

An Empirical Study Analyzing Selected Strategies for School Education in New Normal

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Abstract

In the present time, the education system has faced several disruptions and challenges due to the pandemic, but coped with the assistance of advancing Internet technology. To repair the damage and deterioration brought in education due to this largest disruption in the working of educational institutions all over the world, different strategies of learning and teaching were adopted by different countries. The present research work undertakes a systematic review of contemporary literature focusing on the major practices and strategies adopted by the different nations, during this challenging time of the new normal. It empirically explores and identifies the possible effective education strategies, which could be implemented by the Indian education systems in the new normal. The findings of this study will be fruitful for educators, policy-makers and other stakeholders in the field of education, especially in coping with the challenges imposed on primary and secondary education systems and designing future courses of action adequately and aptly.

Keywords: Learning strategies, Teaching strategies, Institutional strategies. New normal. Teachers' perception. Students' perception.

Introduction

The COVID-19 disease outbreak has led to the largest disruption in the working of educational institutions all over the world. It has adversely influenced roughly 1.6 billion students in more than 200 nations, irrevocably affecting 95 per cent of the world's student population, by the closure of educational institutions and other learning spaces. The imposed social separation has resulted in some substantial legislative reforms in education that are geared toward an "online pivot" (George, 2020). There has been a movement from a face-to-face teaching paradigm to a wholly online one, for the first time in the history of the Indian education system (Zimmerman, 2020). At the same time, the Global

pandemic has brought tremendous changes in the educational system by introducing digitalization of educational practices, such as the introduction of several e-platforms like WebEx, Zoom, Google etc. During this span of the global pandemic, the education system in all the countries struggled and strove in different ways to deal with the inevitable challenges of the new normal like by incorporating virtual learning and by adopting innovative practices for educating their people. This research work has investigated numerous online research papers, newspaper reports, published documents and available literature by doing a systematic review of the selected published works and analysing distinct practices and innovative strategies adopted

by different countries for education during this period of new normal. In order to find out the suitability of these innovative strategies, the current study empirically examined these commonly used educational strategies in the Indian scenario. The research suggests certain educational strategies which can be effectively implemented in this time of new normal in Indian schools.

Review of related Literature

In recent years, increasing attention has been paid to the use of learning strategies, learning attitudes, learners' emotions etc. to enhance learning satisfaction, which is a significant factor in evaluating the quality of learning (Ahmed et al. 2013; Mariza et al. 2015; Obergriesser and Stoeger, 2020), as learning strategies have been methods to produce, arrange or transform knowledge (Alexander et al. 1998). The present research explores strategies to enhance educational achievement and learning satisfaction in times of crisis caused by COVID-19. It studies by classifying learning strategies into three categories, i. e., learners-based strategies, educators-based strategies and institutional strategies, regarding the perception of learners and educators about the effectiveness of these strategies in the post-pandemic era. The pandemic wreaked havoc on the educational system, particularly among schoolchildren (Vegas, 2020). Children spent about half of their time on homework at home compared to what they would have spent in a classroom setting at regular times (Thorn & Vincent-Lancrin, 2021). Though Indian learners find technology and social networking tools useful for learning and are inclined to use them (Alvi, 2021), the biggest problem for Indian teachers and learners was adapting technology in a short period of time during pandemic. Several previous studies established that classroom dynamics

and social activities lead to more successful, productive, and meaningful learning (Hurst et al . 2013; Carini et al . 2006), whereas online classes lack co-curricular activities (Lall and Singh 2020). Furthermore, studies reveal that characteristics such as age, gender, learners' computer skills and technology tolerance, learning habits, lack of awareness, interest, personal touch, and interaction, as well as connectivity challenges, have a significant impact on students' perceptions of online learning (Keller and Cernerud 2002; Arora and Srinivasan 2020). Studies also identified major issues in developing countries like India due to digital gap and infrastructural dimensions for online education platforms (Mishra, 2020); Many researchers have investigated and identified problems faced by teachers like their willingness to teach online and their resistance to change (Gratz and Looney, 2020); network troubles, a lack of training, a lack of awareness, a lack of enthusiasm, reduced student participation (Arora and Srinivasan, 2020; Kaup et al., 2020); external interruptions and family disruptions, a lack of training, a lack of technical support, ambiguity related to direction, an inadequate infrastructure, limited knowledge and understanding of online teaching platforms and security concerns, lack of course integration with technology, and low motivation (Joshi, A. et al, 2021); inappropriate behaviour of learners' including playing music, making noise, writing derogatory remarks, eating, and playing games in many windows (Punit and Qz.com, 2020). Despite all these challenges associated with online learning, Indian educational institutions began using web-assisted online classes to provide students with learning opportunities (Jain and Ruby 2020; Nandakumar 2020). Several other research studies have suggested different strategies and development in education system to cope with the challenges including and

appropriate interface for learning and engagement, need of new paradigm, efforts for effective blended learning, enhancement of student teacher virtual communication (Chaturvedi, et al, 2021); development of new learning infrastructure experimentation and micro innovations (Schleicher, 2021a); develop resilience perseverance collaboration, responsiveness and adaptability in the face of rapid changes and disruptions (Png. and Goh, 2021); health education, maintaining good hygiene, academic catch-up, remedial activities, parental engagement, developing essential skills and supporting social and emotional development (Rigall et al., 2021); online and remote learning, developing teachers and students for online and remote learning (OECD, 2021c); investing for the development of educators (Carver-Thomas, et al. 2021) close the digital divide, strengthen distance and blended learning, supporting social and emotional learning (Darling-Hammond, et al. 2020); designing an appropriate policy for schools; identifying the contextual factors that matter, developing new strategies to face the crisis (Goh & Tuga 2021). Considering all this previous research knowledge, this paper explores and analyzes the need to update and upgrade the education system towards online pivots and the digital mindset to cope with the problems presented before it in the recent time i. e. the post-pandemic new normal situation.

Objectives of the Study

The main objectives of a research paper are as follows:

1. To identify the challenges faced by learners and educators in the new normal.
2. To explore effective teaching strategies to be followed in the new normal.

3. To explore learning strategies that can be adopted in the new normal.
4. To analyse the difference between the perception of learners and educators about the selected teaching and learning strategies in the new normal.

Based on these objectives following hypothesis was formulated:

H0: There is no significant difference between the perception of learners and educators about the select education strategies in the new normal.

Research Methodology

The present study aims to analyse strategies to impart education effectively in the new normal. It is an empirical study, which tries to understand different challenges faced by educators and learners in the new normal. Through the review of contemporary literature, the researchers have identified various psychological and social problems, which are being faced by learners and educators in the present scenario. It studies by classifying learning strategies into three categories i. e., learners-based strategies, educators-based strategies and institutional strategies, with the perception of learners and educators about the effectiveness of these strategies in the post-pandemic era. The Research Design for the current study was exploratory research design that investigates the areas of research which have been under-researched earlier (Mason, 2002). The researchers used a non-probability convenience sampling method and took a sample of 102 respondents associated with school education. The research was conducted on a sample consisting of 78 teachers of primary and secondary education institutions and 24 students, belonging to two different schools in western India. The data was gathered using an

online questionnaire, during the month of February - March 2022. It was the time when educators and learners were struggling to cope with the fear and challenges of reopening schools in the new normal. To enable the ease of data analysis the selected strategies were pre-coded. The statistical package (spss 23.0) was used to analyse the data obtained using a questionnaire. The selected strategies were pre-coded to facilitate the ease of data analysis. Data were analyzed using descriptive statistics mean, standard deviation and z-test.

Data Analysis and Interpretation

An overview of the demographic variables related to the gender, profession, income and domicile of the respondents participating in the present research study, is depicted in the table no. 1. The table shows the distribution of respondent according to gender is

34.3 per cent male and 65.7 per cent female, and so female respondents dominated the study.

The sample consists of 78 (76.5 per cent) educators and 24 (23.5 per cent) learners, which clearly indicates that the educators are keen to take part and adopt challenges imposed on the education system in the new normal. The distribution of the sample on the basis of family income per month, as shown in the table, depicts that among the respondents 70 (68.6 per cent) are from the lower income group, whereas 32 (31.4 per cent) are from the higher income group. Thus the lower income group dominates the sample. The distribution of rural and urban respondents was 30 (29.4 per cent) and 72 (70.6 per cent) respectively. It is clearly exhibited that most of the respondents belonged to urban areas as the selected educational institutions were from urban areas.

Table-1: Demographic Profile of the Respondents

Description	Distribution	Total	Percentage
Gender	Male	35	34.3
	Female	67	65.7
Category	Educators	78	76.5
	Learners	24	23.5
Family Income (per month)	Lower Income Group	70	68.6
	Higher Income Group	32	31.4
Domicile	Rural	30	29.4
	Urban	72	70.6

The present study aims to analyse strategies for effective education in the new normal. The study primarily tries to explore and identify the major challenges faced by educators and learners in the new normal. They have mentioned problems such as frequent issues related to internet connectivity, maintaining social distance while

coming to the Institution, fear while interacting with colleagues and friends in the new normal, emotional insecurity, risk of getting COVID while coming to an educational institution, lack of motivation, frequent interruption and lack of attention in online classes and keeping pace with the changing policies and technology during new normal. In

the present research, it is found that most of the respondents faced these challenges; the highly affecting issues are maintaining social distance in the new normal (80.4 per cent) and frequent internet connectivity issues (78.4 per cent), as depicted in table no. 2. Another challenge which is faced by most educators and learners is emotional insecurity (72.5 per cent) during times of crisis and in new normal situations. The challenge which has the least impact on

the respondents in the new normal, is fear while interacting with colleagues and friends (42 per cent). It is probably on account of the long absence of social interactions during severe pandemic times that the respondents welcomed getting an opportunity to interact with their colleagues and friends. It is believed that if they follow guidelines, maintain hygiene and take precautions, there is no fear while interaction with colleagues and friends.

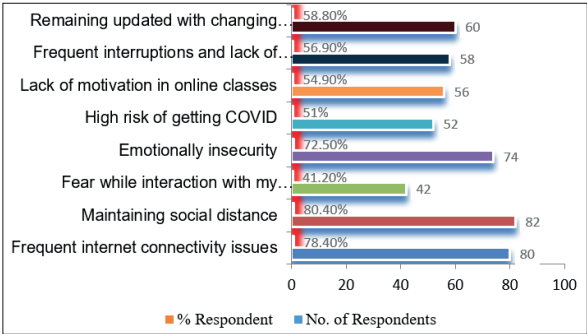
Table-2: Challenges faced in New Normal

Challenges	No. of Respondents	% Respondent
Frequent internet connectivity issues	80	78.4
Maintaining social distance	82	80.4
Fear while interacting with colleagues and friends	42	41.2
Emotionally insecurity	74	72.5
High risk of getting COVID	52	51.0
Lack of motivation in online classes	56	54.9
Frequent interruptions and lack of attention in online classes	58	56.9
Remaining updated with changing technology and policies	60	58.8

Figure 1 also demonstrates that approximately 75 per cent of respondents faced challenges of emotional insecurity, maintaining social distance, and internet connectivity issues and more than 50 per cent of respondents feared a high risk of getting

COVID, lack of motivation, frequent interruptions and lack of attention in online classes as well as keeping updated with changing technology and government policies related to education system in new normal.

Figure-1: Challenges Faced in New Normal



The study also explores the perception of educators and learners regarding a few feasible selected strategies which were based on an extensive review of recent research on this pandemic situation and strategies adopted by different countries to cope with challenges in imparting education. For the present research study, from the review of the previous literature, 11 educational strategies have been selected and studied for their appropriateness in the new normal for school education. These studied strategies for better adaptability and effective education in the new normal, include three learning (SL-1, SL-2, SL-3), two educators-related strategies (SE-1, SE-2) and six strategies related to institutional effectiveness (SI-1, SI-2, SI-3, SI-4, SI-5, SI-6). The respondents were asked to indicate their perception of the effectiveness and possible implementation of these studied strategies i.e. 'Dividing the learners into groups based on their accessibility to the Internet'(SL-1), 'Dividing the learners on the basis of their approachability to the educational institution with low risk of exposure due to transportation etc.'(SL-2), 'Dividing the learners on the basis of their level of learning and ease of learning in online classes'(SL-3), 'By categorizing educators on the basis of their ease of using technology for teaching'(SE-1), 'By categorizing educators on the basis of their willingness to be trained for adopting new methods of teaching'(SE-2), 'By providing online learning education more effectively

and increasing the quality'(SI-1), 'By providing Sports day, Activity day etc. for learners to make deal with social learning and emotional development issues'(SI-2), 'By adopting continuous classroom evaluation methods for substituting exams'(SI-3), 'By adopting oral exams more effectively as a substitute of final examination'(SI-4), 'By developing technology for better proctoring of online exams'(SI-5), 'By emphasizing qualitative assessment instead of quantitative evaluation'(SI-6).

To enable the ease of data analysis the selected strategies were pre-coded. Data were analyzed using descriptive statistics and the results of the descriptive statistical analysis of the perception of educators and learners regarding selected strategies are presented in table no. 3. The table exhibits the mean and standard deviation of different selected strategies. The mean scores of most of the selected strategies are above 3 and near 4, which explains that the respondents find these educational strategies highly significant in dealing with challenges faced in imparting education in the new normal. It may be inferred from the analyzed data that SL-1, i.e. Dividing the learner on the basis of their accessibility to the internet, is the least significant of these strategies with a mean score of 2.77. It is also evident that SI-2, with a mean score of 3.79, SI-5, with a mean value of 3.78 and SI-6 with a mean of 3.73, are considered the most appropriate strategies by both educators and learners.

Table-3: Descriptive Analysis of the Perception of Educators and Learners

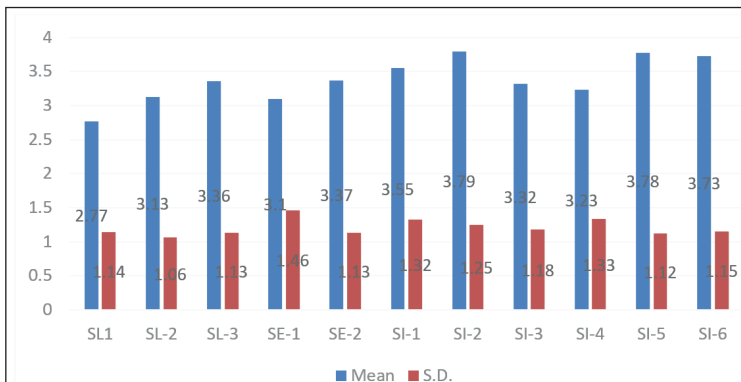
Strategies	Mean	S.D.
SL1	2.77	1.14
SL-2	3.13	1.06
SL-3	3.36	1.13
SE-1	3.1	1.46

Strategies	Mean	S.D.
SE-2	3.37	1.13
SI-1	3.55	1.32
SI-2	3.79	1.25
SI-3	3.32	1.18
SI-4	3.23	1.33
SI-5	3.78	1.12
SI-6	3.73	1.15

The figure 2 also depicts the descriptive statistics related to the respondents' perception about the studies strategies, which could be effectively implemented, to face the challenges in new normal

in school education. And it is definitely clear that educators and learners both find all the selected strategies significant as the have mean score higher than 3, except SL-1.

Figure-2: Mean & S.D. of the Perception of Educators and Learners



Analysis of the difference in Perception regarding the Studied Strategies

H0: There is no significant difference between the perception of learners and educators about the select education strategies in the new normal.

The research study statistically tested the difference between the perception of educators and learners, with regard to different selected strategies, using the test of difference of means i.e. Z-test. The outline of each test is provided below in the table no. 3. The null hypothesis that H0: There is no significant difference between the perception of educators

and learners with regard to different selected strategies, is statistically tested, whether the value of Z-test is higher than 1.96 and lesser than 2.58, it is significant at 5 per cent level. If the value is greater than 2.58, it is significant at the 1 per cent level, and the significant value indicates that the null hypothesis is not accepted. The test result given below shows clearly that there is a significantly high difference in the perception of educators and learners regarding SE-1 with (Z=2.74, p<0.001). It means that educators and learners perceive differently about categorizing educators on the basis

of their ease of using technology for teaching. Similarly, for SI-1 i. e. providing online learning education more effectively and increasing the quality, the Z-test value is 1.99 ($p < 0.05$), and for SI-3, i.e. adopting continuous classroom evaluation methods for substituting exams, the score is $Z = 1.99$ ($p < 0.05$). Therefore, it is evident that i.e. there is a significant difference in the perception of educators and learners regarding these strategies.

Contrary to the difference in the perception of educators and learners regarding strategies, the results of SL-1 with ($Z=0.05$, $p < 0.05$), SL-2

with ($Z=0.67$, $p < 0.05$) and SL-3 with ($Z=0.73$, $p < 0.05$), show that there is no significant difference in the perception of educators and learners regarding these strategies. Similarly, the Z-test scores of SE-2 with ($Z=0.42$, $p < 0.05$), SI-2 with ($Z=0.09$, $p < 0.05$), SI-4 with ($Z=0.04$, $p < 0.05$), SI-5 with ($Z=0.52$, $p < 0.05$) and SI-6 with ($Z=0.08$, $p < 0.05$) aptly depict that the perceptions of educators and learners regarding these other strategies do not differ significantly. Therefore, it can be concluded that both, educators and learners find all the studied strategies significant for coping with the challenges of the new normal in school education.

Table-4: Descriptive Analysis of the Perception of Educators and Learners

Strategy	Category	Mean	S.D.	Z-value	(2 tailed)
SL-1	Educator	2.65	1.11	0.05	NS
	Learner	3.17	1.17		
SL -2	Educator	3.10	0.97	0.67	NS
	Learner	3.21	1.32		
SL-3	Educator	3.38	1.01	0.73	NS
	Learner	3.29	1.49		
SE-1	Educator	3.54	1.34	2.74*	S
	Learner	1.67	0.76		
SE-2	Educator	3.42	1.18	0.42	NS
	Learner	3.21	0.98		
SI-1	Educator	3.33	1.33	1.99*	S
	Learner	4.25	1.03		
SI-2	Educator	3.68	1.27	0.09	NS
	Learner	4.17	1.09		
SI-3	Educator	3.73	0.89	1.99*	S
	Learner	2.00	1.02		
SI-4	Educator	3.08	1.29	0.04	NS
	Learner	3.71	1.40		

Strategy	Category	Mean	S.D.	Z-value	(2 tailed)
SI-5	Educator	3.74	1.11	0.52	NS
	Learner	3.92	1.18		
SI-6	Educator	3.62	1.15	0.08	NS
	Learner	4.08	1.10		

Discussion and Conclusions

The study aims to understand different learning strategies based on learners, educators, and institutions, which could be effective in the new normal. In order to explore, the effectiveness of selected educational strategies and how educators and learners perceive them, by using the structured instrument, the data was collected. The collected data was analyzed using descriptive statistics. The result of this study provides a clear understanding that there is a significant difference between the perception of educators and learners about these strategies. The research was carried out by adopting a descriptive quantitative, that used a questionnaire for data gathering. From the study, it can be safely concluded that the issues which have a greater impact and impose major challenges on all the educators and learners in the new normal, are mainly related to social distancing, managing emotional insecurity and dealing with internet connectivity issues.

The present study also establishes that most of the studied strategies are found significant by both learners and educators for coping with the challenges of the new normal. Both educators and learners are in favour of the adoption of the studied institutional strategies, to deal with the challenges of the new normal. Among the selected strategies, learners based strategy i.e. 'dividing the learners on the basis of their approachability to educational institutions with lower risk to exposure due to transportation' and 'dividing the

learner on the basis of their level of learning and ease of learning in online classes' was found more appropriate and acceptable, than 'dividing the learner into groups based on their accessibility to internet'. It is established that both learners and educators believe that all learners should get better access to the Internet. The outcomes of this study support the conclusions that students prefer mixed-mode learning to e-learning (Tagoe, 2012), and students found blended e-learning, as suggested through some of the strategies in the current research, to be more appealing than web-assisted learning (Sharma and Alvi, 2021) adopted during a pandemic.

The present study also establishes that educators and learners are growing more adaptable to innovative educational strategies. The result throws light that imparting education in the new normal requires immediate attention from educational institutions to cope with the challenges of the new normal. From the current study it can also be concluded that educational institutions need to immediately deal with the rapidly changing needs of educational services. The research revealed that in the new normal, educational institutions should implement the studied strategies as per the needs of the environment and should help in curbing the anxiety and fear of the learners and become more effective as well as efficient in delivering educational services.

Recommendations and Suggestion

In uncertain times appropriate

measures are needed to be undertaken by Educational Institute to promote the development of an effective education system. Educational institutions should encourage for implementation of innovative learning Strategies and assist in making them more successful. Effective implementation of these learning strategies would help in filling the learning gaps created by the COVID-19 situation and also assist in coping with the challenges imposed on the education system by the Pandemic crisis. It is recommended that educational institution should empower their educators to take the initiative for the effective implementation of innovative learning strategies. A developed and effective education system is not only, needed to enhance knowledge and prepare learners mentally and professionally, but it is also required to maintain economic sustainability and global advancement. Educational institutions and educators must undergo training programs to maintain the quality of education.

De-limitations

There are some restrictions of this study that need to be acknowledged. One significant constraint of the research is the limited number of respondents in the sample. The study requires further empirical analysis with a larger number of respondents for generalization of the inferences drawn from the study. Secondly, the present research uses a self-rating questionnaire as measuring instrument, which might result in response bias as participants have a tendency to share socially appropriate responses instead of giving genuine responses. The study studies selected strategies to cope with the challenges in the new normal, but it did not throw much light on the other possible strategies which could be adopted and be a success. The study focuses on the challenges faced by Indian schools

which are struggling to provide quality education in the new normal. However, considering the Indian scenario, all the educational institutions might not have suitable resources and infrastructure to implement these studied strategies.

Educational Implications

The present study will be advantageous for initiating successful learning strategies for students and educators as they are experiencing several challenges in the new. Learners and educators need to attain educational goals for which they require a face-to-face class schedule to learn, teach and effectively practice, but are unable to achieve so due to the pandemic crisis. Very few studies have empirically investigated the learning strategies, which can be successfully used by learners, educators, and institutions to deal with challenges imposed on the education system in the new normal. The present study aims to close this gap in the literature by taking a look at the use of these learning strategies and their impact on the perception of educators and learners. The finding of the current research would help in improving educational practices, as the basic objective of the study was to recognise successful learning strategies in copying these challenges. The study results will be useful to academicians, policymakers, teachers, psychologists, and research scholars in enhancing the educational achievements of learners in the present times of uncertainty due to this crisis. It will be beneficial in being prepared for such an unpredictable situation and in the effective implementation of innovative learning strategies for different types of learners. The study might well be helpful to schools and teachers in identifying effective teaching and learning practices by providing a better understanding of the challenges of learners and educators.

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