

## THE EMERGENCE OF TECH COMPANIES IN LEVERAGING THE EDUCATION SYSTEM OF THE NEW DECADE

**Dr. Alka Suri**

*Associate Professor*

*D.B.S. (P.G.) College, Dehradun*

*Email: [alkasuri09@gmail.com](mailto:alkasuri09@gmail.com)*

### **Abstract**

*The emergence of online education is a major contribution of the tech-savvy world that has widely played its role even before and after the pandemic. Most governments of the world have swiftly shut down the educational institutions to control the pandemic of covid-19. An incomprehensible number of states, regions and nations have closed their learning bases, with more than 91% of the world's vast (UNESCO) neighborhood schools and universities closed. Many of the countries have implemented localized lockdowns which impacted millions of additional learners. UNESCO itself is supporting countries in their efforts to slow down the impact of institution closure particularly for more disadvantaged and vulnerable communities around the globe to facilitate the continuity of education for all through the remote learning. The World Bank is also actively functioning with the ministries of education in several countries to support their efforts to utilize various educational technologies to provide remote learning opportunities to the students during the educational institutions closure due to covid-19 pandemic. According to Dr. Howard Taylor (Executive Director, of Global Partnership to End Violence)- "The coronavirus pandemic has led to an unprecedented rise in online education in the present time." According to UNICEF- "Because of school closures and strict prevention measures more and more families will be relying on the technology and digital solutions to keep the children learning, entertained and connected to the outer world, but not all the children have the necessary knowledge, skills and resources to keep themselves safe with the online methods. In this situation of pandemic, learning can be moved to online and the knowledge can be transferred virtually using multimedia media tools. It's not like that online education was not popular before but the pandemic situation made it almost necessary for every learner to shift to the online method due to the social circumstances which have aroused due to the pandemic thing.*

Reference to this paper should be made as follows:

**Received: 18.12.2022**

**Approved: 25.12.2022**

**Dr. Alka Suri**

THE EMERGENCE OF TECH COMPANIES IN LEVERAGING THE EDUCATION SYSTEM OF THE NEW DECADE

*RJPSSs 2022, Vol. XLVIII, No. 2, pp.235-248 Article No.27*

Similarity Check: 1%

**Online available at:**

<https://anubooks.com/journal-volume/rjpss-vol-xlvi-ii-no2>

**DOI:** <https://doi.org/10.31995/rjpss.2022v48i02.27>

### **Online Education Ore-Learning**

Online learning conjointly brought up as E-Learning or electronic learning, is the acquisition of data that takes place through the electronic devices and technologies. Generally, it is conducted on the web, wherever students can access numerous varieties of learning materials online at anywhere any anytime. In the words of Joshua- “An online tutor compensates the dearth of physical presence within the virtual room by making auxiliary surroundings wherever a student feels comfy to participate in the online category.” It plays a big role in remodeling lives to the digital world by providing versatile places, category timings and quality content. It provides the simplest way to the event of humanity at the time of physical isolation because of pandemic. Online education is useful as a result of its instantly accessible and offers versatile planning also. During this system, the learners use web technology to speak with their lecturers and colleagues through numerous ways like E-mail, WhatsApp, Video conferencing, and instant electronic communication or victimization alternative similar tools. However, Videoconferencing is also effectively utilized in online learning to reinforce cluster collaboration with the sense of community between learners which can replace face-to-face category space learning to some extent. In the past, students of rural areas were missing several of the opportunities that their urban and residential district peers had received. Connecting these rural students to online learning via video conferencing will dramatically improve the standard of their learning expertise. This allows the rural and disadvantaged learners to attend school or college from home and provides them access to the study. Videoconferencing could be a synchronous model for interactive voice, video and knowledge transfer between two or a lot of people (Wisemans & Wang, 2010). Videoconferencing is simply one of the technological systems which will be utilized in online learning. The worth of online learning is being recognized by a lot of organizations, since its price effective and delivers an outsized range of individuals. It will manufacture important results by not solely decreasing prices, but additionally by rising performance. The educational establishments in affected areas are seeking stop-gap solutions to continue teaching; however, it’s necessary to notice that the educational quality depends on the amount of digital access and potency. The online learning atmosphere varies deeply from the normal schoolroom scenario once it involves learners’ motivation, satisfaction and interaction (Bignoux & Sund, 2018). Adam et.al.(2012) argued that there was

no important distinction between online learning and the face-to-face category with relevance to their satisfaction and conjointly, they supported the very fact that the online category is as effective as the ancient category if it's designed fittingly. The above facts clearly show that online learning could be a good substitute for the normal schoolroom learning if they're designed and implemented appropriately. Educational establishments in India have conjointly created a transition to an online teaching atmosphere shortly after once Union Government's call to impose a nationwide lockdown from 25<sup>th</sup> March, 2020. However, the main concern is regarding the standard of learning that is closely connected with how well the content is meant and designed. The effectiveness of learning conjointly depends on how the content is curated to the online atmosphere and conjointly in understanding and addressing the constraints visage by students. The study is even a lot of relevant considering that in India the system of online education has never been tried at this scale and this is often sort of a large social experiment. The results of the study are necessary for academic institutes for two main reasons. Firstly, the shift to online mode has been associate degree abrupt; one thanks to unprecedented internment obligatory to manage the covid-19, and therefore the institutes didn't have time to style and adopt the course contents for online mode. During this context, the expertise of scholars and therefore the learnings will be incorporated to create online learning straightforward, economical and productive. Second, even once the lockdown is revoked, life after the covid-19 pandemic won't be like before and online learning is here to remain, although together with regular offline categories. There's uncertainty regarding the length of the pandemic and the possibilities of reinfections, the social distancing will become a mandatory thing. So, all the tutorial institutes got to be ready to shift majority of the course content to e-learning platforms and modify the course structure and course of study appropriately. The results of the research will be necessary input to decide on the educational atmosphere in online platforms to push effective learning.

### **Indian Edtech Startup on The Expansion**

While the disease irruption influences many businesses, the net education trade is one in every of the few companies at its most. A lot of advancement has been explored inside the Indian EdTech trade to deal with teacher's and student's complexities from a standard to a virtual room. As these developments and technologies saw low adoption within the pre covid-19 world, many existing off-

the-shelf technological advances have recently experienced broad adaption in instructional establishments to confirm that the tutorial stream isn't obstructed. Within the room, the bond between a coach and student is way additional within the room management. Nowadays, virtual school rooms have remodeled matters. Good school rooms make teaching additionally simple and accessible by a student in about to real room-like interaction. All competitive assessments are foot and students will use the chance to apply towards themselves. This had a right away impact on the sphere of education. (Tripathy and Devarapalli 2020)

Students haven't any alternative apart from shifting to laptops and smartphones. EdTech firms have experienced exponential growth within the disease irruption. Byju's has begun providing free materials in contagion and has uninheritable 7.5 MN new users on its portal. Unacademy, Vedantu, and Toppr are other firms that have seen 3X developments at this point. This growth isn't shocking. After all, India has approximately 1.5 billion students, and that they have the obscurity to travel during this scenario (Tripathy and Devarapalli 2020).

### **Electronic Technology in India During Covid-19 Pandemic**

In an exceedingly recent study specializing in the education management of the covid-19 crunch, 90% of colleges expressed exploitation of pedagogical software package tools., seventy-two used live streaming videos, four-hundredth offered links to proceed with online materials, 68% contributed towards virtual organization meetings and social media teams, less frequency, and tiny scale operating teams (Emami , 2020). Electronic platforms like email, education tools, Skype, Facebook, Telegram, and Google Meet are intensively used globally for theoretical content and presently adapting to the current new persistence. Academic establishments gift electronic academic platforms as an offer for online classroom activities. For example, the Moodle platform is extensively utilized by colleges for active learning activities. Moodle is a web community that supports operating to market mixing –learning to strengthen learning outcomes coaching and raising their performance in line with worldwide standards. Moodle will send instructive material, tasks, and assessments and produce along personal communication with students. Aiming at colleges in the low-income areas showed that what the Moodle offers, are unprocurable formative e-assessments and accommodated varied question formats and completely different ability levels trained by instructors. Typically, students were expected to own sensible outcomes; reactions are given technological

difficulties and issues related to stresses (Passos et al. 2020). As those retailers are useful, they're already organized, and standardized and wish to involve enhancements, constant maintenance, and a high-quality net association.

The establishments used personal platforms like Moodle to transmit educational content to expand communication among students and professors. Attributable to specific trendy development, the stress is on education; there looks to be very little proof concerning the many impacts these media retailers wear students coaching and action experience. LinkedIn and Pinterest are the other platforms that are used. New norms of room conferences, and lectures utilised in video conference systems, particularly Zoom, Jitsi, Microsoft groups, and webEx, were used at many establishments. Zoom and WebEx are open and paid platforms that are exciting alternatives to the room setting, although they heavily look at the standard of the web association. The foremost exciting analysis of problem-based learning exploitation webEx and Zoom is student distraction (mobile and web browsing). Virtual facilitation demands fearlessness from facilitators and intervention (Alshiekhly et al. 2015).

### **Review of Literature**

The current technological advancements permit us to use many ways that to style the net content. It's vital to contemplate the preferences and perceptions of learners when coming up with the net courses to create the educational effective and productive. Preference of the learner is said to be the readiness or temperament of the learner to participate in cooperative learning and therefore the factors influencing the readiness for online learning. E-learning portals have the advantage of a versatile place, time and medium of use. In an exceedingly country like India, wherever basic or teaching isn't doable thanks to several constraints like money and social issues, the online education system helps individuals to access to a world-class education system (Piyush Joshi & Shweta Dewangan, 2021). Online teaching brings plenty to the educational table for all students as a result of whether they're from pre-school or graduate level. Various digital school corporations have vied a big role in the modification like google Rooms, Zoom, Microsoft groups, and sheet (Adeoye et al, 2020). Students haven't any selection apart from shifting to laptops and smartphones. EdTech corporations have practiced exponential growth within the sickness irruption. Online learning could be a tool that will manufacture the teaching-learning method additional student-centered, innovative,

and versatile. Online learning is outlined as ‘learning experiences in each synchronous and asynchronous platform by totally different devices (e.g., mobile, laptops, and phone) with web access. (Singh and Thurman, 2019). Learning content isn’t given in live classes; it’s given in totally different learning systems and mediums. Immediate feedback and instant response don’t seem to be doable beneath such a platform (Littlefield, 2018). As mentioned by KPMG India and Google, developing countries like India is in an exceedingly higher position to ignore the inaccurate models adopted earlier in advanced countries like the USA and leverage the newest advancements like hybrid model, the addition of latest and way-out subjects, gamification, peer-to-peer learning, and profile mapping (Bansal, 2017). These days ICT is widely employed in each sector thus education sector has additionally started victimization the potential of ICT to bring changes in teaching-learning methods (Chairmen M. and Thampy K., 2016). E-learning could also be effective in developing the psychological feature skills of pupil lecturers (Singh & Mishra, 2009). Instructional Technology is very helpful for college students, particularly students following knowledgeable courses (Mehra & Mital, 2007). Watson J., Murin A., et al., 2012, explain the use of online platforms like Google schoolroom, Zoom, virtual learning surroundings and social media and numerous cluster forums like wire, Messenger, WhatsApp and WeChat are explored and tried for teaching and learning for the primary time ever to continue education. This could be explored more even when face-to-face teaching resumes and these platforms can give further resources and training to the learners. Teachers are duty-bound to develop initiatives that assist to beat the constraints of virtual teaching. Lecturers are actively collaborating with each other at a neighborhood level to boost online teaching ways. There is a unit unequalled opportunity for cooperation, inventive solutions and disposition to find out from others and take a look at new tools as educators, folks and students share similar experiences (Doucet et al., 2020). Several instructional organizations are providing their tools and solutions for complimentary to assist and support teaching and learning in an exceedingly a lot of interactive and fascinating surroundings.

### **Objectives of The Study**

The objectives of the study are as follows:

- To study the importance of online education throughout the Covid-19 crisis
- To evaluate the emergence of EdTech platforms in India

### Research Methodology

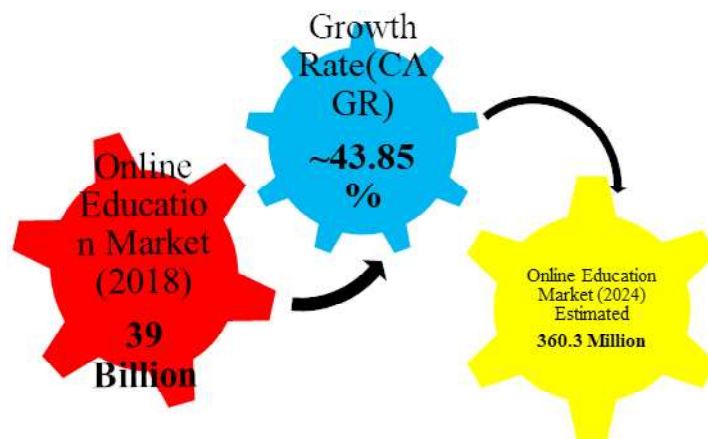
The data used in the descriptive research is purely secondary and the study is a qualitative in nature. The data is collected through secondary sources.

### Need of The Study

The pandemic has forced all the educational institutions and students to adopt methods other than the traditional learning where they can learn without sitting in a room cause of the need for social distancing. The main reason to do the research was to see how online learning can be effective in the long term even after once the pandemic ends. It enhanced on evaluation of the role of the EdTech platforms which have played a huge role to overcome the education crisis in a such difficult time.

### Data Interpretation and Analysis

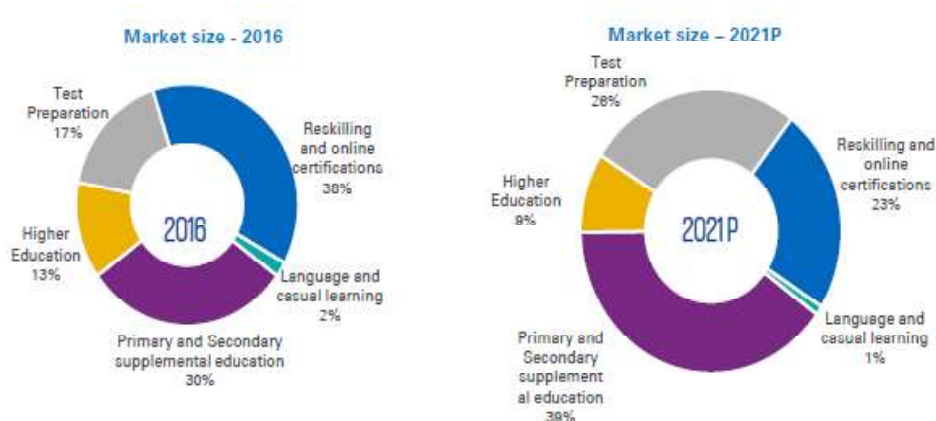
#### Indian Online Education Sector (An Overview)



**Figure 4.1 Growth of India's online education sector (In Million \$, source: CAGR report,2019)**

**Interpretation:** The online education market in India was valued at INR 39 billion in 2019 and it is expected to reach INR 360.3 billion by the year 2024, expanding at a CAGR of ~43.85% during the 5-year period. Ease of learning, flexibility and a wide range of study materials have influenced the overall growth of the industry. As a result, it can be said that the online education in India is growing undoubtedly and the above data confirms the same.

### Category wise Online Education Market in India



**Figure 1: Category-wise split of the online education market in India (Comparison of 2016 and 2021, source KPMG report 2020)**

**Interpretation:** According to the KPMG report 2020, the online education market is taking a positive ride for the past few years. In 2016 total market size of online education was 247 million USD but in the year 2021, it is expected to reach 1964 million USD which is estimated to be with a CAGR of approximately 52%. The above statistics show that online education is going to be a permanent trend in education in the upcoming time.

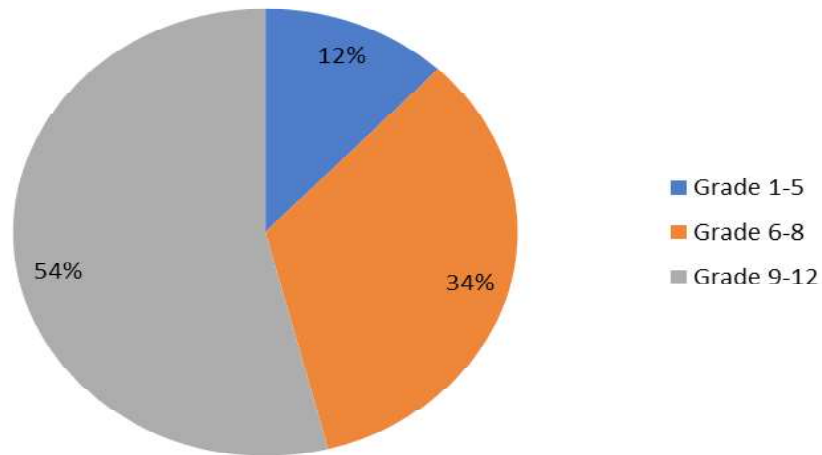
### Edtech Market in India (Million \$): Grade 1-12 (The Year 2019-2022)

**Table 1: Indian EdTech Market Growth (Grade 1<sup>st</sup> to 12<sup>th</sup>)**

Segment	Market Share 2019 (Million \$)	Market Share (%)	Market Share 2022- (Million \$)	Market Share (%)
Grade 1-5	15.9	6	204	12
Grades 6-8	84.8	32	578	34
Grade 9-12	164.3	62	918	54
Total	265	100	1700	100

Source: Redseer Report 2021-2022





**Figure 2: Segment-wise market share of Edtech in India (Grade 1<sup>st</sup> to 12<sup>th</sup>)-2021**

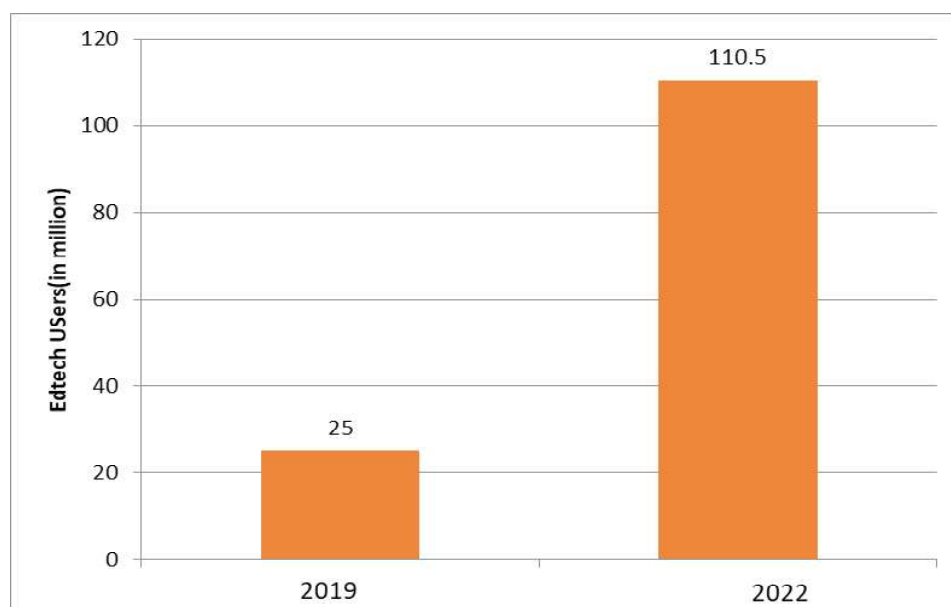
**Interpretation:** The post-intermediate EdTech-addressable market was projected to be worth \$1700 Million by 2022, up more than six-fold from \$265 Million in 2019. While number of students enrolled in offline coaching in grades 1<sup>st</sup> to 12<sup>th</sup> is expected to grow only ~8% by 2022, online education is set to have a much larger increase. Strong growth is likely across all 3 major segments, with grades 1–5 seeing the fastest growth.

**Edtech Users in India: Grade 1<sup>st</sup>-12<sup>th</sup> (The Year 2019-2022)**

**Table 2: Edtech users in India in Million (Grade 1<sup>st</sup> to 12<sup>th</sup>)**

Year	Number of Students (in Million)
2019	25
2022 (FORECASTED)	110.5

Source: Redseer Report 2021-2022



**Figure 3: Edtech user Growth in Million (Grade 1<sup>st</sup> to 12<sup>th</sup>)**

**Interpretation:** In the figure 3, we can see that the number of Edtech users in India has claimed an unexpected increase. It is clear that the number of users which was 25 million in the year 2019 is estimated to grow up to 110.5 million in the year 2022 which indicates that the Edtech market is showing positive growth over the years.

**Edtech Market in India (Million \$): Post Intermediate (The Year 2019-2022)**

**Table 3: Indian EdTech Market Growth(Post Intermediate)**

Segment	Market Share 2019 (\$ Million)	Market Share (%)	Market Share 2022 F (\$ Million)	Market Share (%)
Higher Education	333.7	71	1059	60
Technical Skill	56.4	12	335.35	19
Test Preparation: Other	56.4	12	123.55	7
Test Prep: Govt.	265	5	247.1	14
Total	470	100	1765	100

Source: Redseer Report 2021-2022

**Interpretation:** The Post intermediate EdTech business is split into four segments, every business to completely different education desires and outcomes: educational activity, technical skilling, check preparation for government jobs, and check preparation for alternative jobs. There's ample chance for market expansion here, provided sure obstacles are adequately addressed. The business can grow threefold by 2022, swelling to \$1.7 billion in sales. Much of this can come back from EdTech offerings that specialize in educational activity, because it will these days.

#### **Growing Edtech Platforms in India (Million \$)**

**Table 4.: Leading EdTech Platforms of India (In Million \$)**

S. No.	Name of EdTech Platform	Revenue (in Million \$)
1	BYJU'S	382.1
2	Camp K12	78.7
3	Topper Learning	73
4	Meritnation	60
5	Extramarks	45
6	Khan Academy	43.7
7	Unacademy	11.7
8	Toppr	7.9
9	Vedantu	4.8
10	Next Education	3.72

Source: Google,2021

**Interpretation:** From an estimated size of \$700 million today, the EdTech market (that includes higher education, professional skilling courses and of course the primary education) is headed for 8x to 10x growth in the next 60 months. From the above figure, we can see that different EdTech platforms are contributing to the education of students as well as the economy of the country with BYJU'S tending to be the leading one.

#### **Conclusion**

Online Learning is the commonest methodology of distance learning nowadays. Throughout the lockdown period for covid-19, online learning is that the best platform to stay learners and educators engaged and safe by maintaining social distancing. Govt. of India has initiated totally different online learning platforms to continue academic activities throughout the internment amount that is additionally been recognized by United Nations Educational Scientific and

Cultural Organization and IBRD. Online Learning methodology utilizes numerous applications of the web to distribute schoolroom materials and facilitate learners and educators to act with each other. Victimization of the assorted technologies accessible for online learning, educators will give a lot of interactive distance learning expertise by delivering period, synchronous video conferencing. Online learning is taken into account as a future learning method and this platform encompasses a potential for overall amendment in the pedagogy of teaching-learning within the times. However, necessary steps should be taken to coach all stakeholders of education on the online learning platform. Government/educational establishments ought to adopt the policy to supply free web and free digital gadgets to all or any learners so as to encourage online learning as a result of which individuals would get engaged during the lockdown and stay safe from pandemics. Online learning is the best methodology of learning at now due to the happening of covid-19 and more in-depth applied mathematics study could also be undertaken on the impact of online learning during this whole time. The EdTech market is already foretold to grow exponentially within the returning years thanks to numerous policy initiatives and therefore the evolving shopper preferences. Covid-19 could also be an additional catalyst for the expansion of this business and further support for the adoption of online education models moving forward. Education systems across the planet as well as India must invest in the skilled development of lecturers, particularly on ICT and effective pedagogy, considering this situation. Creating online teaching artistic, innovative and interactive through easy tools is that a different space of analysis and development. This is able to assist and prepare the education system for such uncertainties in the future.

#### **Recommendations/Suggestions**

Some helpful steps for swish functioning of online learning are as advised below:

1. Online platforms with increased safety and safeguarding measures, particularly for virtual learning tools ought to be ensured. The devices should have the newest software system updates and antivirus programs otherwise the protection of private information could also be compromised in concert will hack the digital devices.
2. High-speed web property ought to be ensured so as to enhance swish access for all as well as learners of deprived teams and low-income families.

4. Colleges ought to monitor the sensible online behaviors of students while conducting online categories.
5. Government ought to take necessary steps to coach all stakeholders of education on online learning platforms to tackle such crises of internment throughout any pandemic. The government ought to produce awareness of online education with safety measures for youngsters and take measures to make awareness of cyber security.

#### References

1. Aboagye, E., Yawson, J.A., Appiah, K.N. (2020). covid-19 and E-Learning: The Challenges of Students in Tertiary Institutions. *Soc. Educ. Res.* **Pg. 1–8.**
2. Popovici, A., Mironov, C. (2015). Students' Perception on using eLearning Technologies. *Procedia Soc. Behav. Sci.* 180. **Pg. 1514–1519.**
3. Fischer, H., Heise, L., Heinz, M., Moebius, K., Koehler, T. (2014). E-learning trends and hypes in academic teaching. Methodology and findings of a trend study. In Proceedings of the International Association for Development of the Information Society (IADIS) International Conference on Cognition and Exploratory Learning in the Digital Age (CELDA), Portugal, 25–27 October. **Pg. 63–69.**
4. Horton, W. (2006). *E-Learning by Design*. Pfeiffer: San Francisco, CA, USA. ISBN -13.
5. Engelbrecht, E. (2005). Adapting to changing expectations: Post-graduate students' experience of an e-learning tax program. *Comput. Educ.* 45. **Pg. 217–229.**
6. Koohang, A., Harman, K. (2005). Open Source: A Metaphor for e-learning. *Inf. Sci. J.* 8. **Pg. 75–86.**
7. Cohen, E., Nycz, M. (2006). Learning Objects and E-Learning: An Informing Science Perspective. *Interdiscip. J. E Ski. Lifelong Learn.* 2. **Pg. 23–34.**
8. Bezhovski, Z., Poorani, S. (2016). The Evolution of E-Learning and New Trends. *Inf. Knowl. Manag.* 6. **Pg. 50–57.**
9. Lee, B.-C., Yoon, J.-O., Lee, I. (2009). Learners' acceptance of e-learning in South Korea: Theories and results of Computer Education. 53. **Pg. 1320–1329.**
10. Sangrà, A., Vlachopoulos, D., Cabrera, N. (2012). Building an Inclusive Definition of E-Learning: An Approach to the Conceptual Framework. *Int. Rev. Res. Open Distance Learn.* 13. **Pg. 145–159.**

11. Shruti, P., Mukharjee, Dr. Sangeeta. (2020). Byju's The Learning App: An Investigative Study On The Transformation From Traditional Learning To Technology-Based Personalized Learning. 3<sup>rd</sup> Mar. ISSN 2277-8616.
12. Volery, Thierry., Lord, Deborah. (2000). Critical success factors in online education. *IJMR*. 14/5. **Pg. 216-223.**
13. Goddha, Dr. Anuradha., Sharma, Dr. Anukriti. (2021). Edtech startups capitalizing over e-learning market after covid-19 hit distress in India: The road ahead. *TOJDEL*. January. Volume 9. Issue 1.
14. Subhashni, Apanna. (2008). A Review of Benefits and Limitations of Online Learning in the Context of the Student, the Instructor and the Tenured Faculty. *International JI. on E-Learning*. 7(1). **Pg. 5-22.**