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E – LEARNING AND SKILL ENHANCEMENT

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***Abstract*:**

Of late, the landscape of education of students has been reportedly progressive and remarkably competitive. The knowledge they have gained is enormous with the help of various sources of information. Plenty of information is available at their fingertips. . But one of the most important factors the students need to concentrate is their employability skills. Many students struggle a lot to get job, not because of their lack of knowledge, but paucity of Employability Skills. Soft Skills are the part and parcel of employability skills. Nowadays, enhancing the employability skills with the help of e-learning is not only an absolute possibility but also a definite necessity. Almost every student accesses his/her study materials at the touch of the screen (smart phone). This paper describes the ways and means of enhancing the employability skills such as Job skills, Aptitude skills, Soft skills and Technical skills (JAST) through e-learning, which in turn increases the opportunity of getting employed or become the most sought after in the job market.

***Keywords*: E-learning, Employability skills, Online, Soft skills, Student**

1. Introduction

The current educational infrastructure in India is inadequate to meet the challenges of future needs of the country. Digital India initiative by Indian government will enhance the Internet usage. This is going to help the education sector in providing quality education to larger neglected population and it can be boon for the learners to have access to quality education to skill and re-skill themselves for current and future jobs available in the market. The previous study suggests that E- learning market in India is expected to grow twice as compared to global average with a compounded annual rate of 17.4% during 2022 to 2023.Even though India is marked by having more than half the population under 25 years of age, due to inadequate education infrastructure, the country is going to face a crunch of 250 million skilled workforce by 2024. In this situation, E-learning has a pivotal role to play in addressing employability skill gap and helping employers to reduce the burden and cost for training. For E-learning it is important for the educators to know that there is a need to shift the learner's attitude towards learning, they should be intrinsically motivated to learn and for this, there is a need to create awareness

2. Literature Review

2.1 E-learning

Recently E-learning has been very productive and there is ample availability of e-learning opportunities E-learning helps in educating and training individuals worldwide on different topics from focused educational programs, to general hobbies E-learning systems are becoming a critical platform for educational institutions, as well as for corporations, and general life-long learning

2.2 Learning and Skills

skills are a combination of ability, knowledge, and experience that enables an individual to enhance his/her performance. Skills are the cornerstone of what enable individuals to be successful in their daily activities, be it work, hobbies, or educational endeavors. It has been observed that from the early age to adulthood, learning and enhancing skills are very important as it enables individuals to be competent enough in what they do, are of the opinion that to ensure success in any form of career or human development, skills are required and it is very important part of the e-learning courses.

2.3 Employability Skills

Employability refers to the ability of an individual to gain employment appropriate to his/her educational standard. An individual employability depends upon his or her assets in terms of knowledge, skills, and attitudes; the manner in which these assets are used and deployed; presented to potential employers and the context within which the individual works. The term employability includes a set of achievements that comprise skills, understanding and personal attributes that secure and make an individual successful in his/her chosen occupation provide benefit to him/herself, the workforce, the community and the economy. Though it's difficult to define employability skills, according to UK Commission for Employment and Skills it refers to personal skills like self-management, problem-solving and people skills supported by functional competencies like traditional literacy, numeracy and effective use of Information and Communication Technologies. Lacking employability skills may lead to a risk of unemployment and it will be difficult to progress at work. Poor employment skills are of great concern for the individuals as well as employers, economy, and society as a whole.

3. Learning Analytics and Employability Skills

Learning analytics has recently emerged as a promising research area where data is collected, assessed, and interpreted to bring into light new dimensions to each user's learning process. With the technological advancement in the current time, various systems of learning management and digital technologies can produce and demonstrate data visualizations in a way that may be considered as 'learning analytics'. Learning analytics allows gathering and processing data as people engage in learning to enhance learning and teaching. Nowadays, higher education institutions use a blended approach for teaching where learning is enhanced with tailor-made/user-friendly e-resources and online platforms. Experts in educational data mining and learning modeling suggest numerous tactics to track how a student is reacting during the learning process and record actions like time devoted to a page, the number of clicks, etc. This has led to accessible information to draw attention to the learners' litheness and retention of concepts.

Moreover, the growing repository created through the collated data on the learners' behavior enables the data mining experts to further research and new conclusions. Learning analytics is the process of gathering, measuring, investigating, and reporting data related to learners and their environment. It aims to understand and improve learning by arugmenting the environments where learning occurs. On a broader sense, the techniques and methods usually used in learning analytics focuses on evaluating educational and institutional data, improvisation of processes and workflows, and developing organizational effectiveness, thereby enabling a user to have more customized learning.

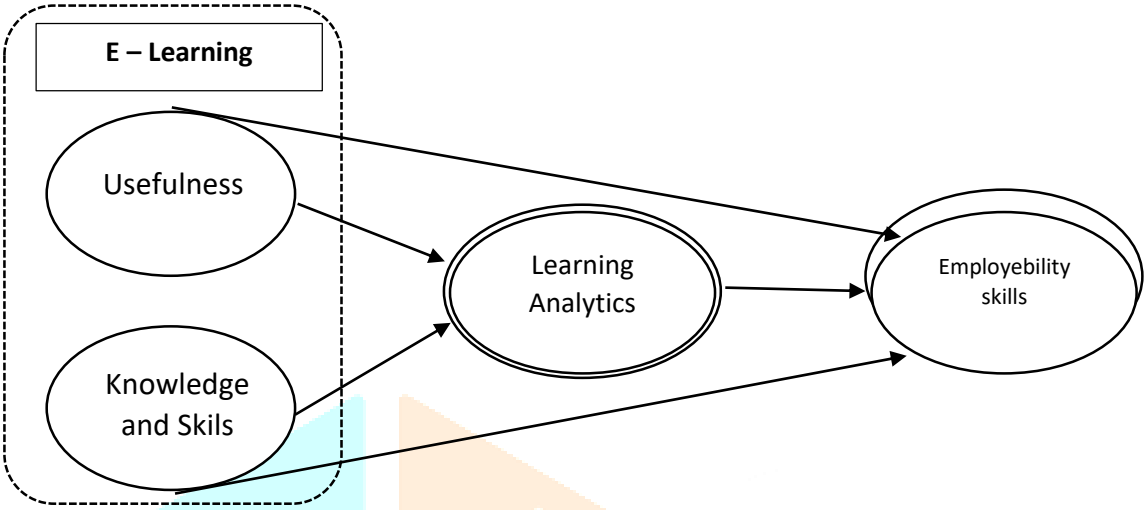
For skillful professionals, intended learning outcomes of educational programs and the students' progression are keys to employability. Learning Analytics instills data analytics and teamwork skills in learners. It studies the process of learning by gathering and evaluating data related to education and regularly assessing it for adaptive learning outcomes. Learning analytics as a technique is majorly used at the institutional level for the teaching and learning process and is essentially concerned with increasing the success rate with which helps the students to learn and understand more efficiently conducted an early study that examined and demonstrated improvement in students' learning outcomes and learning support and teaching. However, the suggested potential of learning analytics in student skills could not shift the higher education practice in the past few years.

This study examines the mediating role of learning analytics in identifying online learning's impact concerning skills, assessment, monitoring, and development on the students' employability skills.

4. Research Methodology

4.1 Model Framework Figure 1 displays the proposed model of the study.

The model shows E-learning usefulness, knowledge and training skills on students' employability skills. The model also evaluates the indirect effect of learning analytics in explaining the relationship between e-learning usefulness,training skills, and familiarity with students' employability skills.



4.2 Hypotheses Development

Although it is difficult to manage the enormous data, smarter technologies and learning analytics enable higher educational institutes to teach employability skills to students. The learning analytics technique regularly assesses adaptive learning outcomes by collecting and analysing the data related to learning. Thus, skillful professionals intended learning outcomes of educational programs, and assessing the students' progression is the key for the students' employability

4.3Theoretical framework of e learning

The theoretical framework of e-learning encompasses various theories and principles from educational psychology, instructional design, and technology-enhanced learning. These theories provide a foundation for understanding how people learn in digital environments and inform the design, implementation, and evaluation of e-learning initiatives. Some key theoretical frameworks in e-learning include:

1. **Constructivism**: Constructivist theories, such as Piaget's theory of cognitive development and Vygotsky's socio-cultural theory, emphasize the active construction of knowledge through interaction with the environment and social interactions. In e-learning, constructivism highlights the importance of engaging learners in authentic tasks, collaborative activities, and reflective practices to facilitate meaningful learning experiences.

2. **Connectivism**: Connectivism posits that learning is distributed across networks of people, resources, and technology. According to this theory, learners participate in knowledge creation and exchange through online communities, social media platforms, and digital resources. E-learning environments can leverage connectivist principles to foster networked learning, collaborative problem-solving, and lifelong learning skills.

3. **Cognitive Load Theory**: Cognitive load theory examines the cognitive processes involved in learning and memory. It distinguishes between different types of cognitive load, such as intrinsic (related to the complexity of the learning task), extraneous (related to instructional design), and germane (related to meaningful learning). In e-learning, designers can apply cognitive load theory to optimize the presentation of information, reduce cognitive overload, and promote efficient learning.

4. **Media Richness Theory**: Media richness theory proposes that communication effectiveness depends on the richness of the communication medium, which is determined by its capacity to convey multiple cues, provide immediate feedback, and support natural language. In e-learning, designers can select appropriate media formats (e.g., text, images, videos, simulations) based on the richness required for the learning task and the preferences of the target audience.

5. **Social Learning Theory**: Social learning theory emphasizes the role of social interactions, observational learning, and modeling in shaping behavior and attitudes. In e-learning, social learning theory highlights the importance of peer collaboration, instructor feedback, and community support in promoting active engagement and knowledge construction. Social learning platforms, discussion forums, and collaborative tools can facilitate social interaction and knowledge sharing in digital environments.

6. **Andragogy and Self-Directed Learning**: Andragogy, or the theory of adult learning, emphasizes the autonomy, self-direction, and prior experience of adult learners. Self-directed learning theories propose that learners are capable of setting their learning goals, monitoring their progress, and evaluating their outcomes. In e-learning, designers can incorporate features that support learner autonomy, such as flexible pacing, learner control, and personalized feedback, to empower adults in their learning journey.

These theoretical frameworks provide valuable insights into the cognitive, social, and motivational aspects of e-learning, guiding the design and implementation of effective digital learning environments. By integrating principles from these theories, educators and instructional designers can create engaging, interactive, and personalized e-learning experiences that optimize learning outcomes for diverse learners.

5. A few arguments in favour of e-learning

1. **Accessibility**: E-learning allows access to education regardless of geographical location or physical limitations. People from remote areas or with disabilities can benefit from educational resources without the need to travel or be present in a physical classroom.

2. **Flexibility**: E-learning offers flexibility in terms of scheduling. Learners can access materials and participate in activities at their own pace and at times that are convenient for them. This is particularly advantageous for individuals with busy schedules, such as working professionals or parents.

3. **Cost-effectiveness**: E-learning can be more cost-effective than traditional classroom-based learning. It eliminates expenses associated with commuting, accommodation, and physical learning materials. Additionally, institutions can save on overhead costs related to maintaining physical facilities.

4. **Variety of resources**: E-learning platforms often provide a wide range of multimedia resources such as videos, interactive simulations, and online assessments. This variety enhances the learning experience by catering to different learning styles and preferences.

5. **Personalized learning**: E-learning platforms can utilize algorithms and data analytics to personalize the learning experience for individual students. This includes recommending specific courses, adapting content based on learner performance, and providing targeted feedback.

6. **Scalability**: E-learning allows educational institutions to scale their programs more efficiently compared to traditional classroom-based learning. With the right infrastructure in place, e-learning can accommodate a large number of students simultaneously without significant increases in costs.

7. **Continuous learning**: E-learning facilitates lifelong learning by providing access to educational resources beyond formal schooling. Individuals can pursue further education or acquire new skills throughout their lives, thereby enhancing their employability and personal development.

8. **Environmental sustainability**: By reducing the need for physical infrastructure and commuting, e-learning can contribute to environmental sustainability by minimizing carbon emissions and resource consumption associated with traditional education.

9. **Global collaboration**: E-learning enables collaboration and knowledge sharing among learners from diverse backgrounds and geographic locations. This global exchange of ideas and perspectives enriches the learning experience and fosters cultural understanding.

10. **Adaptation to technological advancements**: E-learning leverages technological advancements to create innovative learning experiences. As technology continues to evolve, e-learning platforms can integrate new tools and features to enhance learning outcomes and keep pace with changing educational needs.

These arguments highlight the numerous benefits of e-learning, which make it an increasingly popular and effective mode of education in today's digital age.

6. A few arguments against of e-learning

1. **Digital Divide**: Not everyone has access to the necessary technology or internet connection required for e-learning. This creates a disparity between those who can afford and access e-learning resources and those who cannot, widening existing inequalities in education.

2. **Lack of Personal Interaction**: E-learning often lacks the interpersonal interaction found in traditional classrooms. This can lead to feelings of isolation among learners and hinder opportunities for collaborative learning, peer-to-peer support, and mentorship.

3. **Technical Issues**: E-learning platforms may experience technical glitches, such as server outages, slow internet speeds, or compatibility issues with devices. These technical challenges can disrupt the learning process and frustrate both students and instructors.

4. **Limited Social Skills Development**: Traditional classrooms provide opportunities for students to develop essential social skills, such as communication, teamwork, and conflict resolution, through face-to-face interaction. E-learning may limit these opportunities, potentially hindering students' social development.

5. **Quality of Instruction**: The quality of instruction in e-learning environments can vary widely. Some e-learning courses may lack effective teaching methodologies, personalized feedback, and student engagement strategies, leading to inferior learning outcomes compared to traditional classrooms.

6. **Cheating and Academic Integrity**: E-learning can make it easier for students to cheat on assignments and exams, as supervision and monitoring are often more challenging in virtual environments. This undermines academic integrity and devalues the qualifications obtained through e-learning programs.

7. **Dependency on Technology**: E-learning is heavily dependent on technology, which can be prone to malfunctions, cybersecurity threats, and data privacy breaches. Relying solely on digital platforms for education poses risks in terms of data security and privacy, as well as potential disruptions in the event of technological failures.

8. **Limited Hands-On Learning**: Some subjects, such as laboratory-based sciences or vocational skills training, require hands-on learning experiences that are difficult to replicate in an e-learning environment. This limitation may compromise the quality and comprehensiveness of education in certain fields.

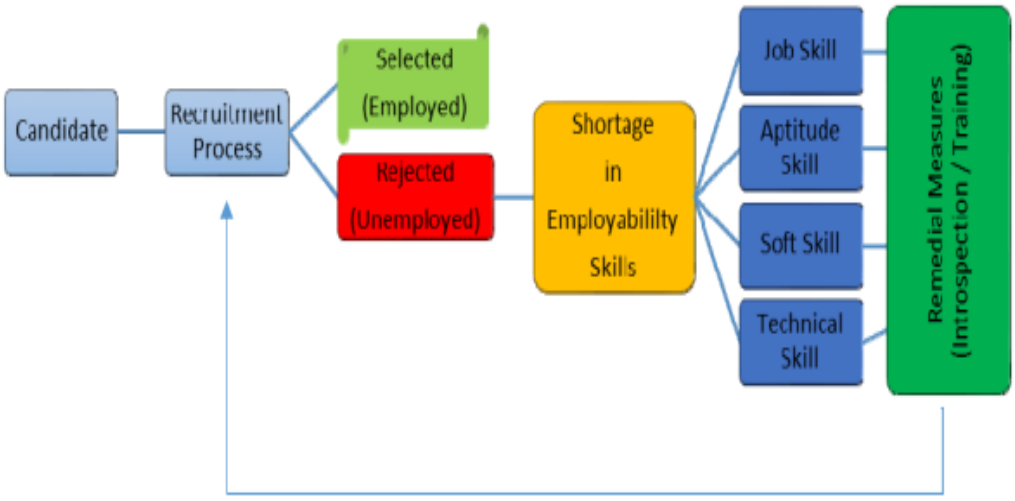
9. **Learning Environment Distractions**: E-learning often takes place in non-traditional learning environments, such as homes or coffee shops, where distractions are more prevalent. Students may struggle to maintain focus and concentration in these environments, leading to decreased productivity and learning outcomes.

10. **Employer Perception**: Despite the growing acceptance of online education, some employers may still perceive traditional degrees or qualifications more favorably than those obtained through e-learning. This bias could potentially impact job prospects and career advancement opportunities for individuals with e-learning credentials.

These arguments highlight some of the challenges and drawbacks associated with e-learning, underscoring the importance of considering its limitations and addressing potential concerns to ensure the effectiveness and inclusivity of online education.

7. CONCEPTUAL THEORETICAL FRAMEWORK

Education and employment are to be conceptually linked with the construct 'employability'. Employability has been defined as the 'ability to secure and sustain employment' (Berntson, Naswall & Sverke, 2008; Bhagwan & Selvaraj, 2010; Curtis & Mckenzie, 2001; Fugate & Ashforth, 2004; Hillage & Pollard, 1998) Employability is viewed as 'a set of achievements – skills, understandings and personal attributes – that make graduates more likely to gain employment and be successful in their chosen occupations, which benefits themselves, the workforce, the community and the economy' (Yorke, 2004). Many graduates pass out from colleges with good grades but do not make it to the top owing to lack of personality and soft skills. Hence, it is imperative that organisations must have excellent people management process to retain managers (Showry, 2012). There are many different terms, often used interchangeably or in a vague sense (Binkley et al., 2005) to describe similar concepts, including enabling skills , generic skills , core skills , key competencies , essential skills , and necessary skills . Through the earlier research with the help of Mann-Whitney test, it was understood that the job skills are more important for service industry sector than manufacturing sector as far as both top and bottom level of employees. (Nathan, 2015). The learning process will take place not only in the class but also outside it; students will take responsibility for their own learning and learn at their own pace. The conceptual framework of this study is derived with the help of various sources of literature and research as shown in Fig.1.



Skill enhancement technology refers to tools, platforms, and systems designed to facilitate the development and improvement of various skills. These technologies leverage digital advancements to offer innovative solutions for skill acquisition, practice, feedback, and assessment across different domains. Here are several examples of skill enhancement technology:

1. **Online Learning Platforms**: Websites and apps like Coursera, Udemy, and Khan Academy provide access to a wide range of online courses covering diverse topics, from programming and data analysis to language learning and business skills. These platforms offer interactive lessons, videos, quizzes, and assignments to help users enhance their skills at their own pace.

2. **Simulations and Virtual Reality (VR)**: Simulations and VR technologies allow users to engage in realistic, immersive scenarios to practice and refine their skills. For example, medical students can use VR simulations to practice surgical procedures, while pilots can use flight simulators to hone their flying skills in a safe environment.

3. **Gamification**: Gamification involves incorporating game elements, such as points, badges, levels, and leaderboards, into non-game contexts to motivate and engage users. Skill enhancement platforms often use gamification techniques to make learning more enjoyable and rewarding, encouraging users to continue practicing and improving their skills.

4. **Adaptive Learning Systems**: Adaptive learning systems use artificial intelligence (AI) algorithms to personalize the learning experience based on each user's abilities, preferences, and progress. These systems dynamically adjust content, difficulty levels, and learning pathways to optimize learning outcomes and promote skill development.

5. **Augmented Reality (AR)**: AR technologies overlay digital content onto the real world, providing interactive and immersive experiences that enhance skill development. For example, AR applications can provide step-by-step instructions or visual cues to assist users in completing tasks, such as assembling furniture or learning to play a musical instrument.

6. **Skill Assessment Platforms**: Online platforms like LinkedIn Learning, Skillshare, and Codecademy offer skill assessment tests and quizzes to evaluate users' proficiency levels and identify areas for improvement. These platforms often provide personalized recommendations for courses and resources based on users' assessment results.

7. **Remote Collaboration Tools**: Remote collaboration tools, such as video conferencing software (e.g., Zoom, Microsoft Teams) and project management platforms (e.g., Trello, Asana), facilitate teamwork and communication among distributed teams. These tools help users develop collaboration, communication, and project management skills essential for remote and hybrid work environments.

8. **Feedback and Analytics Systems**: Skill enhancement technologies often incorporate feedback mechanisms and analytics dashboards to provide users with insights into their performance and progress. These systems offer real-time feedback, performance metrics, and actionable recommendations to help users track their development and make informed learning decisions.

Overall, skill enhancement technology empowers individuals to acquire new skills, improve existing competencies, and adapt to evolving demands in today's fast-paced and dynamic world. By leveraging digital innovations, these technologies enable lifelong learning and continuous skill development across various domains and industries.

8. CONCLUSION

In conclusion, e-learning has emerged as a powerful tool for skill enhancement, offering accessible, flexible, and personalized learning experiences tailored to the needs of diverse learners. Through innovative technologies and platforms, individuals can access a wide range of courses, simulations, and interactive resources to develop and improve their skills across various domains. From online learning platforms and simulations to gamification and adaptive learning systems, skill enhancement technology provides engaging and effective solutions for practicing, assessing, and refining skills. Furthermore, e-learning enables lifelong learning and continuous professional development, empowering individuals to adapt to changing demands in today's digital age. By leveraging the opportunities afforded by e-learning, individuals can unlock their full potential, advance their careers, and achieve their personal and professional goals. Ultimately, e-learning is not just a means of acquiring knowledge; it is a pathway to skill mastery, growth, and success in the modern world.

REFERENCES

1. https://www.tojdel.net/journals/tojdel/articles/v04i03/v04i03-02.pdf
2. https://www.temjournal.com/content/114/TEMJournalNovember2022_1469_1476.pdf
3. https://files.eric.ed.gov/fulltext/EJ1106068.pdf
4. https://pdf.sciencedirectassets.com/