

University of Nebraska - Lincoln

DigitalCommons@University of Nebraska - Lincoln

---

Library Philosophy and Practice (e-journal)

Libraries at University of Nebraska-Lincoln

---

Fall 10-3-2021

## Platforms and Tools used for Online Learning all over the World during Covid-19: A Study

Sana Aslam

*Babasaheb Bhimrao Ambedkar University, sanaaslam13895@gmail.com*

Sharad Kumar Sonkar

*Babasaheb Bhimrao Ambedkar University, sksonker@yahoo.co.in*

Follow this and additional works at: <https://digitalcommons.unl.edu/libphilprac>



Part of the [Information Literacy Commons](#), and the [Scholarly Communication Commons](#)

---

Aslam, Sana and Sonkar, Sharad Kumar, "Platforms and Tools used for Online Learning all over the World during Covid-19: A Study" (2021). *Library Philosophy and Practice (e-journal)*. 6205.

<https://digitalcommons.unl.edu/libphilprac/6205>

# **Platforms and Tools used for Online Learning all over the World during Covid-19: A Study**

**Sana Aslam**

*Research Scholar*

*Department of Library and Information Science*

*Babasaheb Bhimrao Ambedkar University*

*Lucknow-226025*

*Email: sanaaslam13895@gmail.com*

**Sharad Kumar Sonkar**

*Associate Professor*

*Department of Library and Information Science*

*Babasaheb Bhimrao Ambedkar University*

*Lucknow-226025*

*Email: sksonker@yahoo.co.in*

## **ABSTRACT**

The coronavirus disease (COVID-19) epidemic has wreaked havoc across the globe. In the realm of education, this pandemic has resulted in the widespread suspension of face-to-face operations at educational institutions in over 190 countries in order to limit the virus's spread and reduce its effects. According to the United Nations Educational, Scientific, and Cultural Organization (UNESCO), more than 1.2 billion students at all levels of education have quit attending face-to-face lectures by mid-May 2020. More than 1.5 billion students and learners have been affected by school and university closures caused by the COVID-19 pandemic. Therefore, different tools and techniques for online learning which can ensure the continuity of learning are highlighted. Some emerging approaches by the Ministry of Education across the country for online learning platforms are presented. It consists of all country-wise online learning platforms under UNESCO. The descriptive research method was used in the study and data was collected from different countries by visiting UNESCO websites. The results indicate that the global financial situation has boosted educational innovation. The study has seen innovative methods for guaranteeing education and training continuity, from radio and television to take-home packages. The significant learning experience of students, as well as governments' and other relevant stakeholders' long-term responsibilities to learners, and students' reactions to online education depend on their competency with online tools.

**Keywords:** Online learning, Platforms, Learners, COVID-19, Ministry of Education, World, UNESCO.

## **1. INTRODUCTION**

According to the UNESCO motto in all countries, "education for all," global online education describes not only a technological advance in access to useful information for people in developing countries, but also a massive change away from education as a means of perpetuating the upper class (McCarty, Ibrahim, Sedunov, and Sharma, 2006). When it comes to improving the educational process, the present state of information technology provides new methods and tools to consider. Among these methods and tools, online learning platforms are now used at different phases of organizational learning systems (Dodun et al., 2015). More organizations are recognizing the value of online learning because it is a cost-effective way to attract the majority of individuals. It has the opportunity to generate impressive results by not only reducing costs but also enhancing the organization (Jena, 2020). Many educational activities have been forced to stop due to the COVID-19 epidemic. Because of this, educational institutions have no choice but to transition to online learning (Heng and Sol, 2020). The COVID-19 pandemic has caused chaos and destruction, including almost every part of human life. COVID-19 has resulted in the temporary shutdown of educational institutions all around the world. School and university cancellations caused by the COVID-19 pandemic have impacted more than 1.5 billion students and learners around the world (UNESCO). Several countries are affected globally, and there is concern that the current year, as well as future years, may be lost (Dhawan, 2020). Over 175 members of the United Nations family, civilized society, education, and the commercial sector join together to assure that "Learning Never Stops" (UNESCO).

Covid-19 has placed countries all over the world on lockdown and educational institutions are the same everywhere. The country is experiencing a severe problem in several areas as a result of the Covid-19 outbreak across the country, but the educational system has been affected the worst, with most courses being delayed during final exams. Learners are challenged to get an internet service that is both reliable and consistent. After this unanticipated crisis, the government has to maintain the right to education. To overcome this crisis, the Ministry of Education has maintained online learning platforms and tools for accessing online educational resources across the country. In this article, we attempt to examine different platforms and tools for online learning during this pandemic situation. In such a situation, these learning platforms may be of tremendous support because they are provided in an online format, are easily accessible, and are available for free.

## **2. REVIEW OF LITERATURE**

Khan et al. (2021) study reveals that a quantitative approach was used, and responses from 184 university students from Delhi University, Jamia Millia Islamia (Central University), and Guru Gobind Singh Indraprastha University in the National Capital Territory (NCT) of Delhi, India, were collected via an online questionnaire. This research study took place between June and August of 2020. The study's findings reveal students' good perceptions of e-learning and their adoption of this new learning system are revealed by the study's findings. In the midst of the COVID-19 crisis, it has also empirically proved the relevance of e-learning. The study's findings

will help educational institutions and policymakers take online learning to the next level in a more effective way. Similarly, Pokhrel and Chhetri (2021) present a complete assessment of the influence of the COVID-19 epidemic on online teaching and learning of various papers, as well as suggest a course of action. Another study observed was to find out what issues and barriers English language learners (EFL) at Science and Arts College, Alula, Taibah University, Saudi Arabia, face as a result of the COVID-19 epidemic in the second semester of 2020. The purpose of this study is to investigate the viability of virtual learning methods by evaluating learners' new experiences in online education. This was accomplished by examining the responses of 184 students to a survey-based inquiry. The study's validity was assessed using a descriptive statistical method. According to the findings, the key issues that influence and affect online EFL learning during COVID-19 are connected to technological, academic, and communication concerns. The survey shows that the majority of EFL students are dissatisfied with their online learning since they have not made the desired progress in language learning, Mahyoob (2020). Further study shows that online learning during Covid-19. This article focuses on the benefits of online learning during times of crisis, such as job absences or pandemics. As a result, various online learning tools and strategies that can assure learning continuity are emphasized. The government of India's new methods for online learning was discussed. There is also a discussion about the advantages and disadvantages of using online learning platforms. During lockdown, learners' and instructors' impressions of the online learning system were discussed, Jena (2020).

Coman et al (2020) Researchers examined students' attitudes towards online learning, their ability to absorb information, and their use of e-learning platforms in this regard. A semi-structured questionnaire was used to conduct an online survey. 762 students from two of Romania's largest institutions participated in the study. The findings of the study revealed that Romanian higher education institutions were not prepared for solely online learning. As a result, the benefits of online learning documented in previous studies appear to be diminishing, while the negatives become more obvious. In the context of the pandemic-induced crisis, the hierarchy of difficulties that develop in online learning shifts. The most prominent concerns are technological issues, followed by teachers' lack of technical abilities and badly suited instructional styles for the online setting. Students, on the other hand, attributed the last place to a lack of connection with professors or poor communication with them. The research implications for institutions and researchers are examined in light of these findings. Similarly, Banerjee and Singh (2020) said that they would assess students' reactions to shifting teaching and learning platforms during the COVID lockdown and compare them to the resp19 pandemic act, which is based on gender and location. A total of 275 undergraduate and graduate students from five universities participated in the study. Most students have a neutral attitude toward teaching and the learning process, according to the findings, while a few students have a favorable attitude toward teaching. During lockdown, the learning process is also discovered. In general, students are interested in their studies in light of the changing situation, although many are dissatisfied with their learning progress during lockdown. According to the findings, there is

no substantial variation in students' perceptions of teaching under lockdown based on gender or location.

### 3. METHODOLOGY

During the continuing lockdown, the Ministry of Education has also maintained online learning platforms and tools across the country for accessing online educational resources. Online learning platforms related information was obtained from different countries by visiting UNESCO websites. Data for the study was collected during July 2021 from the website of UNESCO (<https://en.unesco.org/covid19/educationresponse/nationalresponses>). Through data mining was done from the raw data with the use of tables for enhanced visualization. The study was categorized systematically by country-wise online learning platforms under UNESCO. The information gathered is evaluated in order to determine the platforms and languages used by the online learning system during lockdown and to recommend changes considered vital to make it more successful for learners.

**Closing schools exacerbates educational inequality by negatively affecting the most susceptible children and learners.**

<b>1.8%</b> of the world's student population is affected by school closures	<b>31</b> Millions of learners have dropped out	<b>8</b> Countries affected by school closures
---	--	---

(Source: <https://en.unesco.org/covid19/educationresponse/globalcoalition>) (Figure as of 31.07.2021)

### 4. DATA ANALYSIS

The study analyzes country-wise online learning platforms, supported agencies, and languages that have been extensively used during the COVID-19 lockdown. These platforms are as follows:

**Table: 1. AFRICA**

S.No	Countries	Platforms	Supported by	Languages	Current Status
1.	Angola	<ul style="list-style-type: none"> <li>• Tele aulas</li> </ul>	Ministry of Education and the Public Television of Angola	Portuguese	Active
2.	Benin	<ul style="list-style-type: none"> <li>• École au Bénin</li> <li>• École au Bénin - TV</li> <li>• INFRE Bénin</li> <li>• Radio Scolaire et Éducative (RSE)</li> </ul>	Ministry of Education	French & English	Active
3.	Botswana	<ul style="list-style-type: none"> <li>• Botswana Educational Television</li> <li>• E-Thuto</li> <li>• Radio Lesson Programmes</li> </ul>	Ministry of Education	Southern Sotho & English	Active
4.	Burkina Faso	<ul style="list-style-type: none"> <li>• Burkina</li> <li>• Faso e-Educ@tion</li> </ul>	UNICEF	Swedish & English	Active

		<ul style="list-style-type: none"> <li>• RNB, Ouaga FM, Savane FM, Watt FM, Oméga FM and national radio</li> </ul>			
5.	<b>Cabo Verde</b>	<ul style="list-style-type: none"> <li>• Aprender e Estudar em Casa - Radio</li> <li>• Aprender e Estudar em Casa - Television</li> <li>• Novos horizontes de aprendizagem</li> </ul>	Ministry of Education	Portuguese	Active
6.	<b>Cameroon</b>	<ul style="list-style-type: none"> <li>• L'école à la radio</li> <li>• L'école à la télé - Online platform</li> </ul>	Ministry of Education	French	Active
7.	<b>Central African republic</b>	<ul style="list-style-type: none"> <li>• Radio Ndeke Luka</li> </ul>	Central African Ministry of Education, UNICEF	Croatian & English	Active
8.	<b>Chad</b>	<ul style="list-style-type: none"> <li>• EduTchad</li> <li>• GoClass</li> <li>• Télé-Tchad Ecole</li> </ul>	N/A	Arabic and French	Active
9.	<b>Comoros</b>	<ul style="list-style-type: none"> <li>• Classera Comores</li> </ul>	Ministry of Education	French	Active
10.	<b>Congo</b>	<ul style="list-style-type: none"> <li>• École à domicile</li> <li>• École à domicile - Radio</li> <li>• École à domicile - TV</li> </ul>	Ministry of Education	French	Active
11.	<b>Cote d'Ivoire</b>	<ul style="list-style-type: none"> <li>• Mon Ecole à la Maison</li> <li>• Mon Ecole à la Maison - Radio</li> <li>• Mon Ecole à la Maison - Television</li> </ul>	Ministry of Education & Ministry of National Education	French	Inactive
12.	<b>Democratic Republic of the Congo</b>	<ul style="list-style-type: none"> <li>• EDUC TV</li> <li>• Ma Classe</li> <li>• Okapi Ecole</li> </ul>	Ministry of Primary, Secondary and Technical Education & UNICEF	French & English	Active
13.	<b>Djibouti</b>	<ul style="list-style-type: none"> <li>• Cours Télévisés –</li> <li>• E-learning platform Menfop</li> </ul>	Ministry of Education	French & English	Active
14.	<b>Equatorial Guinea</b>	<ul style="list-style-type: none"> <li>• Escuela en casa</li> <li>• Escuela en mi casa - Radio</li> <li>• Escuela en mi casa - TV</li> </ul>	Ministry of Education	French	Inactive
15.	<b>Eswatini</b>	<ul style="list-style-type: none"> <li>• Home Study</li> </ul>	Ministry of Education	English	Active
16.	<b>Ethiopia</b>	<ul style="list-style-type: none"> <li>• E-textbooks</li> <li>• Ethiosat</li> <li>• Radio</li> </ul>	Ministry of Education	Amharic & English	Inactive
17.	<b>Gabon</b>	<ul style="list-style-type: none"> <li>• Apprendre à la maison - Radio</li> <li>• Apprendre à la maison - TV</li> <li>• XGEST</li> </ul>	Ministry of National Education	French	Active
18.	<b>Gambia</b>	<ul style="list-style-type: none"> <li>• QTV and GRTS, Gambia Education TV (GETV)</li> </ul>	N/A	English	Inactive
19.	<b>Ghana</b>	<ul style="list-style-type: none"> <li>• Edmodo Ghana</li> <li>• Ghana Learning TV -</li> </ul>	Ministry of Education	English	Active
20.	<b>Guinea</b>	<ul style="list-style-type: none"> <li>• M'booré</li> <li>• Ma réussite entre mes mains</li> <li>• Startime - Radio</li> <li>• Startime - TV</li> </ul>	N/A	French	Inactive
21.	<b>Kenya</b>	<ul style="list-style-type: none"> <li>• Edu Channel TV</li> <li>• Kenya Education Cloud</li> <li>• Kenya Institute for Curriculum Development (KICD)</li> <li>• KICD Radio -</li> </ul>	Kenya Institute for Curriculum Development Education	Swahili & English	Active
22.	<b>Lesotho</b>	<ul style="list-style-type: none"> <li>• LNBS</li> </ul>	Lesotho National Broadcasting Service	English	Active
23.	<b>Liberia</b>	<ul style="list-style-type: none"> <li>• MoE distance learning project</li> </ul>	Ministry of Education	English	Active
24.	<b>Madagascar</b>	<ul style="list-style-type: none"> <li>• Izaho koa mba te hahay</li> <li>• Kilasi pour tous</li> </ul>	Ministry of National Education and Technical and Vocational Education (MENETP)	French	Active

25.	<b>Malawi</b>	<ul style="list-style-type: none"> <li>• Notesmaster</li> <li>• MCDE -</li> </ul>	Ministry of Education & Malawi College of Distance Education	English	Active
26.	<b>Mali</b>	<ul style="list-style-type: none"> <li>• ORTM</li> <li>• So Kalan: ma classe à la maison</li> <li>• Sokalan</li> </ul>	Ministry of Education	French	Active
27.	<b>Mauritania</b>	<ul style="list-style-type: none"> <li>• Elearning platform</li> <li>• Radio Mauritanie and TVM</li> </ul>	Ministry of Fundamental Education and National Education	English	Active
28.	<b>Mauritius</b>	<ul style="list-style-type: none"> <li>• eResources</li> <li>• Mauritius Broadcasting Corporation (MBC)</li> </ul>	Mauritius Institute of Education (MIE), the Open University of Mauritius, the Mahatma Gandhi Institute	English	Active
29.	<b>Mozambique</b>	<ul style="list-style-type: none"> <li>• Instituto de Educação Aberta e à Distância</li> <li>• RadioEscola</li> <li>• TeleEscola</li> </ul>	Institute of Open and Distance Education	Portuguese	Active
30.	<b>Namibia</b>	<ul style="list-style-type: none"> <li>• #LearnOnOne</li> <li>• Namibia Reads</li> </ul>	Ministry of Education	English	Active
31.	<b>Niger</b>	<ul style="list-style-type: none"> <li>• Radio classes</li> </ul>	N/A	French	Active
32.	<b>Nigeria</b>	<ul style="list-style-type: none"> <li>• Ministry of Education</li> <li>• Mobile Classroom</li> <li>• Television and Radio Lessons</li> </ul>	Ministry of Education	English	Active
33.	<b>Rwanda</b>	<ul style="list-style-type: none"> <li>• Ministry of Education</li> <li>• Mobile Classroom -</li> </ul>	Ministry of Education	English	Active
34.	<b>São Tomé and Príncipe</b>	<ul style="list-style-type: none"> <li>• Escola em Casa - Radio</li> <li>• Escola em Casa - TV</li> </ul>	Ministry of Education	Portuguese	Active
35.	<b>Senegal</b>	<ul style="list-style-type: none"> <li>• Apprendre à la maison</li> <li>• Canal Education</li> <li>• Télé-école</li> </ul>	Ministry of Education	French & English	Active
36.	<b>Seychelles</b>	<ul style="list-style-type: none"> <li>• E-learning center</li> <li>• MoE Televised Programme</li> <li>• Radio lessons</li> </ul>	Ministry of Education	English	Active
37.	<b>Sierra Leone</b>	<ul style="list-style-type: none"> <li>• Radio Teaching programme 95.3 FM</li> </ul>	Ministry of Basic and Senior School Education (MBSSE)	English	Active
38.	<b>South Africa</b>	<ul style="list-style-type: none"> <li>• Department of Basic Education TV</li> <li>• ePortal</li> <li>• Ministry of Education</li> <li>• Radio Program</li> <li>• TV Program</li> </ul>	Ministry of Education	English	Active
39.	<b>South Sudan</b>	<ul style="list-style-type: none"> <li>• Radio Miraya and SSBC Monday</li> </ul>	N/A	English	Active
40.	<b>Tanzania</b>	<ul style="list-style-type: none"> <li>• Azam TV</li> <li>• TBC Radio, Azam TV, Chaneli Ten, and ZBC Radio -</li> </ul>	Ministry of Education	English	Inactive
41.	<b>Uganda</b>	<ul style="list-style-type: none"> <li>• Kolibri Uganda</li> <li>• UBC TV, CBS Radio, Star FM</li> </ul>	Ministry of Education & UNICEF	English & Swahili	Active
42.	<b>Zambia</b>	<ul style="list-style-type: none"> <li>• Educating our Future</li> <li>• Radio Lessons</li> </ul>	Ministry of Education	English	Active
43.	<b>Zimbabwe</b>	<ul style="list-style-type: none"> <li>• ZBC Radio Lessons Programme</li> </ul>	Ministry of Primary and Secondary Education	English	Active

**Table: 2. ARAB STATES**

S.No	Countries	Platforms	Supported by	Languages	Current Status
1.	<b>Algeria</b>	<ul style="list-style-type: none"> <li>• Mafatih En-najah'</li> </ul>	Ministry of Education	Arabic	Active

		<ul style="list-style-type: none"> <li>• ONEFD</li> <li>• TV Web ONEFD</li> </ul>			
2.	<b>Bahrain</b>	<ul style="list-style-type: none"> <li>• EduNET</li> </ul>	Ministry of Education	Arabic & English	Active
3.	<b>Egypt</b>	<ul style="list-style-type: none"> <li>• Education Egypt Live</li> <li>• Elearning</li> <li>• Live broadcast platform</li> <li>• MOE E-Learning -</li> </ul>	Ministry of Education	Arabic	Active
4.	<b>Iraq</b>	<ul style="list-style-type: none"> <li>• Educational channel on YouTube</li> <li>• Iraq educational platform</li> <li>• Newton</li> </ul>	Ministry of Education	Arabic & Kurdish	Active
5.	<b>Jordan</b>	<ul style="list-style-type: none"> <li>• Darsak</li> <li>• Noorspace</li> <li>• Teachers platform</li> <li>• TV Lessons Program</li> </ul>	Ministry of Education & School Information Management System of Jordan	Arabic	Active
6.	<b>Kuwait</b>	<ul style="list-style-type: none"> <li>• E-learning portal</li> <li>• MOE video channel</li> </ul>	Ministry of Education	Arabic	Active
7.	<b>Lebanon</b>	<ul style="list-style-type: none"> <li>• Tele Liban E-learning</li> <li>• MEHE</li> </ul>	Ministry of Education and Higher Education	Arabic & English	Active
8.	<b>Libya</b>	<ul style="list-style-type: none"> <li>• Libya Al-Ahrar Channel</li> <li>• School-ly</li> </ul>	Ministry of Education	Arabic	Active
9.	<b>Mauritania</b>	<ul style="list-style-type: none"> <li>• Elearning platform Radio Mauritanie and TVM -</li> </ul>	Ministry of Fundamental Education and National Education	Arabic, English & French	Active
10.	<b>Morocco</b>	<ul style="list-style-type: none"> <li>• ABHATOO</li> <li>• BacTV</li> <li>• TaalimTice</li> <li>• TelmidTice</li> <li>• TV channels -</li> </ul>	National Documentation Centre & Ministry of Education	Arabic, English & French	Active
11.	<b>Oman</b>	<ul style="list-style-type: none"> <li>• Oman Mubasher Live TV and Oman Culture Satellite Channels</li> <li>• Mawred - Youtube Channel</li> <li>• MoE platforms</li> </ul>	Ministry of Education	Arabic, English	Active
12.	<b>Palestine</b>	<ul style="list-style-type: none"> <li>• It-Mohae</li> <li>• Palestine TV and Al Quds Educational Channel</li> <li>• Rawafid educational portal</li> <li>• Voice of Education Radio</li> </ul>	Ministry of Education & Higher Education	Arabic & English	Active
13.	<b>Qatar</b>	<ul style="list-style-type: none"> <li>• Ministry of Education channel</li> <li>• Siraj</li> <li>• Qatar TV</li> </ul>	Ministry of Education & Higher Education	Arabic & English	Active
14.	<b>Saudi Arabia</b>	<ul style="list-style-type: none"> <li>• Future Gate</li> <li>• Ien National e-portal IEN TV Channels</li> <li>• Vschool</li> </ul>	Ministry of Education	Arabic & English	Active
15.	<b>Syrian Arab Republic</b>	<ul style="list-style-type: none"> <li>• ECE Platform</li> <li>• Syrian Educational Platform</li> <li>• Youtube channel</li> </ul>	Ministry of Education	Arabic	Active
16.	<b>Tunisia</b>	<ul style="list-style-type: none"> <li>• CNTE</li> <li>• Edunet</li> <li>• Watania Educative</li> </ul>	Ministry of Education & National Center for Technologies	Arabic & English	Active
17.	<b>United Arab Emirates</b>	<ul style="list-style-type: none"> <li>• Alef Education EduShare</li> <li>• Learning Management System</li> <li>• Learning Curve</li> <li>• MOE Library</li> <li>• Swift Assess</li> </ul>	Ministry of Education	Arabic & English	Active
18.	<b>Yemen</b>	<ul style="list-style-type: none"> <li>• TV Channel</li> </ul>	Ministry of Education	Arabic	Inactive



**Table: 3. ASIA & THE PACIFIC**

S.No	Countries	Platforms	Supported by	Languages	Current Status
1.	<b>Australia</b>	<ul style="list-style-type: none"> <li>• ABC TV Education</li> <li>• Scootle</li> </ul>	Australian Government Department of Education	English	Active
2.	<b>Bangladesh</b>	<ul style="list-style-type: none"> <li>• Digital Content</li> <li>• Ghore bose shikhi</li> <li>• My School at My Home</li> </ul>	National Curriculum and Textbook Board (NCTB)	Bengali & English	Active
3.	<b>Bhutan</b>	<ul style="list-style-type: none"> <li>• BBS TV Channel</li> <li>• Bhutan e-Learning program</li> </ul>	Ministry of External Affairs	Dzongkha & English	Active
4.	<b>Brunei</b>	<ul style="list-style-type: none"> <li>• MoE platforms</li> <li>• Program Pembelajaran Di Rumah</li> </ul>	Ministry of Education	Malay & English	Active
5.	<b>Cambodia</b>	<ul style="list-style-type: none"> <li>• MoEYS E-learning</li> <li>• Think! Think!</li> <li>• TVK-Education</li> </ul>	Ministry of Education	Khmer & English	Active
6.	<b>China</b>	<ul style="list-style-type: none"> <li>• China Education Network Television</li> <li>• National Network Cloud-Platform for Educational Resources and Public Service</li> </ul>	National Primary & Secondary Education	Chinese & English	Active
7.	<b>Fiji</b>	<ul style="list-style-type: none"> <li>• FEMIS LIVE Version</li> <li>• RF One and RF Two radio channels</li> </ul>	Ministry of Education	Fijan & English	Inactive
8.	<b>India</b>	<ul style="list-style-type: none"> <li>• MHRD</li> <li>• National Digital Library of India</li> <li>• Swayam Prabha</li> </ul>	Ministry of Human Resource Development	Hindi & English	Active
9.	<b>Indonesia</b>	<ul style="list-style-type: none"> <li>• Radio Edukasi</li> <li>• Rumah Belajar</li> <li>• SPADA</li> <li>• TV Edukasi</li> </ul>	Center for Education and Culture Radio Media Development (BPMRPK), Ministry of Education and Culture	Indonesian & English	Active
10.	<b>Iran (Islamic Republic of)</b>	<ul style="list-style-type: none"> <li>• Network Education</li> <li>• Shadweb.iranlms.ir</li> <li>• Together for One Another</li> </ul>	Ministry of Education	Persian & English	Active
11.	<b>Japan</b>	<ul style="list-style-type: none"> <li>• Future Classroom</li> <li>• MEXT</li> <li>• NHK education</li> </ul>	Ministry of Education	Japanese & English	Active
12.	<b>Kiribati</b>	<ul style="list-style-type: none"> <li>• Kiribati School e-Resources</li> </ul>	Ministry of Education	Maori & English	Active
13.	<b>Lao</b>	<ul style="list-style-type: none"> <li>• MOE E-Learning</li> <li>• Television &amp; Radio</li> </ul>	Ministry of Education and Sports and the Ministry of Information, Culture and Tourism	Lao & English	Active
14.	<b>Malaysia</b>	<ul style="list-style-type: none"> <li>• MOE E-Learning</li> <li>• Television &amp; Radio</li> </ul>	Ministry of Education	Malay & English	Active
15.	<b>Maldives</b>	<ul style="list-style-type: none"> <li>• Filaa</li> <li>• TelekilaasA</li> </ul>	Maldives Government	Dhivehi	Active
16.	<b>Mauritius</b>	<ul style="list-style-type: none"> <li>• Student Support Programme</li> <li>• MBC TV channel</li> </ul>	Ministry of Education, Tertiary Education Science and Technology & Republic of Mauritius	English	Active
17.	<b>Myanmar</b>	<ul style="list-style-type: none"> <li>• Education Channel</li> </ul>	Ministry of Health and Sports	Burmese	
18.	<b>Nepal</b>	<ul style="list-style-type: none"> <li>• Learning Portal</li> <li>• NCED Virtual</li> <li>• Radio Jingle</li> </ul>	National Center for Education Development (NCED) & Ministry of Education Science & Technology	Nepali	Active
19.	<b>New Zealand</b>	<ul style="list-style-type: none"> <li>• Learning from home</li> </ul>	Ministry of Education	English	Active

		<ul style="list-style-type: none"> <li>• Ki te Ao Mārama</li> <li>• Papa Kāinga TV</li> </ul>			
20.	<b>Pakistan</b>	<ul style="list-style-type: none"> <li>• Open Courseware RadioSchool</li> <li>• Taleem Ghar</li> <li>• TeleSchool</li> </ul>	Punjab province's School Education Department	Urdu & English	Active
21.	<b>Philippines</b>	<ul style="list-style-type: none"> <li>• DepEd Commons DepEd Radio</li> <li>• DepEd TV Channel</li> </ul>	Department of Education	Tagalog & English	Active
22.	<b>Republic of Korea</b>	<ul style="list-style-type: none"> <li>• Educational Broadcasting system (EBS)</li> <li>• KERIS</li> <li>• Onschool</li> </ul>	Korea Education & Broadcasting Corporation	Korean & English	Active
23.	<b>Samoa</b>	<ul style="list-style-type: none"> <li>• 2AP Radio Station</li> <li>• MESC website</li> <li>• TV1 &amp; National Channel</li> </ul>	Ministry of Education, Sports and Culture	Samoan & English	Active
24.	<b>Seychelles</b>	<ul style="list-style-type: none"> <li>• E-learning center</li> </ul>	Ministry of Education and Human Resources Development	English	Active
25.	<b>Singapore</b>	<ul style="list-style-type: none"> <li>• Singapore Student Learning Space</li> </ul>	Ministry of Education	English & Tamil & Malay	Active
26.	<b>Solomon islands</b>	<ul style="list-style-type: none"> <li>• SIBC radio</li> <li>• Solomon Islands iResource</li> </ul>	Ministry of Education and Human Resources Development	English	Active
27.	<b>Sri Lanka</b>	<ul style="list-style-type: none"> <li>• Channel Eye and Nethra TV</li> <li>• E-thaksalava</li> </ul>	Ministry of Education	Sinhala & Tamil	Active
28.	<b>Thailand</b>	<ul style="list-style-type: none"> <li>• Digital Learning Centre</li> <li>• Educational TV Channel</li> </ul>	Office of Private Education Commission (OPEC)	Thai & English	Active
29.	<b>Timor-Leste</b>	<ul style="list-style-type: none"> <li>• ESKOLA BA UMA</li> <li>• Timorleste</li> <li>• Learningpassport</li> </ul>	Ministry of Education	Tatar & English	Active
30.	<b>Vanuatu</b>	<ul style="list-style-type: none"> <li>• Homskul Givhan</li> <li>• Moodle</li> <li>• MOE E-Learning</li> </ul>	Ministry of Education	French & English	Active
31.	<b>Viet Nam</b>	<ul style="list-style-type: none"> <li>• Elearning</li> <li>• National and local TV channels</li> </ul>	Ministry of Education	Vietnamese & English	Active

**Table: 4. EASTERN EUROPE & CENTRAL ASIA**

S.No	Countries	Platforms	Supported by	Languages	Current Status
1.	<b>Albania</b>	<ul style="list-style-type: none"> <li>• Akademi.al</li> <li>• RTSH Shkolla</li> <li>• Radio RTSH</li> </ul>	Ministry of Education	Albanian	Active
2.	<b>Afghanistan</b>	<ul style="list-style-type: none"> <li>• Education Television, RTA and private TVs</li> <li>• Maarif</li> </ul>	Ministry of Education	Pashto	Inactive
3.	<b>Armenia</b>	<ul style="list-style-type: none"> <li>• Dasaran</li> <li>• E-school Armenia</li> <li>• Heravar</li> </ul>	Ministries of Education, Science and Culture of the Republic of Armenia	Armenian	Active
4.	<b>Azerbaijan</b>	<ul style="list-style-type: none"> <li>• ARB TV Gunesh</li> <li>• E-resurs</li> <li>• Elektron Dərslük Portalı</li> <li>• Video.edu.az</li> </ul>	Ministry of Education	Azerbaijani	Active
5.	<b>Bosnia and Herzegovina</b>	<ul style="list-style-type: none"> <li>• e-Nastava</li> <li>• TV channels</li> </ul>	Ministry of Education and Culture of the Republika Srpska- LMS Platform	Serbian & English	Active
6.	<b>Bulgaria</b>	<ul style="list-style-type: none"> <li>• National Electronic Library for Teachers</li> </ul>	Ministry of Education	Bulgarian & English	Active

		<ul style="list-style-type: none"> <li>• With BNT2 at school</li> </ul>			
7.	<b>Croatia</b>	<ul style="list-style-type: none"> <li>• Skola za zivot</li> <li>• Skola za zivot - Television</li> </ul>	Ministry of Science and Education	Croatian & English	Active
8.	<b>Czech Republic</b>	<ul style="list-style-type: none"> <li>• Ucitelka</li> <li>• Nadalku</li> </ul>	Ministry of Education	Slovak	Active
9.	<b>Estonia</b>	<ul style="list-style-type: none"> <li>• Education-nation</li> </ul>	Ministry of Education	Estonian & English	Active
10.	<b>Georgia</b>	<ul style="list-style-type: none"> <li>• EL.GE</li> <li>• Email.mes</li> <li>• Feedc Edu</li> <li>• Teleskola</li> </ul>	Ministry of Education, Science, Culture and Sport	Georgian & English	Active
11.	<b>Hungary</b>	<ul style="list-style-type: none"> <li>• Oktatas</li> <li>• Digitalis oktatas</li> </ul>	Ministry of Education	Hungarian & English	Active
12.	<b>Israel</b>	<ul style="list-style-type: none"> <li>• MoE platform</li> <li>• National broadcasting system</li> </ul>	Ministry of Education	Hebrew	Active
13.	<b>Kazakhstan</b>	<ul style="list-style-type: none"> <li>• Balapan</li> <li>• Kazakhstan national open education platform</li> <li>• Kundelik</li> <li>• Uztaz</li> </ul>	Ministry of Education and Science of the Republic of Kazakhstan	Russian, Kazakh & English	Active
14.	<b>Kyrgyzstan</b>	<ul style="list-style-type: none"> <li>• Balastan TV channel</li> <li>• Bilim Bulagy</li> <li>• "Digital lessons" education portal</li> <li>• Ibilim</li> <li>• Kitep</li> <li>• Lib</li> </ul>	Ministry of Education of Kyrgyzstan	Kyrgyz, Russian & English	Inactive
15.	<b>Latvia</b>	<ul style="list-style-type: none"> <li>• LTV7 program</li> <li>• Skola2030</li> <li>• Tavaklase</li> </ul>	Ministry of Education and Science	Latvian & English	Active
16.	<b>Lithuania</b>	<ul style="list-style-type: none"> <li>• Naujienos</li> <li>• Domiosios Pamokos</li> </ul>		Lithuanian & English	Active
17.	<b>Mongolia</b>	<ul style="list-style-type: none"> <li>• Econtent</li> <li>• Mongolian Television Association</li> </ul>		Mongolian & English	Active
18.	<b>Montenegro</b>	<ul style="list-style-type: none"> <li>• Uci.me</li> <li>• Skolskiportal</li> <li>• UciDoma</li> </ul>		Montenegrin	Active
19.	<b>North Macedonia</b>	<ul style="list-style-type: none"> <li>• TV-Classroom</li> <li>• Eduino</li> </ul>		Serbian	Active
20.	<b>Republic of Moldova</b>	<ul style="list-style-type: none"> <li>• Educatie Online - TV Moldova 1</li> </ul>	Ministry of Education, Culture and Research	Romanian & English	Inactive
21.	<b>Romania</b>	<ul style="list-style-type: none"> <li>• Educured</li> <li>• Manuale</li> <li>• Telescoala</li> </ul>	Ministry of Education and Research	Romanian	Active
22.	<b>Russian Federation</b>	<ul style="list-style-type: none"> <li>• Edu portal</li> <li>• Russian e-school</li> <li>• TV channels</li> <li>• Worldskills</li> </ul>	Ministry of Education of Russia	Russian	Active
23.	<b>Serbia</b>	<ul style="list-style-type: none"> <li>• Nastava na daljinu</li> <li>• Portal of MoE for online teaching</li> <li>• RTS and RTS Planet channels</li> </ul>	Ministry of Education of Russia	Serbian & Croatian	Active
24.	<b>Slovakia</b>	<ul style="list-style-type: none"> <li>• ucimenadialku.sk</li> <li>• Školský klub</li> <li>• Viki</li> </ul>	Ministry of Education	Slovak & English	Active
25.	<b>Slovenia</b>	<ul style="list-style-type: none"> <li>• Izodrom</li> <li>• SIO</li> </ul>		Slovenian & English	Active
26.	<b>Tajikistan</b>	<ul style="list-style-type: none"> <li>• Academy of Sciences of the Republic of Tajikistan</li> <li>• Bahoriston TV channel</li> </ul>		Tajik	Active

		<ul style="list-style-type: none"> <li>• OER Portal</li> </ul>			
27.	<b>Turkey</b>	<ul style="list-style-type: none"> <li>• Remote Educational System</li> <li>• TRT EBA TV</li> </ul>	Ministry of National Education	Turkish & English	Active
28.	<b>Ukraine</b>	<ul style="list-style-type: none"> <li>• All-Ukrainian</li> <li>• E-school</li> <li>• Youtube of the Ministry of Education</li> </ul>	Ministry of Education of Ukraine	Russian & English	Active
29.	<b>Uzbekistan</b>	<ul style="list-style-type: none"> <li>• Eduportal.uz</li> <li>• TV channels</li> <li>• UZEDU</li> </ul>	Ministry of Public Education of Uzbekistan	Uzbek, Russian and English	Active

**Table: 5. WESTERN EUROPE & NORTH AMERICA**

S.No	Countries	Platforms	Supported by	Languages	Current Status
1.	<b>Austria</b>	<ul style="list-style-type: none"> <li>• BMBWF</li> <li>• Edutheke.at</li> <li>• ORF-1-Freistunde</li> </ul>	Ministry of Education, Science and Research	German & English	Active
2.	<b>Belgium</b>	<ul style="list-style-type: none"> <li>• Enseignement.be</li> <li>• e-classe.be</li> <li>• Klascement</li> <li>• Y'a pas école, on revise!</li> </ul>	N/A	French & English	Active
3.	<b>Canada</b>	<ul style="list-style-type: none"> <li>• Alberta_Engaging all learners!</li> <li>• Alberta_My Child's Learning: A Parent Resource/L'apprentissage de mon enfant : Ressource pour les parents</li> <li>• Alberta Distance Learning Centre</li> <li>• Curriculum Nova Scotia</li> <li>• LearnAlberta.ca</li> <li>• Manitoba_My learning at home/Mon apprentissage chez moi</li> <li>• Newfoundland and Labrador_Centre for Distance Learning and Innovation (CDLI)</li> <li>• New Brunswick_Learning at Home: Resources for families</li> <li>• New Brunswick_Je m'éduque</li> <li>• Nova Scotia_Learning at home</li> <li>• Nunavut_Angirrami Ilinniarniq</li> <li>• Ontario Learn at home/Apprendre à la maison</li> <li>• Open School British Columbia Keep Learning Resources</li> <li>• Prince Edward Island Home Learning Resources</li> <li>• Quebec Open school/L'école ouverte</li> <li>• Saskatchewan</li> <li>• Télé-Québec en classe</li> </ul>	Ministry of Education	French & English	Active
4.	<b>Cyprus</b>	<ul style="list-style-type: none"> <li>• Learn From Television</li> <li>• Photodentro</li> <li>• Schools.ac.cy</li> </ul>	N/A	Greek & Turkish	Active
5.	<b>Denmark</b>	<ul style="list-style-type: none"> <li>• emu.dk</li> </ul>	Ministry of Education	Danish & English	Active
6.	<b>Finland</b>	<ul style="list-style-type: none"> <li>• OPH.fi</li> <li>• OPH resources</li> <li>• Yleisradio</li> </ul>	Finnish National Agency	Finnish & English	Active

7.	<b>France</b>	<ul style="list-style-type: none"> <li>• Ma classe à la maison</li> <li>• Maison Lumni</li> </ul>		French & English	Active
8.	<b>Germany</b>	<ul style="list-style-type: none"> <li>• Bayerischer Rundfunk: Schule daheim -Online lernen</li> <li>• Bildungsserver Berlin-Brandenburg</li> <li>• Bildungsserver Mecklenburg-Vorpommern</li> <li>• Hamburger Bildungsserver</li> <li>• Hessischer Bildungsserver</li> <li>• Landesbildungsserver Baden-Württemberg</li> <li>• Landesmedienzentrum Baden-Württemberg</li> <li>• Mebis- Landesmedienzentrum Bayern</li> <li>• Niedersächsischer Bildungsserver</li> <li>• Online Schule Saarland</li> <li>• Thüringer Schulportal</li> <li>• Unterstützung für das Lehren und Lernen in der Corona-Krise</li> <li>• Unterstützungsangebot für Lehrerinnen und Lehrer in Phasen des Distanzlernens</li> <li>• weBBcloud</li> </ul>		German & English	Active
9.	<b>Gibraltar</b>	<ul style="list-style-type: none"> <li>• Home Learning Programme</li> </ul>		English	Inactive
10.	<b>Greece</b>	<ul style="list-style-type: none"> <li>• Digital Educational Material</li> <li>• Interactive School Books</li> <li>• Mathainoumestospiti</li> <li>• We learn at home</li> </ul>	Ministry of Education	Greek	Active
11.	<b>Greenland</b>	<ul style="list-style-type: none"> <li>• Iserasuaat</li> </ul>	N/A	Danish & English	Active
12.	<b>Iceland</b>	<ul style="list-style-type: none"> <li>• Ministry of Education webpage</li> </ul>	Ministry of Education	English	Inactive
13.	<b>Ireland</b>	<ul style="list-style-type: none"> <li>• edTV - TV</li> <li>• PDST</li> <li>• Scoilnet</li> </ul>		English	Active
14.	<b>Italy</b>	<ul style="list-style-type: none"> <li>• INDIRE webinars</li> <li>• RAI Scuola</li> </ul>	National Institute for Documentation, Innovation and Educational Research (INDIRE) & Ministry of Education	Italian & English	Active
15.	<b>Luxembourg</b>	<ul style="list-style-type: none"> <li>• Education Portal</li> <li>• Kanner Doheem</li> <li>• Schouldoheem.lu</li> </ul>		Luxembourgish	Active
16.	<b>Malta</b>	<ul style="list-style-type: none"> <li>• Curriculum.gov.mt</li> <li>• TeleskolaAn</li> </ul>	Ministry of Education	Maltese & English	Active
17.	<b>Netherlands</b>	<ul style="list-style-type: none"> <li>• Lesopafstand</li> </ul>	Ministry of Education, Culture and Science	Dutch & English	Active
18.	<b>Norway</b>	<ul style="list-style-type: none"> <li>• NRK Skole</li> </ul>		Norwegian & English	Active
19.	<b>Poland</b>	<ul style="list-style-type: none"> <li>• epodreczniki.pl</li> <li>• Szkoła z</li> </ul>	Ministry of Education	Polish	Active
20.	<b>Portugal</b>	<ul style="list-style-type: none"> <li>• Apoio à Escolas</li> <li>• Estudo em Casa</li> </ul>		Galician	Active
21.	<b>Spain</b>	<ul style="list-style-type: none"> <li>• Aprendemos en Casa</li> <li>• Aprendo en Casa Online</li> <li>• Educlan</li> <li>• INTEF</li> <li>• Procomún</li> </ul>	Ministry of Education	Spanish & English	Active

22.	<b>Sweden</b>	<ul style="list-style-type: none"> <li>• Skolahemma</li> </ul>	Swedish National Agency	Swedish & English	Active
23.	<b>Switzerland</b>	<ul style="list-style-type: none"> <li>• Eduport.ch</li> </ul>	Cantonal Ministers of Education	German, French & Italian	Inactive
24.	<b>United Kingdom of Great Britain and Northern Ireland</b>	<ul style="list-style-type: none"> <li>• BBC Bitesize</li> <li>• DfE Online Education Resources</li> </ul>		English	Active
25.	<b>United States of America</b>	<ul style="list-style-type: none"> <li>• Resources for Learning at Home</li> <li>• TV programs</li> </ul>	Departments of Education	English	Active

**Table: 6. LATIN AMERICA & THE CARIBBEAN**

S.No	Countries	Platforms	Supported by	Languages	Current Status
1.	<b>Antigua and Barbuda</b>	<ul style="list-style-type: none"> <li>• Home School 101</li> </ul>	-	English	Active
2.	<b>Argentina</b>	<ul style="list-style-type: none"> <li>• Biblioteca Digital</li> <li>• Seguimos educando</li> <li>• Seguimos Educando - Radio</li> <li>• Seguimos Educando - TV</li> </ul>	Ministry of Education	Spanish & English	Active
3.	<b>Aruba</b>	<ul style="list-style-type: none"> <li>• Material Educativo</li> </ul>	Department of Education Aruba	Esperanto	Active
4.	<b>Bahamas</b>	<ul style="list-style-type: none"> <li>• Bahamas Virtual Learning Portal -</li> </ul>	Ministry of Education	English	Active
5.	<b>Barbados</b>	<ul style="list-style-type: none"> <li>• E-learning portal</li> </ul>	Ministry of Education	English	Active
6.	<b>Belize</b>	<ul style="list-style-type: none"> <li>• CXC Learning Hub</li> <li>• In it together</li> <li>• Ministry of Education Radio Programs</li> <li>• Student Resources</li> </ul>	Ministry of Education Youth, Sports and Culture & UNICEF	English	Active
7.	<b>Bolivia</b>	<ul style="list-style-type: none"> <li>• Aula virtual para la educación en Bolivia</li> <li>• TV Culturas, Educación y Deportes</li> </ul>	Ministry of Education	Spanish & English	Active
8.	<b>Brazil</b>	<ul style="list-style-type: none"> <li>• Banco Internacional de Objetos Educacionais</li> <li>• Seguimos Conectados</li> </ul>	Brazilian Government	Portuguese	Inactive
9.	<b>Chile</b>	<ul style="list-style-type: none"> <li>• Aprendo en línea</li> <li>• Aprendo FM</li> <li>• Aprendo TV</li> </ul>	Ministry of Education	Spanish & English	Active
10.	<b>Colombia</b>	<ul style="list-style-type: none"> <li>• Aprender digital</li> <li>• Prof en Casa – Radio</li> <li>• Profe en Casa - TV</li> </ul>	-	Spanish & English	Active
11.	<b>Costa Rica</b>	<ul style="list-style-type: none"> <li>• Aventura Bikëtsö</li> <li>• Aprendo en casa</li> <li>• Aprendo en casa - TV</li> <li>• Caja de herramientas</li> </ul>	Ministry of Education	Spanish & English	Active
12.	<b>Cuba</b>	<ul style="list-style-type: none"> <li>• Canal Educativo</li> <li>• CubaEduca</li> </ul>	National Education System	Spanish & English	Active
13.	<b>Dominica</b>	<ul style="list-style-type: none"> <li>• Class Support Materials</li> </ul>	Ministry of Education	English	Active
14.	<b>Dominican Republic</b>	<ul style="list-style-type: none"> <li>• Enlinea MinerD</li> </ul>		Spanish & English	Inactive
15.	<b>Ecuador</b>	<ul style="list-style-type: none"> <li>• Aprender la Tele</li> <li>• Radios Rurales Comunitarias</li> <li>• Recursos educativos digitales</li> </ul>	Ministry of Education	Spanish & English	Active
16.	<b>El Salvador</b>	<ul style="list-style-type: none"> <li>• Aprendamos en casa</li> <li>• Material para la continuidad</li> </ul>	Ministry of Education	Spanish & English	Inactive

		educativa • Radio El Salvador			
17.	<b>Grenada</b>	• M-Star Learning Support Platform		English	Inactive
18.	<b>Guatemala</b>	• Aprendo en casa - TV • Aprendo en casa - Radio • DIGECADE • Mineduc Digital	Ministry of Education	Spanish & English	Active
19.	<b>Guyana</b>	• Guyana Learning Channel • Interactive Radio Instruction • Ministry of Education	Ministry of Education	English	Active
20.	<b>Haiti</b>	• PRATIC • Télé Ecole	Ministry of Education	French & English	Active
21.	<b>Honduras</b>	• Educatrachos • Radio Educativa SRE • STVE TELEBÁSICA	Ministry of Education	Spanish & English	Active
22.	<b>Jamaica</b>	• Education Television • National Library of Jamaica	National Library of Jamaica (NLJ)	English	Active
23.	<b>Mexico</b>	• Aprende 2.0 • Aprende en casa - • Aprende en casa - Radio • Aprende en casa - TV • TELEsecundaria	Ministry of Public Education	Spanish & English	Active
24.	<b>Nicaragua</b>	• Nicaragua Educa • TV Educa Nicaragua	Ministry of Education	Spanish & English	Active
25.	<b>Panama</b>	• Conéctate con la Estrella • Educapanama	Ministry of Education	Spanish & English	Active
26.	<b>Paraguay</b>	• Biblioteca Digital - • Tu escuela en casa • Tu escuela en casa - Radio • Tu escuela en casa - TV	Ministry of Education	Spanish & English	Active
27.	<b>Peru</b>	• Aprendo en casa • Aprendo en Casa - Radio • Aprendo en Casa - TV • PerúEduca	Ministry of Education	Spanish & English	Active
28.	<b>Saint Lucia</b>	• Moodle Platform • Radio	Ministry of Education	English	Active
29.	<b>Saint Vincent and the Grenadines</b>	• Education Alive	Caribbean Examinations Council	English	Active
30.	<b>Surinam</b>	• Television programs	-	Dutch & English	Inactive
31.	<b>Trinidad and Tobago</b>	• DEIE Learning Management System • Division of Education's Broadcast • Ministry of Education Online Learning Platform	Ministry of Education	English	Active
32.	<b>Uruguay</b>	• Plan Ceibal • TA, Tiempo de Aprender and C+	National Public Education Administration, Television National Uruguay	Spanish & English	Active
33.	<b>Venezuela</b>	• Cada Familia Una Escuela • Cada Familia Una Escuela • Cada Familia Una Escuela - TV	Ministry of Education, broadcasting educational	Spanish	Active

## 5. TOOLS USED FOR ONLINE LEARNING

Nowadays online learning platforms provide a wide range (Fernandez, Gill, Palacios and Devece, 2011) of features through their various tools, which can be classified as follows:

- **Productivity-oriented Tools:** Under the category of productivity-oriented tools, all tools that give the student follow-up on activities. The features that stand out: bookmarks, which allow students to quickly return to a previously viewed webpage, whether it is the course or not, and the calendar and progress review, which make time management for courses a valuable aspect. Helping participants to use the platform for orientation and helping participants to use the learning system (tutorials, manuals, online help, course search-engine to facilitate course selection and location indicating a search pattern, and synchronization and offline work mechanisms, where students have the option of working disconnected) would also be included.
- **Learning-oriented Tools:** Under the category of learning-oriented tools, the features that stand out are discussion forums, discussion forums, and tools that allow messages to be exchanged during the course's duration. Forums can be arranged chronologically, by categories, or by conversation topics, with or without the ability to attach files to postings. Aside from forums, synchronous communication options for sharing immediate communications among participants (Chat, Video conference) and asynchronous communication tools for exchanging mail and messages both within the course and using external mail addresses must be available (Email, messaging). Blogs, a technology that allows students and professors to make notes in a journal (edublogs), whether they are subject blogs or personal blogs of the students for whom they give support and join, are another similar format. Wikis, which allow for collaborative production of online documents, would be included in this category as well.
- **Students' participation Tools:** Work groups to organize a class into groups so that each student has their own space where the teacher assigns tasks or projects; self-assessment tools to practice or review online examinations and be aware of their evaluations are examples of tools for participating students. The teacher usually does not count these. Finally, the study findings can be added to the system: a student's corner or designated locations for learners (to display jobs and advertisements, see photographs, personal information, and so on).
- **Knowledge Management System tools:** The items would be included in knowledge management systems. Both tools for collaborative work and internal organising of common knowledge memory are provided by integral knowledge systems. Normally, they use a hierarchical framework to reflect the organisation of knowledge. The goal of moderating information systems is to offer users an interface that allows them to search for information in a certain area using diverse and distributed knowledge sources.



- **Tools for creating and distributing courses and content:** Assessments and computerized results, which allow teachers to create, conduct, and evaluate final tests, would be integrated into tools dedicated to distributing courses and content. Teachers can be self-corrected, and solutions, comments, and explanations can be presented if they desire. Course administration: these technologies help teachers to keep track of their students' progress through the use of course materials. Support for course developers in the management of the following (forums, online assistance, e-mail) as well as student follow-up tools to provide extra analysis about the use of course content.

## 6. CONCLUSION

Education is a continual process for a person's whole growth (Banerjee and Singh, 2020). The study shows that learners need a personalized platform and tools during this pandemic situation. In this number, a number of students were left from schools and colleges (Mohammed, Rida and Chafiq, 2021). In the whole world, people are facing many problems after the spread of the COVID-19 pandemic. During this time, teaching-learning platforms rapidly changed from offline to online classrooms (Banerjee and Singh, 2020). For the first time, the COVID-19 pandemic has created an increased use of online learning on a global scale (Chatterjee and Chakraborty, 2020; Skulmowski and Rey, 2020). During the COVID 19 period, the study's goal was to investigate the online learning platforms and tools on students' perceptions of online learning. The study's descriptive research method was appropriate for achieving this purpose. On the other hand, this crisis has encouraged innovation in the education sector. From radio and television to take-home packages, we've seen creative techniques to ensure education and training continuity. Governments and all partners across the world, particularly the Global Education Coalition organized by UNESCO, responded quickly to support education sustainability, resulting in the development of online learning alternatives. The study is also aware of the critical role of teachers, as well as the enduring responsibility that governments and other relevant stakeholders have for education workers.

## REFERENCES

- Allan, M., Leah, N. K., Namanyane, T., & Shaoan, M. R. (2021). The impact of online learning on international students' studies amid the Covid-19 pandemic during the 2020 spring semester: A case study of Southwest University. *Asian Journal of Education and e-Learning*, 9(1), 16-35.
- Aslam, S., Sonkar, S. K., & Owan, V. J. (2021). Changes in teaching and learning in higher education during Covid-19 lockdown: A study of LIS students in India. *Library Philosophy and Practice (e-journal)*, 1-22.

- Banerjee, S. & Singh, L. K. (2020). Changing Learning Platform during Covid-19 Pandemic Lockdown: Reflections from Higher Education Students. *Periodic Research*, 8(3).
- Butnaru, G. I., Nit, A. V., Anichiti, A., & Brînz A. G. (2021). The Effectiveness of Online Education during Covid 19 Pandemic—A Comparative Analysis between the Perceptions of Academic Students and High School Students from Romania. *Sustainability*, 13, 5311.
- Chakraborty, P., Mittal, P., Gupta, M. S., Yadav, S., & Arora, A. (2021). Opinion of students on online education during the COVID-19 pandemic. *Human Behavior & Emerging Technology*, 3, 57–365.
- Chatterjee, I., & Chakraborty, P. (2020). Use of information and communication technology by medical educators amid COVID-19 pandemic and beyond. *Journal of Educational Technology Systems*, 49(3), 310-324.
- Chattopadhyay, P., & Halder, B. K. (2021). A scientometric sketch on the paper informetrics & scientometric of e-PG Pathshala portal. *Library Philosophy and Practice (e-journal)*, 1-7.
- Coman, C., Țîru, L. G., Meseșan-Schmitz, L., Stanciu, C., & Bularca, M. C. (2020). Online teaching and learning in higher education during the coronavirus pandemic: Students' perspective. *Sustainability*, 12, 10367.
- Dhawan, S. (2020). Online learning: A panacea in the time of COVID-19 crisis. *Journal of Educational Technology Systems*, 49(1), 5-22.
- ECLAC-UNESCO. (2020). Education in the time of COVID-19. Retrieved from [https://repositorio.cepal.org/bitstream/handle/11362/45905/1/S2000509\\_en.pdf](https://repositorio.cepal.org/bitstream/handle/11362/45905/1/S2000509_en.pdf)
- Fernandez, R., Gill, I., Palacios, D., & Devece, C. (2011). Technology platforms in distance learning: Functions, characteristics and selection criteria for use in higher education. Retrieved from [https://www.researchgate.net/publication/290096909\\_Technology\\_platforms\\_in\\_distance\\_learning\\_Functions\\_characteristics\\_and\\_selection\\_criteria\\_for\\_use\\_in\\_higher\\_education](https://www.researchgate.net/publication/290096909_Technology_platforms_in_distance_learning_Functions_characteristics_and_selection_criteria_for_use_in_higher_education)
- Heng, K., & Sol, K. (2020). Online learning during COVID-19: Key challenges and suggestions to enhance effectiveness. *Cambodian Education Forum*. 1-15. Retrieved from [https://www.researchgate.net/publication/346719308\\_Online\\_learning\\_during\\_COVID-19\\_Key\\_challenges\\_and\\_suggestions\\_to\\_enhance\\_effectiveness](https://www.researchgate.net/publication/346719308_Online_learning_during_COVID-19_Key_challenges_and_suggestions_to_enhance_effectiveness)
- Jena, P. K. (2020). Online learning during lockdown period for COVID-19 in India. *International Journal of Multidisciplinary Educational Research*, 9(5), 82-92.

- Khan, M. A., Vivek, Nabi, M. K., Khojah, M., & Tahir, M. (2021). Students' perception towards e-learning during COVID-19 pandemic in India: An empirical study. *Sustainability*, 13, 57.
- Mahyoob, M. (2020). Challenges of e-learning during the COVID-19 pandemic experienced by EFL learners. *Arab World English Journal (AWEJ)*, 11(4), 351-362.
- McCarty, S., Ibrahim, B., Sedunov, B. I., & Sharma, R. C. (2006). Global online education. The International Handbook of Virtual Learning Environments. Netherlands: Springer, 723–78.
- Mohammed, O., Rida, N., & Chafiq, T. (2021). Overview of e-learning platforms for teaching and learning. *International Journal of Recent Contributions from Engineering Science & IT (iJES)*, 9(1), 21.
- Muganga, A., Leah, N. K., Namanyane, T., & Shaoan, M. R. (2021). The impact of online learning on international students' studies amid the Covid-19 pandemic during the 2020 spring semester: A case study of Southwest University. *Asian Journal of Education and e-Learning*, 9(1), 16-35.
- Oana, D. et al. (2015). Analysis of an e-learning platform use by means of the axiomatic design. *Procedia CIRP*, 34, 244–249.
- Panda, S. (2021). An analysis of e-content modules of Indian OERs: A case study of e-PG Pathshala. *International Journal of Academic Research in Library & Information Science*, 3(1), 1-11.
- Pokhrel, S., & Chhetri, R. (2021). A Literature Review on Impact of COVID-19 Pandemic on Teaching and Learning. *SAGE Journal*, 8(1), 133-141.
- Skulmowski, A., & Rey, G. D. (2020). COVID-19 as an accelerator for digitalization at a German university: Establishing hybrid campuses in times of crisis. *Human Behavior and Emerging Technologies*, 2(2), 212– 216.
- United Nations. (2020). Policy brief: Education during COVID-19 and beyond. Retrieved from [https://www.un.org/development/desa/dspd/wpcontent/uploads/sites/22/2020/08/sg\\_policy\\_brief\\_covid-19\\_and\\_education\\_august\\_2020.pdf](https://www.un.org/development/desa/dspd/wpcontent/uploads/sites/22/2020/08/sg_policy_brief_covid-19_and_education_august_2020.pdf)