A SWOT ANALYSIS: EFFECTIVENESS OF E - EDUCATION DURING COVID – 19 LOCK DOWN

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ABSTRACT

COVID-19 has disrupted most of the industries in the world. Education is the only industry that is completely transferred to online mode in most countries around the world. The goal of this study was to carry out a SWOT analysis to know the effectiveness of E – education (Online education) during COVID 19 lockdown in Tirupur. The contribution of this study is to evaluate the learners' new experiences in online education and to assess the strength, weakness, opportunity and threats associated with E – education. This is achieved by analyzing 193 learners' responses to the online questionnaire. A large number of students complied that E - education has the strength of accessible anywhere, anytime and any pace. Amongst weaknesses, high distractions, internet connectivity, can't substitute classroom teaching and no lab sessions were reported. Students agreed the E – education provides them the opportunity to opt distant learning, its best available option during lock down like situations. However, students perceived threats like its effect on eyes and overall health issues. The study suggests that in future, blended learning can be picked by integrate online education along with classroom teaching to conquer weaknesses and threats of online teaching while making greatest use of its strengths and opportunities.

KEYWORDS: COVID 19, E – education, Effectiveness, Strength, Weakness, Opportunity, Threats.

INTRODUCTION

The COVID 19 Pandemic was declared as a Public Health Emergency of International concern on January 30, 2020 by World health organization and as a pandemic on March 11, 2020. More than 188 countries and territories globally are affected resulting into death of lakhs of people. To deal with this pandemic globally almost all governments had imposed lock down in their countries. Various educational institutions have been closed either on a nationwide or local basis in 172 countries, affecting approximately 98.5 percent of the world's student population.

More than 50 per cent of India's knitwear garments are manufactured in the 'Dollar Town', as Tirupur is popularly known as (for being a key export hub) of Tamil Nadu. The industry dealt with its first blow after its business was curtailed by the cancellation of massive export orders as coronavirus engulfed the European

countries, China and Italy. But now, with the pandemic spreading in India, its domestic business is also hampered. The continuous fall in exports due to the impact of the pandemic and non-payments of already delivered goods has started to impact stakeholders. The situation has now become worse as over 10,000 manufacturing units in Tirupur, which employs over 6 lakhs people, are now struggling to maintain their workforce. A majority of them are migrants – both intra and inter-state, with the latter rapidly on the rise over the last 5-10 years.

The Indian government also enforced lock down on March 24, 2020 which has led to shut down of all sectors except essential services. The Covid-19 pandemic created a lot of confronts in the Indian education system. As it hit the country, the education system of India has taken a sharp turn towards E - education, which has changed its dynamic. The present pandemic has resulted in various advancements in the education sector. Most of these innovations are spinning around digitization. Schools, colleges, and universities have moved from physical classes to online classes. However, this task is not easy, and the all-educational institutions are facing assorted barriers and challenges while implementing the online education system. In the past, several pragmatic researches have been carried out to investigate barriers and challenges of the online education system. COVID-19 has created many challenges and opportunities for the educational institutes to strengthen their technological knowledge and infrastructure.

LITERATURE REVIEW

AudyeCidral, W.Oliveira, T.Di Felice, M. & Aparicio, M. (2018) in their study discussed the factors that define and determine the success and effectiveness of e-learning. Paper declares the use and user satisfaction of e-learning as closely linked. The user satisfaction is found to be related to quality of resource material and system, teacher attitude, evaluation and assessment methods, and learner's interaction with peers and the teacher. Assessment can be done in a variety of ways like using quizzes and tests. Similarly, overall success of the program can be made possible by improving these factors. E-Learning programs can be made more effective and successful if they take into consideration the individual requirements and interest of the learners.

Mohammad Ali, S. M. Khaled Hossain and Tania Ahmed (2018) aimed to analyze the effectiveness of e-learning for the students at university level. Data have been collected through questionnaire and it was given to 700 students. The questionnaire was returned by 667 students and 94.9% of them are using different e-learning tools, techniques or platforms. Eight variables have been used to measure the effectiveness of e-learning. The outcome of the study supports that e-learning is faster, time and cost friendly, appropriate to work independently, add value to the learning of the students, usable for the purpose of active learning, faster, quick response, applicable outside the class room and quality of e-learning is satisfactory which indicates e-learning is effective. The paper attempts to investigate the effectiveness of e-learning using some crucial and fundamental factors. The outcome of all the determinants endorses that e-learning is effective for university students. The study will contribute to encourage both students and academicians to grab the benefits of electronic tools, techniques and platforms by using it for the purposes of acquiring and sharing knowledge.

Carrmen carrillo and Maria Assuncao Flores (2020) in their article provides a review of the literature on online teaching and learning practices in teacher education. In total, 134 empirical studies were analysed. Online teaching and learning practices related to social, cognitive and teaching presence were identified. The findings highlighted the need for a comprehensive view of the pedagogy of online education that integrates technology to support teaching and learning. The implications of this study for the development of online teaching and learning practices are discussed. Suggestions for further research are also examined in their study.

Giorgi Basilaia and David Kvavadzein (2020) in their paper studied the capacities of the country Georgia and its population to continue the education process at the schools in the online form of distance learning, study reviews the different available platforms and indicates the ones that were used by the support of the government. Authors made a case study, where the Google Meet platform was implemented for online education in a private school with 950 students, shows the usage statistics generated by the system for the first week of the online education process. Results confirm that the quick transition to the online form of education went successful and gained experience can be used in the future.

H.Mahfoodh and H. AlAtawi (2020) in their paper explores the educational system's potential changes worldwide after COVID-19, where e-Learning is the feasible medium to sustain Higher Education by adopting a curriculum based on integrating eLearning. It is descriptive and analytical in nature, and it is based on previous studies and research that have explored eLearning as an educational necessity. The literature review is explored by adopting the SWOT model to analyses the pros and cons of implementing eLearning in Higher Education. Based on the analysis and findings, the paper concludes that eLearning is inevitable in the Post COVID-19 era since it has proved its success and sustainability once the threats and weaknesses are addressed and resolved.

RESEARCH METHODOLOGY

An online study using Google form was conducted to know the discernment of students about the strengths, weaknesses, opportunities and threats (SWOT analysis) related to E – education during COVID 19 lock down in Tirupur. For this study, Google form was created with enclosed statements associated to strengths, weaknesses, opportunities and threats of E – education. It was sent to 200 students of Tirupur city by means of online modes like E-mails and WhatsApp. A descriptive statistical method was used to test the validation of the study. The comebacks were sought on three-point scale as agree, somewhat agree and disagree with relevant scores of 3, 2 and 1. In total, 193 students replied in turn. The data was analyzed using statistical tools like frequency, percentage, mean score and ranks. The study results show that most of the students are not satisfied with continuing E - education, as they could not fulfill the expected progress.

RESULT AND DISCUSSIONS

The data was examined and the results of the study are presented and conferred below:

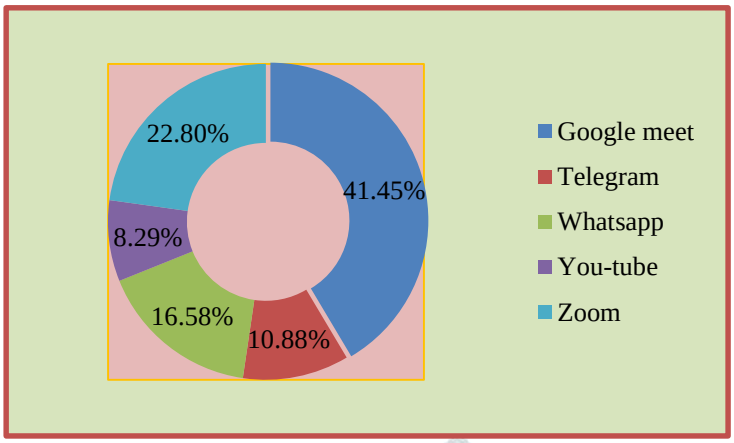

Figure no.1 Modes of E – education used

Figure no.1 illustrates the modes of getting E – education used by the teachers for teaching the students during lockdown just after the announcement by Government to start online education. Early phase was in fact full of trails with new technologies. Lack of awareness and handiness in use of online education escort with technological intricacies could be the few reasons for comparatively less use of various modes. The constant trials by the teachers themselves, efforts taken by the management of various schools and colleges by arranging lots of webinars on Online teaching, a noticeable increase in use of technology was witnessed.

Greater part of the students (41.45%) shared that Google meet was used for classes by their teachers. This was closely followed by Zoom app (22.80 %). There were 16.58 per cent of teachers using WhatsApp, 10.88 per cent of teachers using Telegram, and only 8.29 per cent of teachers were using YouTube platform for taking online classes. A limited usage of Zoom app could be due to its limitation of 40 minutes time in comparison to Google meet which has no such limit. Telegram, YouTube and WhatsApp does not allow live sessions; therefore, they were less used for taking classes but were used for other communications like educational interactions, submission of assignments, clearing up of doubts and to conduct class tests.

Table no.1: Strengths of E-education as perceived by students (n =193)

Strengths of E - education	Agree f (%)	Somewhat agree f (%)	Disagree f (%)	Mean*	Rank
Anywhere, Anytime, Any pace…	109(56.48)	54(27.98)	30(15.54)	2.41	1
Convenient and flexible	75(38.86)	67(34.72)	51(26.42)	2.12	5
Digital learning makes study interesting	69(35.75)	66(34.20)	58(30.05)	2.06	7
No Discrimination	88(45.60)	52(26.94)	53(27.46)	2.18	4
Saves money	75(38.86)	62(32.12)	56(29.02)	2.10	6
Saves time	92(47.67)	55(28.50)	46(23.83)	2.24	3
Up skilling new technologies	98(50.78)	60(31.09)	35(18.13)	2.33	2
			Overall Mean	**2.21**	

Table no.1 illustrates the strengths of E-education as perceived by students after attending online classes. Most of the students (56.48%) agreed that E-education can be taken anywhere, anytime and any pace with a mean value of 2.41. Majority of the students agreed that E-education has the reward of up skilling new technologies (50.78%). Its strength in terms of saving time (47.67%), and no discrimination (45.60%) were also agreed by nearly half of the students. Students (38.86%) further feel that E-education saves their money. On the other hand, nearly one third of the students (30.05%) disagreed that digital learning makes study as an interesting one.

Overall major strength of E-education as perceived by students is it can accessible anywhere, anytime and any pace with highest mean value (2.41) among all. This was followed by its reward of up skilling new technologies (Mean = 2.33, rank: 2). Students feel that they were able to save their time in online learning (Mean = 2.24, rank: 3). This was followed by the advantage of no discrimination (2.18) with fourth rank. Students further agreed that end-users can undergo learning at their place in convenient time as it does not have any restriction of time (2.12) and agreed that it is flexible to use. However, students disagreed that Digital learning makes study interesting. Therefore, it can be concluded that classroom learning is more focused and more competent.

Table no.2: Weaknesses of E-education as perceived by students (n =193)

Weaknesses of E - education	Agree f (%)	Somewhat agree f (%)	Disagree f (%)	Mean*	Rank
Can't substitute classroom teaching	108(55.96)	57(29.53)	28(14.51)	2.41	3
Digital competence	62(32.12)	65(33.68)	66(34.20)	1.98	6
High distractions	140(72.54)	37(19.17)	16(8.29)	2.64	1
Hinders social life	44(22.80)	78(40.41)	71(36.79)	1.86	8
Internet Connectivity	122(63.21)	61(31.61)	10(5.18)	2.58	2
Limited assessments and feedbacks	65(33.68)	52(26.94)	76(39.38)	1.94	7
No lab sessions	100(51.81)	67(34.72)	26(13.47)	2.38	4
Time constraints	80(41.45)	53(27.46)	60(31.09)	2.10	5
			Overall Mean	**2.24**	

Table no.2 illustrates the weaknesses of E-education as perceived by students in comparison to class room teaching. Most of the students (72.54%) agreed that E-education highly distracts them learning and 63.21% states that, it is highly dependent on strong network connectivity. Majority of them (55.96%) agreed that classroom teaching cannot be substituted with online education which also hinders their social life (22.80%). Students (51.81%) feel that they have no practical knowledge as there no lab sessions are possible. One third of the students were fully agreed (33.68%) that E-education limits assessment and feedback of the students besides conducting online learning examination is still a challenge as it lacks transparency.

Taken as a whole, the most leading weakness of E-education as perceived by students is its highly distractive nature (Mean = 2.64). Followed by being dependent upon strong network connection (mean =2.58, rank =2) and this is justified as most of the students were receiving live lectures via Google meet for which strong network connection is prerequisite. This was followed by its inability to substitute classroom teaching (mean =2.41, rank=3), this was followed by its there is no lab sessions (mean =2.38, rank: 4), time constraints in conducting classes (mean =2.10). Digital competence among students (1.98) and Limited assessments and feedbacks (1.94) were other weaknesses perceived by students. It can be interpreted that majority of the students were facing complexities in attending online classes. The forced E-education had its own issues as neither teachers nor students were prepared for the change.

Table no.3: Opportunities of E-education as perceived by students (n =193)

Opportunities of E - education	Agree f (%)	Somewhat agree f (%)	Disagree f (%)	Mean*	Rank
Adapt to an international online community	122(63.21)	51(26.42)	20(10.36)	2.53	3
Become self-regulated learners	93(48.19)	59(30.57)	41(21.24)	2.27	6
Broadens experience	119(61.66)	48(24.87)	26(13.47)	2.48	4
Distant learning is possible	151(78.24)	31(16.06)	11(5.70)	2.73	1
Enables to reflect and think critically	82(42.49)	76(39.38)	35(18.13)	2.24	7
Learn to manage the time more efficiently	110(56.99)	50(25.91)	33(17.10)	2.40	5
Promotes retention of learning (Recordings)	138(71.50)	43(22.28)	12(6.22)	2.65	2
			Overall Mean	**2.47**	

Table no.3 depicts the opportunities offered by E - education as perceived by students. Most of the students (78.24%) agreed that it enables students and teachers from faraway places to join at one platform. It can be due to the situation that though students went to their home towns in different places and also to other districts earlier to lockdown but were able to stick together their classmates and teachers for online learning. Therefore, they recognize this opportunity of E - education for distant learning.

A large majority of the students (71.50%) also opined that E - education promotes retention of learning by providing various recorded materials. Students (63.21) also felt that it gives an opportunity to adapt to an international online community as E - education premeditates various teaching styles.

Mean comparison shows that among opportunities, its knack to facilitate connectivity of teachers and students from faraway places was ranked 1 with mean 2.73, followed by its Promotes retention of learning (2.65), Adapt to an international online community(2.53) and Broadens experience(2.48) in that order.

Table no.4: Threats of E-education as perceived by students (n =193)

Threats of E - education	Agree f (%)	Somewhat agree f (%)	Disagree f (%)	Mean*	Rank
Affect eyes and overall health	110(56.99)	41(21.24)	42(21.76)	2.35	1
Sense of Isolation	93(48.19)	53(27.46)	47(24.35)	2.24	3
Learning style	95(49.22)	60(31.09)	38(19.69)	2.30	2
Makes lethargic	94(48.70)	46(23.83)	53(27.46)	2.21	4
May affect private life	65(33.68)	62(32.12)	66(34.20)	1.99	7
Pandemic-related anxiety	74(38.34)	54(27.98)	65(33.68)	2.05	6
Risk of cyber crime	86(44.56)	43(22.28)	64(33.16)	2.11	5
			Overall Mean	2.18	

Table no. 4 pinpoints the threats of E - education as perceived by students. A large number of students (56.99%) felt that E - education affects their eyes and overall health. Students (49.22%) also agreed that E - education may not suit their learning style as they are attached to traditional learning. 48.70% of the also agreed that online education makes them lethargic. They (48.19%) also agreed that online education increases the sense of isolation. It has been observed that E - education raise up the chance of cybercrimes (44.56%). However, one third of students (34.20% and 33.68) disagreed to its effect on their personal life and E – education provides Pandemic-related anxiety.

Overall, the most reported threat was its effect on eyes and overall health with mean 2.35. This may be because after attending E - education students feel hurt on their eyes and shoulders. This was followed by threat of its effects on their traditional learning style (Mean value = 2.30, Rank = 2), and their sense of isolation (Mean value = 2.24, Rank = 3).

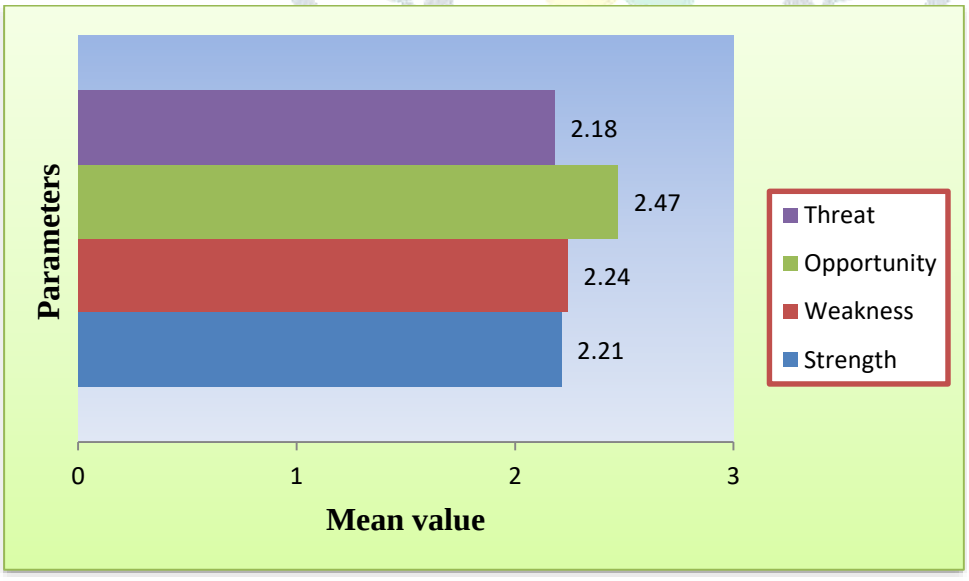

Figure no. 2: SWOT analysis of E - education as perceived by students

The figure no.2 examines the strength, weakness, opportunity and threat (SWOT) of E - education as perceived by the students. It explains that students perceived opportunities of online learning for their

education with a highest mean score of 2.47. The situations reasoned owing to corona pandemic had created a break in the schooling of students, but E - education offered this opportunity to prolong the schooling in some means. An outsized majority also agreed on weaknesses of the E - education and learning with the mean score of 2.24. Strength of E - education got mean score of 2.21 and whilst threats got least mean score of 2.18.

Thus, it can be concluded that by conquering the weaknesses, E - education can be advantageous for students not only during any pandemic situation but it can be incorporated in custom teaching. Students agreed to some extent that online education creates threats too, which can affect their lives physically, economically and in a social context that needs to be tackled.

CONCLUSION

Online pedagogy does a great job of supplementing offline education, but it does not serve as the latter's replacement. This holds especially true in a developing economy such as India for several reasons. One important change which is to be a permanent feature of the Indian education system is flexibility. Most of the courses offered by any Indian University have a single entry and single exit opportunity. Pandemic told us about uncertainty in life. Therefore, the higher education system needs to be more flexible, where multiple entries and multiple exit opportunities are possible. The second important change is to be around education opportunities for working professionals. Pandemic has forced Indian education stakeholders to adopt technology in all possible manners. E–education can become the part of routine teaching learning process if the network issues are resolved even in remote area. Teaching community looks forward at a future of blending online and classroom teaching so that strengths and opportunities of both may be availed while overcoming the weaknesses and threats of both. As we say that there will be new normal after the pandemic. The Indian education sector will become more tech-savvy, flexible, focusing on continuous assessment rather than on the final examination, enabling different types of executive education and admission process which is more student-friendly.

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