

Unit: 01 Introduction to Digital Fluency

Digital Fluency: Digital fluency is a multifaceted concept that includes a variety of abilities and knowledge. It involves not only knowing how to use digital technologies, but also an awareness of why, when, and how these tools might be utilized to achieve specific objectives.

Components of digital fluency:

1. Digital Literacy: Being able to find, comprehend, organize, access and adapt to digital contents.
2. Technical Proficiency: Being capable of successfully selecting and using digital tools to learn, produce, and share.
3. Social Competence: Being an ethical, respectful, and responsible while working online.

Digital literacy, fluency, and proficiency:

1. Digital literacy: The ability to use technology to find, evaluate, and communicate information. It's a basic understanding of how to use digital tools.
2. Digital fluency: The ability to use technology to learn, work, and play in a way that's adaptable and innovative. It's a higher level of competence than digital literacy.
3. Digital proficiency: A measure of how effectively someone uses their digital literacy skills.

Importance of digital fluency:

1. Access to information and resources: Digital fluency allows individuals to access and browse through vast amount of information available online. This empowers people to learn new skills, pursue personal interests, and stay informed about current events and developments in their fields.
2. Efficient problem-solving: By learning to navigate through digital tools and platforms, individuals can analyze information, evaluate its credibility and solve problems more efficiently.
3. Navigating through the digital landscape effectively: Digital fluency enables an individual to effectively examine and filter information when navigating through different websites for different objectives.
4. Establishing digital safety and privacy practices: Digital fluency provides individuals with the skills and knowledge necessary to defend themselves and others from potential online threats.

5. Workplace competitiveness: Employees with strong digital skills are better able to adapt to technologies and work settings, thereby enabling them to be more productive.
6. Enhanced productivity: Digitally fluent employees are able to work more efficiently and perform things faster with a variety of digital technologies.
7. Effective communication: Being digitally fluent allows employees to communicate effectively across platforms like email, video conferencing, and so on.

Importance of digital fluency in various fields:

A) Education:

1. Digital tools and platforms: There are different digital platforms that come handy in education, such as learning management systems (LMS), online collaboration tools (like Google Workspace, Google classroom, Google Meet, Microsoft Teams, etc.), and different educational applications. Students can work together, build teams, and develop skills by using these platforms.
2. E-learning and blended learning: For those students who need more time and help to understand different topics, e-learning and blended learning is especially useful. Some e-learning platforms offered by Indian Government are
 - DIKSHA (Digital Infrastructure for Knowledge Sharing): Available as mobile app and web portal platform. It offers a variety of learning materials such as lesson plans, worksheets, and textbooks in multiple languages.
 - SWAYAM (Study Webs of Active-Learning for Young Aspiring Minds): An online platform providing free courses from schools to university level, including professional courses.
 - ePathshala: Developed by NCERT (National Council of Educational Research and Training), this app provides access to textbooks, audio, video, and other interactive contents for both students and teachers.
 - National Digital Library of India (NDLI): It offers a vast collection of books, articles, audio and video lectures, and other educational materials.
 - NROER (National Repository of Open Educational Resources): It offers free resources including interactive content, audio, video, images, and documents for various subjects and educational levels.
 - PM eVidya: A comprehensive initiative under Atmanirbhar Bharat Abhiyan which unifies all efforts related to digital/online/on-air education to enable multimode access to education. It has information about all the other e-learning

services like online coaching for competitive exams, special e-content for CWSN, and other platforms like DIKSHA, SWAYAM, etc.

- e-GyanKosh: A repository to store, index, preserve, distribute and share the digital learning resources developed by the Open and Distance Learning Institutions in the country. Items in eGyanKosh are protected by copyright, with all rights reserved by IGNOU, unless otherwise indicated.
3. Data literacy and Analytics: Digital fluency enables teachers to analyze student data and track their progress, pinpoint areas of weakness in student learning, and modify their pedagogy based on the data.
 4. Skill development: Students can develop necessary digital skills and become proficient in using digital tools thereby enabling them in being more productive and efficient.

B) Healthcare

1. Electronic Health Records (EHR): Digital fluency enables accurate documentation, tracking of medical histories, and sharing of patient records across different healthcare settings. ABHA (Ayushman Bharat Health Account) is a personal health viewer application from National Health Authority, Govt. of India through which patients can manage and maintain health records.
2. Telehealth, Telemedicine, and Telecare: Digital fluency in healthcare involves using digital technologies for consultations and monitoring. It enables medical professionals to conduct virtual consultations and distant monitoring through online communication platforms.

Telemedicine involves using telecommunications to provide various medical services remotely, including connecting patients with specialists in different locations.

Telehealth offers remote healthcare services beyond doctor-patient interactions. It involves interactions with nurses, pharmacists, and social workers for patient care and support.

Telecare includes health apps, exercise trackers, medication reminders and so on.

3. Digital imaging and diagnostic tools: Radiologists and other healthcare workers need digital fluency for understanding medical imaging techniques (X-Ray, MRI, CT scans).
4. Remote Monitoring and IoT (Internet of Things): Healthcare providers utilize IoT devices for remote patient monitoring, obtaining real-time health data (heart rate, blood pressure) to handle chronic illnesses and evaluate post surgery recovery. Digital fluency in IoT ensures precise data interpretation, and personalized patient care.

5. e-Hospital and online registration system (ORS): Online platforms for hospital registration, appointment scheduling, and accessing medical records.

C) Business and Marketing:

1. Digital channels: Digital fluency enables people to utilize social media platforms for customer engagement and brand awareness, communicate through email campaigns, optimize website content for search engines and organic traffic.
2. Emerging technologies: Digital fluency helps business owners to adapt to and use new technologies like Artificial Intelligence (AI) and machine learning for personalized marketing; chatbots, blockchain for secure transactions and so on.
3. Digital transformation: Business owners and entrepreneurs may also use e-commerce platforms to increase visibility and modernize sales procedures, customer relationship management (CRM) software to monitor sales, track customer interactions, and strengthen connections.

D) Finance:

Digital fluency in finance involves effectively managing making informed decisions using digital tools to improve financial operations. Digital financial tool include online banking for account management, financial software for accounting, budgeting, and planning, and mobile apps for convenient access to financial services.

E) Government and Public Sector:

Digital fluency in government and public sector refers to the capacity to successfully use digital tools, technologies, and platforms to improve public services, better governance, and engage citizens.

1. E-Governance platforms: Online portals and platforms like Sewasetu and e-district, mParivan, UMANG (Unified Mobile Application for New-age Governance) for providing government services to citizens, such as applying for caste certificate, licences, paying taxes, and accessing welfare schemes.
2. Digital payment systems: Bharat Bill Payment System (BBPS) is an integrated bill payment system offering a convenient way to pay bills, insurance premiums, and other recurring payments.
3. DigiLocker: A digital locker service that allows citizens to store and share important documents like certificates, ID cards.
4. National Pension Scheme (NPS) portal: It is an online system for managing matters related to pension accounts, registrations, etc.

5. Passport Seva: It is an online system for managing matters related to applying, renewing, and tracking passport applications.
6. Pradhan Mantri Jan Dhan Yojana (PMJDY): Financial inclusion program offering online account opening, direct benefit transfers and other banking services.
7. EPFO (Employees' Provident Fund Organization) Services: Online access to provident fund account details, claims, and balance checks for employees.
8. e-Courts: An online system for accessing case status, and other legal information.

Skills required for digital fluency:

To be digitally fluent, one must have the following skills-

1. Basic computer literacy: One must have basic knowledge of computer, operating systems, file management, etc.
2. Internet Navigation: Proficiency in navigating through web browsers, search engines, websites, etc.
3. Digital communication: Ability to communicate effectively through digital means like email, video conferencing, etc.
4. Information literacy: Skills to evaluate the credibility and relevance of the information available online.
5. Digital security awareness: Knowledge of online threats and how to protect oneself from the same.
6. Critical thinking and problem solving: Capacity to evaluate nature of problems and how to solve them using digital tools.
7. Mobile technology proficiency: Familiarity with mobile devices, and interfaces for accessing information and performing tasks.
