5.2 Using Film Grammar

The most basic element of filmmaking is a shot. The camera person places the camera at a place and decides on a lens, camera angle and movement if required. After much deliberation and consultation with the actors, directors, and sound team, he started shooting. A shot is a single recording from a camera, from the moment it starts till it cuts. After the scripting process, the team starts working on the shot division of the entire script, scene by scene, in consultation with the director and the cinematographer. Shot division is a script breakdown into separate shots for easy shooting. For, if the scene requires the protagonist to enter a room, the shot division could either film

this in one single long shot or cut this down in multiple shots, starting with a close-up of feet, then cutting to a mid-shot of the face, and then finally to the entire body.

When several shots are combined, it creates a scene. Think of a conversation between two characters. It would have several shots, close-ups of both characters and a long shot of the room or their location. The entire conversation is one scene created by combining many shots. Moving further, when many scenes are combined, it results in a narrative or a story. This is the basic film grammar: words are combined to create a sentence, sentences are combined to create a paragraph and paragraphs are combined to create a story.

15.5.3 Visualising a Storyboard

After the team compiles a shot division for all the scenes, the storyboard artist starts storyboarding the script. A storyboard is a visual representation of the shots. Artists usually draw storyboards with a lot of visual detail, ranging from the position and movement of the characters in the shot to the set design and the costumes. The production design and camera teams then use these storyboards to plan the shots. Think of a storyboard as a comic book of the film, with less emphasis on dialogues and other audio elements.

Film-makers like Satyajit Ray are famous for their detailed hand-painted storyboards and their resemblance with the final product. Several software applications are available today that make it easy to draw each shot.

Check Your Progress: 3

Note: 1) Use the space below for your answers.

2) Compare your answers with those given at the end of this unit.

1. What is a film genre?

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2. What is the need for creating a storyboard? Particularly in the context of contemporary digital social contexts?

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15.6 RELEVANCE OF SCRIPT IN SOCIAL MEDIA ERA

Creating visual content is no longer an expensive exercise. With the advent of social media, reels and shorts have become highly popular among young audiences. A lot of creativity is being experimented with in different

scenarios.

At the core of this course, Digital Media Literacy, social media users need to have a critical understanding of consuming visual content. However, scripting for visual content is a skill required for effective participation in large networks. There are four pillars of the media and information literacy domain, with the fourth pillar describing the participation of media users in communication systems.

The affordability of smartphones and the cost-effective availability of data plans help common users create multimodal communication content (combining various media elements into one single package).

In this scenario, scripting skills help common users convey effective information to a larger audience. In the previous two units, you learned about the opportunities for civic engagement and political participation. Meaningful and socially responsible public communication ensures greater participation and accountability.

15.7 LET US SUM UP

In this Unit, you learnt to look at films as a discipline and not only as a mode of entertainment. We reviewed the film production process, understanding and appreciating film grammar and how all components work together. We then discussed the different genres of films and the codes and stereotypes they build and break while catering to the audience's expectations. Toward the end, we went over writing a script, from ideating to visualising the entire story as a storyboard.

15.8 KEYWORDS

Masala Film — A film that is a mix of many genres, such as drama, suspense, comedy, romance, etc.

Formula film - a mix of all elements that have proven successful at the box office.

Shot – The most basic element of filmmaking. An uninterrupted sequence of frames.

Screenplay - a description of visual and audio elements on the screen, including the action, expressions, and dialogues.

Shot division – breaking down a scene into elements of film grammar

Storyboard - A visual representation of the shots.

15.9 FURTHER READINGS

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15.10 CHECK YOUR PROGRESS: POSSIBLE ANSWERS

Check Your Progress: 1

1. Films that mix genres, such as romance, suspense, comedy, and musicals, are called *masala* films.
2. A formula film combines all the elements that have proven successful at the box office in the past. Audience feedback helps identify these elements for further use.
3. Common users have several expectations from reels and shorts on social media. Primarily, they seek entertainment through engaging and quick-to-consume content. Relatability is key, as users prefer videos that resonate with their personal experiences, interests, and current trends. Informational value is also important, with users appreciating concise tips, hacks, or educational content. Visually appealing and well-edited videos tend to attract more attention and are more likely to be shared. Authenticity plays a significant role, as genuine content where creators show their real selves fosters trust and stronger connections with viewers. Lastly, users enjoy a diverse range of content, including humour, lifestyle, tutorials, and news, which caters to their varied interests and keeps them coming back for more.

Check Your Progress: 2

1. A film has four major audio elements: human voice, music, sound effects and silence.
2. The five basic storytelling elements are Character, Setting, Goal, Conflict, & Resolution.

Check Your Progress: 3

1. A film genre is a broad category of films with thematic and stylistic similarities.
2. A storyboard is a visual representation of the shots used by the production design and camera teams to plan the shooting process.

Creating a storyboard is crucial, particularly in contemporary digital social contexts, as it provides a visual plan that ensures a coherent and logical flow of content. It facilitates efficient communication among team members, making sure everyone is aligned with the vision. Storyboards also enhance time and cost efficiency by identifying potential issues early in the production process, thereby saving resources. In the realm of digital media, engaging storytelling is essential, and storyboards enable creators to plan compelling visuals and narratives that captivate audiences. Additionally, with the diversity of digital platforms, storyboards help tailor content to fit various formats and target audiences, ensuring consistency and effectiveness across different media channels.

UNIT 16 ADVERTISING LITERACY

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 - 16.8.3 Assessing Advertising Effectiveness
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16.0 INTRODUCTION

Advertising is considered a creative commercial message aimed at selling services or products. It can also be used to increase sales or publicise social messages. It is the lifeblood of the media for their survival. At the same time, there is a general belief that advertising wastes time, money and resources. Audiences of different mass media would generally prefer freedom from advertising, but as advertising students, you must learn to romance with advertising, just as shown in some Indian films. Watch these ads closely and connect with the ad characters, jingle, slogan and advertising locations. When doing this, you connect with the brand emotionally, start loving it, build a long-lasting relationship, adore the brands you purchase, and feel nostalgic.

Besides explaining all about advertisements, this Unit discusses the skills and competencies required to critically analyse intellectually challenging complex ideas presented in a creative and appealing manner. That process is called advertising literacy.

By amalgamating the insights from MNM035—media and information literacy—with the previous units from this course, you will gain a comprehensive understanding of the world of promotion-based advertisements. This holistic knowledge will enhance your professional capabilities and instil confidence in your ability to navigate the complex advertising landscape.

16.1 LEARNING OUTCOMES

After completing this unit, you should be able to:

- Discuss principles and practice of advertising;
- Understand the advantages, objectives and limitations of advertising;
- Help facilitate the use of different media and techniques of advertising;
- Analyse the various appeals used in advertising;
- Apply various advertising concepts and models, and
- Plan and evaluate advertising effectiveness.

16.2 WHAT IS ADVERTISING?

16.2.1 Definition and Need

One common definition of advertising is "any paid form of non-personal communication of information about products or ideas by an identified sponsor through the media in an effort to persuade or influence behaviour of the people in such a manner as to induce them to buy."

Despite so many other forms of promotion, why do we need advertising? Production is incomplete without consumption. Customers will consume only when they know the product's availability. Advertising fills this gap between production and consumption. Through advertisements, manufacturers draw consumer attention to the product.

16.2.2 Evolution of Advertising

You can trace the evolution of advertising in India in the timeline below:

- 1780: James Augustus Hickey started Hickey's Bengal Gazette, the first newspaper published in India. It advertised trade and legal notices. With this, print advertising started. It began with classified advertising.
- 1883: Horlicks became the first brand patented as 'malted milk'.
- 1905: B. Dattaram and Co. started operations in Mumbai, the oldest ad agency.
- 1918: Tata Publicity, the first professionally managed ad agency, was started.
- 1920: Foreign-owned ad agencies entered the Indian market.
- 1929: James Walter Thompson (JWT) ad agency started its India operations.
- 1939: The Indian and Eastern Newspaper Society (IENS) were founded. Lintas' advertising agency was started, and they launched Dalda, the first major example of branding.
- 1945: Advertising Agencies Association of India (AAAI) was started.
- 1948: Audit Bureau of Circulation (ABC) was founded.
- 1952: The Indian Society of Advertisers was formed.
- 1955: Advertisers' Club of Bombay (ACB) was set up.
- 1959: Telecasting of T.V. programmes commenced.
- 1967: The first commercial was aired on Vividh Bharati, an AIR channel.
- 1970: Sponsored programmes on radio were introduced.
- 1976: Doordarshan (D.D.) was separated from AIR, the first T.V. commercial seen.
- 1982: Bombay Dyeing becomes the first colour T.V. ad.
- 1985: The Advertising Standards Council of India (ASCI) was set up.

16.2.3 Advertising, Publicity and Propaganda

What are the similarities and differences among the three of them? Let us have a look at it in the table below:

Advertising	Publicity	Propaganda
Giving information about a company or its products by non-personal means	Giving information about a company or its products by personal and/or personal means	Majorly used as a form of political warfare

Always a commercial transaction, it encourages sales of products, services or ideas.	It may not be a commercial transaction.	It may not be a commercial transaction, but it encourages a change of personal beliefs and values.
The source is always known	The source may not always be known	The source is always known
Always a paid form	It may not always be paid for	It may not always be paid for
All advertising is publicity	All publicity may not be advertising	All advertising may not be propaganda

16.2.4 Objectives of Advertising

Let us look at the purpose of advertising. Objectives of advertising can be classified broadly into two types, namely:

16.2.4.1 General Objectives

- To inform: Done to build primary demand & inform about new product availability. E.g. State Bank of India.
- To persuade: The objective is to build demand for a particular brand. For E.g. Vodafone.
- To remind: Established products advertise to remind customers about the brand. E.g. Coca Cola.

16.2.4.2 Specific Objectives

- **Induce trial:** Advertisers use it to encourage the customer to try the new product. E.g. Vim gel.



- **Intensify usage:** It is done to get another consumer segment to try the product (mostly established brand). For example, Cadbury targeted older people using Amitabh Bachchan.
- **Sustain preference:** Established brands advertise to maintain their market share. E.g. Seagram's Imperial Blue.

- **Confirm image:** Established brands want to retain their image in customers' minds. For example, see the Nescafe ad.
- **Change habits:** These are used to change target customers' buying or consumption patterns, such as Johnson and Johnson's baby wipes.
- **Build a line of acceptance:** This displays the entire range of brands, e.g., a Videocon ad.

16.2.5 Advantages and Limitations of Advertising

Advertising is undoubtedly an inseparable part of the marketing process. Let's look at its benefits for manufacturers and consumers.

Pros of advertising for the manufacturer:

- It creates primary demand for the brands and hence results in increased sales.
- After the initial sales, continuous advertising will ensure a steady demand for the brand.
- Increased demand will ensure steady sales, resulting in quicker turnover.
- If the brand is being advertised steadily, then over the years, it will generate consumer goodwill for the brand.
- If the brand's demand is steady in the market, dealers may also show interest in keeping/warehousing it.
- Over the years, manufacturers can sell the goods directly to the consumer, and reduced dependence on middlemen will increase profit as the commission given to these middlemen will be saved.
- Advertising will help salespersons in their sales process by making the brand known to the maximum number of target consumers.

Pros of advertising for the consumer:

- Advertisements inform the consumers about product availability.
- As many products are advertised simultaneously, consumers can compare the brands and make a purchase decision. Of course, consumers may not rely on advertisements solely to do so.
- Advertising increases competition among brands. To attract the target consumers, competing brands improve the quality of their products, resulting in better-quality products for consumers.
- By eliminating the middlemen, consumers will enjoy the benefits of reduced prices.
- Consumers who are well-informed about product availability and other details about the brand save time in the purchase decision-making process.
- Latest and upgraded products are advertised, and consumers are persuaded to buy them, improving their living standards.

Cons of advertising for the consumer:

- Too many products on offer make consumers end up purchasing them

unnecessarily.

- Advertisements increase the price of the product, making it costlier.
- Most advertisements are exaggerated, false, deceptive, and misleading, thus conveying a wrong notion about the brand.
- Manufacturers with high advertising budgets advertise more, thus sidelining those who cannot afford to spend more on advertising. This results in a brand monopoly, and consumers may not be aware of the non-advertised products.
- Too much sex appeal is used in ads, making them vulgar and demeaning.

Limitations of advertising:

- Advertisements can only pull consumers towards the initial sale. If the products are of bad quality, then advertising cannot guarantee sales the second time.
- Advertising can only persuade consumers and not compel them to buy.
- It is a one-way communication, so consumers cannot give feedback.
- Exaggerated forms of advertising make advertisements less believable.

Check Your Progress: 1

Note: 1) Use the space provided below for your answers.

2) Compare your answers with those given at the end of the unit.

1. List three advantages and three disadvantages of advertising for consumers:

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2. List the general and specific objectives of advertising:

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16.3 UNDERSTANDING ADVERTISING LITERACY

In the previous section, you learned the basics of advertising. Let us understand the need for advertising literacy in our routine lives. Remember that whether we are reading a newspaper, watching a television programme, or browsing through mobile apps, all major media ventures are supported by sponsored advertisements. There is an exception: if you subscribe to a specific mobile app, you might not be able to see frequent advertisements, or if you have subscribed to a full-fledged premium OTT platform, you might enjoy the programme without any commercial break. Otherwise, we will be inundated mainly by advertisements. Primarily, these advertisements are a

major source of revenue for media entities. On the other hand, these advertisements are aimed at the audience's mindset to change their interest, preferences or choices. Advertisers use many techniques and tools to attract the audience's attention and further change the audience's perception.

As a regular media user, you need to develop 'advertising literacy skills—the ability to recognise, evaluate and understand advertisements and other commercial messages' (Malmelin, 2010). These skills are crucial in today's media-saturated world. Malmelin devised four dimensions of advertising literacy: informational literacy, aesthetic literacy, rhetorical literacy, and promotional literacy. Each of these dimensions plays a vital role in helping you navigate the complex world of advertising. The conceptual framework of these four dimensions is given in the following table.

The model and dimensions of advertising literacy

Literacy	Informational literacy	Visual / Aesthetic literacy	Rhetorical literacy	Promotional literacy
Focus on	Sources of information and knowledge	Aesthetics, design and entertainment	The means and tactics of persuasion	Commercial functions and financial partnerships in the media
What is analysed?	Ability to use various sources of information and to evaluate the correctness of information	Understanding of the forms of auditory and visual expression as well as styles, stories and references	Understanding of the strategies, goals and target groups of marketing	Understanding of the logic of product placement, branded media contents, sponsorship and publicity

The first dimension of Malmelin's advertising literacy model, informational literacy, is particularly relevant in our media-driven world. In Block 3 of this course, we extensively studied the concepts and applications of information literacy. Now, let's apply this to advertising. Informational literacy in the context of advertising refers to your ability as a media user to access and critically analyse the information provided or promoted through advertisements. This skill is crucial for making informed decisions about the products or services advertised.

Aesthetic or visual literacy describes the need to handle high-quality, appealing advertisements that use sophisticated illustrations, whether print advertisements or the visual fantasy of creatively combining audio and visual appeal in television commercials. These visual elements present complex concepts in a simplified manner, and it might be intellectually challenging to decipher their intercultural meanings.

As we mentioned earlier, advertising is all about influencing the behaviour of the audiences. Rhetoric is considered an influencing form of communication used by many, particularly powerful institutions like government, political parties, ideological groups, civil societies, and activists. The same method is being used in various ways by the advertising industry. Media literacy plays a crucial role in empowering the common media audience to critically analyse

all these rhetoric-based influential messages. According to Malmelin, rhetorical literacy focuses on understanding the means of persuasion used in advertising. Rhetorical literacy is the ability to understand different means and strategies of persuasion in advertising and marketing communications in general.

The last dimension of advertising literacy is promotional literacy. By its nature, all advertisements or commercial messages or, for that matter, many public communications are aimed at promoting certain ideas/products/services/ goods, etc. Advertising literacy expects the common media users to be vigilant about these promotional materials and their approaches. Handling those promotional messages equips users to safeguard against the unnecessary influence of powerful messages.

16.4 MEDIA FOR ADVERTISING

Advertising is a mediated form of communication; therefore, it reaches consumers through some kind of media. To use these different media optimally, one needs to understand their properties.

16.4.1 Print Advertising

This can be further classified into newspapers, magazines and yellow pages. All these three forms deal with literate people and hence provide the benefit of literate consumers. Newspaper advertisements are one of the oldest and most popular forms of advertising. Newspapers help advertisers reach a large number of audiences. On the downside, it is a costly proposition as it does not give a choice to niche audiences, unlike magazine advertisements. Magazine contents are designed to keep select target readers. Hence, advertisers can also choose target consumers strategically, thus making it costly. Newspapers have limited shelf life, maybe not more than 24 hours, but magazine ads can be viewed repeatedly until the magazines are disposed of. Newspaper paper quality is not very good; hence, the colour reproduction of advertisements is not very good, whereas magazine ads give a better output due to glossy papers.

16.4.2 Television Advertising

This is one of the most popular and dominant media the masses use. It is widely available, helps advertisers reach many audiences quickly, and maximises exposure. Due to its audio-visual feature, consumers can absorb advertisements more quickly and elaborately. On the downside, it does not give a choice to literate audiences, is one of the most expensive media to advertise in and therefore, big businesses enjoy a monopoly. Most ads are 30-45 seconds long, and thus, consumers get limited exposure and time to engage in the communication.

16.4.3 Radio Advertising

Radio is an audio medium, so messages must be designed accordingly. It is less expensive than a TV. Advertising duration is also very short, and audiences are not segmented properly. The possibility of switching channels

is lower compared to TV, as people listen to the radio while engaging in other activities.

16.4.4 Online Advertising and New Media

This is the most recent yet one of the popular media. The Internet is growing daily, and advertising opportunities are also increasing. It can blend print and television media that inexpensively reach unlimited audiences; audiences can be tracked, and messages can be personalised. The audiences of these media are literate and global. They can access more detailed information about the product in a single click. Some social media platforms are Orkut, Facebook, Twitter, YouTube, LinkedIn, Fropper and Ibibo.

16.4.5 Outdoor Advertising

This medium works best when your target customers are not consuming media indoors. Advertisers use different outdoor tools such as hoardings, pole ads, electronic displays, wall paintings, banners, posters, and transit advertising. Transit advertisements are used on buses, trains, and rickshaws. Compared to other media, it is cost-effective, can be easily used in crowded places, and is very flexible when placing advertisements. Since the customers are mobile, longer messages cannot be used in these media and do not give advertisers a choice of audiences.

16.4.6 Other Media

Include direct mail, telemarketing, film advertising, and window display. Catalogues, brochures, sales letters, prospectuses, and others are used through direct mail. Telemarketing and direct mail help reach customers directly and in a personalised manner; the sender controls the message, which can be hidden from the competition. Local products can be best advertised through film advertising. The limitation is film viewers seldom watch these advertisements as they are busy talking. Viewers visit the cinema hall just before the film starts and go out for snacks during the interval when these ads are played.

Window display works best at the point of purchase (POP). Carefully and creatively displayed products often catch customer's attention and create demand for that product. The trick is shopkeepers must.

Check Your Progress: 2

Note: 1) Use the space provided below for your answers.

2) Compare your answers with those given at the end of the unit.

1. Name different media of advertising:

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2. Explain the four dimensions of advertising literacy?

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16.5 ADVERTISING TECHNIQUES

A good advertising technique focuses on society and individuals(potential buyers) in particular while keeping basic communication intact. The key lies in understanding the product, the market, and the customers.

16.5.1 Above-the-Line Advertising (ATL)

Advertising is done at the macro level through mass media. It is a conventional and highly impersonal method. ATL uses TV, radio, newspapers, magazines, and outdoor media, which are very expensive. Brands are built through ATL, and then later, with the help of BTL, potential customers are influenced to take action.

16.5.2 Below the Line Advertising (BTL)

Is advertising done at the micro level that uses unconventional brand-building techniques and is a direct means of communication? BTL uses public relations, direct mail, sales promotion, personal selling, and various price incentives and promotional offers, e.g. coupons, gift with purchase, competitions, price refunds, and frequent buyer programs. BTL helps break through the advertising clutter and cost-effectively reach target groups (T.G.).

16.5.3 Through the Line Advertising (TTL)

Marketers and advertisers now blend traditional advertising techniques such as ATL and BTL to design a customised bouquet in TTL or Integrated Marketing Communications (IMC) activities. When marketers combine both techniques, they cross the line, hence the term TTL.

Check Your Progress: 3

Note: 1) Use the space provided below for your answers.

2) Compare your answers with those given at the end of the unit.

1. Expand the following:
 - a. ATL
 - b. BTL
 - c. TTL
2. What do you mean by IMC?

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16.6 DIFFERENT TYPES OF ADVERTISING APPEALS

Ads carry an appeal and communicate with the audiences through them. These appeals work at the subconscious level of the customers. Appeals are distinctive claims of an advertisement advertisers use to emphasise product features and attract customer attention. They can be broadly categorised as emotional and rational. These appeals can be further classified as:

- **Fear appeal:** Uses moderate fear to position the product's work, especially for products such as insurance, cosmetics, fairness cream, etc. For example, in the Himalaya Neem face wash advertisement,
- **Humour appeal** is commonly used and has high ad recall, as it catches the audience's attention quickly. For example, Emami Fair and Handsome Cream feature a well-known film actor.
- **Music appeal:** Music has inherent value that helps capture the audience's attention. For example, the Lux advertisement song (*Bekabu*) features Shahrukh Khan and Katrina Kaif.
- **Sex appeal:** Sensuality raises audience curiosity, but it needs to be strategically used. Improper usage may result in negative effects and may make your ad look vulgar. E.g. Wild stone deodorant advertisement.
- **Masculine, feminine appeal** emphasises product features that will be imparted to the consumer when he/she starts using your product. E.g. Hero Glamour ad.
- **Scarcity appeal:** It is often used to announce promotional and limited-time offers, Such as the Nano special edition.
- **Adventure appeal:** Advertisers associate product features and usage with fun and adventure and emphasise that customers' lives will change drastically after using the product, E.g., Mountain Dew.
- **Bandwagon appeal:** It focuses on peer pressure. Since 'everybody is consuming a particular product, you should too,' the theme of such ads is 'everybody is consuming a particular product, you should too.' For Example, the Airtel advertisement.
- **Testimonial appeal:** Here, satisfied customers talk about the product's good qualities and share their positive experiences. For example, all Dove soap ads use this technique. They have used the same technique to launch the new hair oil Dove Elixir.
- **Slice-of-life appeal:** The advertisement shows a real-life problem the customer faces that can be solved using the advertiser's product, e.g., the Harpic ad.
- **Snob appeal:** This creates a feeling of desire and envy for products associated with luxury and elegance. E.g. Volkswagen Polo and Vento ads.
- **Weasel words appeal:** Advertisers here claim that their product is the best, but the claim is superficial and ambiguous. E.g., Kellogg's special K

Check Your Progress: 4

- Note:** 1) Use the space provided below for your answers.
2) Compare your answers with those given at the end of the unit.

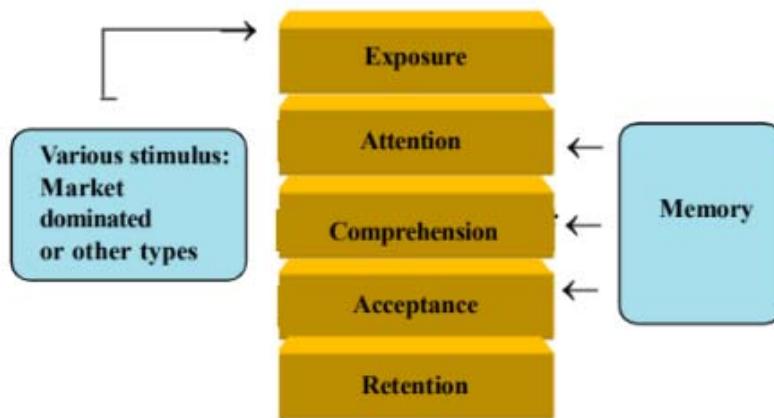
Fill in the blanks:

- a) The appeal is often used to announce promotional and limited-time period offers.
- b) When the ad shows a real-life problem the customer faces that can be solved using the advertiser's product, it uses appeal.
- c) _____ appeal focuses on peer pressure.
- d) Advertisers associate product features and usage with fun and adventure to appeal to customers and emphasise that customers' lives will change drastically after using the product.
- e) When advertisers claim that their product is the best, even though the claim is superficial and ambiguous, it is called appeal.

16.7 ADVERTISING COMMUNICATIONS: BASIC CONCEPTS

16.7.1 Information Processing Model (IPM)

In the 1960s, William McGuire prepared this model and connected it to the concept of persuasion in ad effectiveness. IPM essentially discusses the behaviour and attitudinal changes in response to persuasive communication. Let us have a look at the outline of the model:



The above diagram explains information processing in five steps.

- **Exposure:** All market players simultaneously expose customers randomly to brand-related information through various media and non-media activities. The objective is to inform them about the product attributes.
- **Attention:** Customers choose their ad message based on their interests. Here, marketers face the challenge of attracting T.G.'s attention in a limited period.

- **Comprehension:** Customers will develop an understanding of the brand based on selective attention and interest areas. This is the stage at which T.G. is curious about the brand and wants to know more about it.
- **Acceptance:** Out of the various shortlisted choices, customers accept a particular brand and reject another. This acceptance does not ensure that the decision will remain so forever, and such scepticism can change their decision.
- **Retention:** In this phase, disbelief strengthens belief, and customers adhere to their decisions. Consumers are more determined to continue with the shortlisted brand.

Most importantly, when information travels through these five stages, various stimuli, generally marketer—and advertiser-dominated, must reach through them to create a long-term memory. Memory plays an important role, especially at stages two, three, and four.

16.7.2 AIDA and DAGMAR Models

AIDA and DAGMAR are two models of consumer response to advertising and marketing activities. The AIDA model organises the response into four stages, namely:

- **Attention:** Here, advertisers encourage the audience to hear the main idea of the advertisement. This is the first step to response; consumers' attention must be captured by emphasising the product's strong features, a genuine solution to the problem, the promise of savings through discounts, etc. and by providing any common angle that can attract consumer attention. E.g. Lifebuoy hand wash advertisement.
- **Interest:** Once the attention is captured, further interest is generated in the customer's mind, and a more detailed picture of the message is painted—for example, the MamyPoko pants advertisement.
- **Desire:** It helps customers embrace the central idea by explaining how the change will benefit them—E.g. Fortune Rice Bran Oil advertisement.
- **Action:** The advertisement suggests the action advertisers want consumers to take—for example, the Fair and Lovely fairness cream and face wash advertisement featuring Yami Gautam. In 1961, Russel Colley proposed the DAGMAR model. It is expanded to define advertising goals for measured advertising results. As per this model, consumers' purchase decision goes through four stages, namely:
 - **Awareness:** Consumers must first know the brand and company's existence and availability. Once this awareness is attained, companies must use it immediately—for example, JustDial.com endorsements by Amitabh Bachchan.
 - **Comprehension:** Here, advertisers must focus on product benefits and give a deeper understanding of the product. For example, in the Colgate Super Flexi advertisement,
 - **Conviction:** At this stage, ads must build confidence in the customers' minds so they are compelled to buy the product—E.g. Sugarfree Natura

- **Action:** In this, the focus is on buying, and therefore, ads emphasise the benefits of customers' purchases—for example, Godrej Ezee's advertisement.

16.7.3 Push and Pull Strategy

These are two main types of promotional strategy. In the push strategy, the producer lures wholesalers and retailers in the form of trade shows, direct selling, subsidies, high commission rates, POP displays and others to stock their products and push them towards the customer, as explained in the figure below:



Customers may not experience the push strategy as it is directed towards distributors, whereas the pull strategy aims at the end customer. Through various promotional strategies such as advertising, word of mouth, etc., the product is pulled through the channel by customer demand, as explained below:



The push strategy is comparatively more interactive and works best in impulse-buying product categories. Companies generally combine both strategies to increase sales.

16.7.4 What is a Brand?

A positive brand image is a valuable asset of the company. Brands are the product's visual identity in the form of logo, colour, labelling, name, tagline, shapes, and graphics. It helps customers identify brand 'A' versus brand 'B'. The branding process is creating a unique brand name and position in the market through advertising and marketing campaigns. A good brand name must be unique, easy to pronounce, identifiable, have recall value, talk about the product's qualities and benefits, have legal protection, and not have wrong meanings associated with that word, especially when extending to another market.

16.7.5 Slogans, Jingles, Trademarks, Logo, and Mascot

These are important ingredients of the branding process and distinguish a company from its competition. A well-designed logo enhances brand value, gives a unique identity to the product, must be easily recognisable, builds trust, makes the product look more professional, and helps consumers associate the brand with the company.

A slogan is a watchword, short, catchy phrase or motto used in advertising,

generally along with the logo. It is one of the most appealing tools to be used in the branding process and is often called the brand's fingerprint. It connects consumers with the brand and can change their perception. Slogans may change depending on the campaign. For Coca-Cola, its slogans are quite often changing. In the 2000s, their 'Thanda Matlab Coca-Cola' campaign with Amir Khan was worth noticing. In 2012, they launched their 'Open Happiness' campaign with Coke. In between, they had three more slogans, namely 'Piyo Sar Uthake', 'Jo Chaheho Jaye Coca-Cola Enjoy' and 'Burrrrr'.

Slogans are sometimes paired with jingles, a short tune used in advertising. Like slogans, jingles must be catchy and memorable and create familiarity and desire for the product. Many of us hear a jingle on the radio or television, and it gets into our heads, and the effect is long-lasting. Jingles are one of the classic examples of sound branding.

Many times, companies also use mascots in advertising campaigns. Mascots are a highly visible part of the brand and can take the advertising campaign to the next level. They give the brand a personality. While designing mascots, one has to ensure that the image is associated with the brand image.

The most important legal shield for brands is trademarks. These can be symbols, logos, words, or slogans. Companies register them and create ownership and exclusive rights to use them. Companies may extend trademark protection to packaging, colours, numerals, shape of goods, smell, sound, movement, and holograms. It is anything that distinguishes one company's goods from another. Anybody who infringes them can be taken to court.

16.7.6 USP

Unique Selling Proposition or Unique Selling Point is a marketing concept which Rosser Reeves introduced. It can be a real or perceived benefit that customers seek from the product more than that of its competitor. The purpose of having a USP is that the target audience must be convinced of the reason to buy a product. This proposition must be something other marketers have not yet claimed; only your product is offered or claimed to be offered first. Generally, the advertising campaign is built around USP.

Check Your Progress: 5

- Note:** 1) Use the space provided below for your answers.
2) Compare your answers with those given at the end of the unit.

1. What are the steps involved in the information processing model:

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2. What is USP?

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3. Expand AIDA and DAGMAR:

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4. What do you mean by brand?

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5. Fill in the blanks:

- a. A well-designed logo enhances the _____ and gives a unique identity to the product.
- b. _____ is a watchword, short, catchy phrase, or motto used in advertising, generally along with the logo.
- c. A short tune used in advertising is called _____.
- d. While designing mascots, one has to ensure that the image is happy and _____ colours are used.
- e. _____ provides legal shield to the brands.

16.8 THE ADVERTISING MANAGEMENT PROCESS

16.8.1 Advertising Strategy

A company's advertising strategy should always support its marketing strategy and the company plans. When doing strategic planning, advertisers need to be creative and flexible. A rigid strategy may often lead to loss of market share. One may use push or pull techniques to set the strategies depending on the business's goals. Strategic planning goes through the following steps:

16.8.1.1 Setting Objectives

The first and foremost step in strategic planning is setting objectives. Objectives are statements that explain what needs to be attained by taking advantage of opportunities and overcoming any barriers. When setting objectives, advertisers need to understand the goal of the campaign. Depending on the company's goals, objectives can be short-term or long-term. Short-term objectives focus on customers' actions, i.e., on the purchase, and long-term objectives focus on change in brand attitude. These objectives are further classified as direct and indirect.

Direct objectives focus on increased sales, new distribution channel development, and profitability, whereas indirect objectives focus on changing attitudes and increasing awareness.

16.8.1.2 Formulating Budget

The advertising budget is one of the important components of the marketing budget. Advertisers must first analyse the expected results and only invest in any campaign. Campaign goals and objectives must be first determined, and the budget should be set accordingly. A well-planned budget helps in the effective utilisation of funds and avoids wastage. There are different techniques for setting the ad budget, which are discussed below:

- Based on previous years' expenditure on advertising.
- Percentage of sales technique: here, advertisers assess the annual sales and then set a budget.
- The advertisers set an equal budget at par with the competition, meaning whatever the competition spends is equal to the advertisers' budget.
- In an objective-based budget, advertisers first consider the available funds and cut the number of objectives or prioritise them according to the existing funds.

16.8.1.3 Creating Advertising Messages

Designing an advertising message is considered the most creative part of the campaign. Creativity has no limitations; therefore, messages can be designed in multiple ways beyond imagination. One has to take cues from the objectives to write a precise message.

16.8.1.4 Selecting Media and Vehicles

Selecting media and vehicles is also known as 'media scheduling'. It is a strategic process where media planners do a lot of research before making final decisions.

The key here is to choose the most cost-effective media to reach the focused target audience. Media planners make a 'media mix' as their customised recipes when needs arise. Media mix simply means the right combination of each medium to reach its target audiences. The choice of media can be from print (newspapers, magazines and direct mail) and electronic media (radio, television, and Internet). While preparing media mix, one has to check these simple tips:

- Optimum utilisation of your resources: Try to make a mix that will reach as large an audience as possible while reducing wastage.
- Reach with high frequency: Constantly making your presence felt will have a high register and recall value.
- Know your customer: Understand his/her media consumption for better reach.
- Do your homework: Research well before going on the floor. The duration and timing of the advertising campaign need to be strategically planned for campaign success. Check reach and coverage, the cost of the media vehicles, the nature of your product, business goals, campaign goals, and your audience profile.

- More money spent will not always ensure the success of the advertising campaign.
- Negotiate with media houses for competitive prices.

16.8.2 Strategy Implementation

Once an effective plan is made, it needs to be carefully executed, and that is when strategic implementation comes into the picture. Any organisation is people-oriented, and any strategy cannot be executed without the active involvement of the organisation's employees. The second step is to assess the budget requirements and match them with strategy implementation. Then, assign roles and responsibilities to designated people and, most importantly, give them deadlines. Put simply, have a meticulous communication plan ready before implementation.

16.8.3 Assessing Advertising Effectiveness

Measuring and evaluating advertising effectiveness is extremely important not only for the current campaign but also gives direction for all future campaigns. The ultimate goal of any advertising is to assist the sales team in increasing sales or help the marketing team increase brand awareness. This is measured by calculating R3: Reach, resonance and reaction. Reach is the penetration of your advertisement amongst your target audience. Resonance will tell you how effectively and qualitatively you have reached them. Reaction is how your target responds to your message.

Check Your Progress: 6

Note: 1) Use the space provided below for your answers.

2) Compare your answers with those given at the end of the unit.

1. Name different types of advertising budget settings.

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2. What is media mix?

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3. R3 stands for:

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16.9 LET US SUM UP

In this unit, we discussed the basic principles and practices of advertising. We learned about key concepts commonly used in the advertising business and tried to learn about the prime objectives, advantages, and limitations of advertising.

Advertising cannot reach people without mass media tools, so we reviewed various media vehicles and examined their strengths and weaknesses. We also learned about the techniques and appeals used in ads to understand advertising in depth.

We tried discussing a few important advertising models followed by the advertising management process, which gave us an overview of strategy planning, setting a budget, implementing, and assessing effectiveness.

Through these basic dimensions of advertising, you should be able to glance through various forms of promotional and commercial advertising contents in a critical manner.

16.10 FURTHER READINGS

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16.11 CHECK YOUR PROGRESS: POSSIBLE ANSWERS

Check Your Progress: 1

1. A. Three advantages of advertising to customers are that it informs about product availability, helps customers make purchase decisions, and improves their standard of living.
B. Three disadvantages of advertising are that customers purchase unnecessarily, it increases product price, and advertisements may be false and misleading.
2. A. General objectives are to inform, to persuade and to remind.
B. The objectives are to induce trial, intensify usage, sustain preference, confirm image, change habits, and build a line of acceptance.

Check Your Progress: 2

1. Print, television, radio, online and new media, outdoor, direct mail, telemarketing, film, and window display.
2. Understanding advertising literacy involves grasping four key dimensions: informational literacy, aesthetic literacy, rhetoric literacy, and promotional literacy. Informational literacy pertains to the ability to discern the accuracy and relevance of the information presented in advertisements. Aesthetic literacy involves analysing the visual and sensory aspects of advertisements, including design elements and emotional appeals. Rhetoric literacy focuses on recognizing the persuasive techniques used in advertisements, such as persuasion through language and imagery. Lastly, promotional literacy involves understanding the economic motives behind advertisements, including recognizing when an advertisement aims to sell a product or influence consumer behaviour. By comprehending these dimensions, individuals can critically evaluate advertisements and make informed decisions as consumers.

Check Your Progress: 3

1. (a) Above the Line (b) Below the Line (c) Through the Line
2. In Integrated marketing communication campaigns, marketers blend both above-the-line and below-the-line techniques, i.e. they use mass media tools along with public relations, direct mail, sales promotions and personal selling to reach their target customers.

Check Your Progress: 4

- A. Scarcity
- B. Slice of life
- C. Bandwagon
- D. Adventure
- E. Weasel words

Check Your Progress: 5

1. Exposure, attention, comprehension, acceptance, retention.
2. Unique Selling Proposition is a marketing concept which can be a real or perceived benefit that customers seek from the product compared to its competitors and the target customers must be convinced of the proposition to buy the product.
3. AIDA stands for Attention, Interest, Desire, and Action, and DAGMAR stands for Defining Advertising Goals for Measured Advertising Results.
4. A brand is a name, term, design, symbol, or combination intended to identify the goods and services of one seller or group of sellers and differentiate them from competitors.
5. (a) Brand value (b) Slogan (c) Jingle (d) Bright (e) Trademarks

Check Your Progress 6

1. Based on previous years' advertising expenditures, the percentage of sales technique is at par with the competition, and the budget is objective-based.
2. The right combination of media to reach the target audience.
3. Reach, resonance and reaction.