A RADICAL SHIFT IN TEACHING AND LEARNING APPROACHES IN GOVERNMENT SCHOOLS IN CHENNAI –A POST PANDEMIC SCENARIO

ABSTRACT

Education cultivates our perspective in life. The purpose of education in a child's life is to prepare him/ her for an unpredictable world. The pandemic has had a devastating impact on mankind andin education too. All around the globe there was a surge in engaging with online teaching and learning. From video interactions to online discussions, it was "anytime anywhere learning" which became predominant. Pedagogy got a new meaning altogether with the dawn of the pandemic. Thiscrisis has given an opportunity to educational institutions to adopt an alternative pedagogy to facilitate academic activities in the virtual world without compromising the safety of the students. But the question which persists here is that none of them provide a viable solution on how to function in a society which is marked by digital divide. The Tamil Nadu government gives the highest priority to bridge the learning gaps which occurred during the pandemic. In this paper the author attempts to analyze the implications of academic schemes introduced by the government to bridge the learning losses caused due to the closure of schools during the pandemic. The paperventures into finding the effectiveness of the implementation of schemes for education purpose. Finally, the authors alsosuggest ways in which communication technologies can also be used fora hybridmode of learning to face challenges during school closures due to disasters, natural calamities and pandemics.

Keywords: *Government Schools, Pedagogy, Digital divide, Academic Schemes, Communication technologies.*

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Rabindranath Tagore once said "Everything comes to us that belongs to us if we create the capacity to receive it". Gurudev told the world about education even before independence. Today in 2020 we are facing a situation where we are creating new capacities to continue with our educational endeavors. When did we last see a school full of children? Sometime in the third week of march India decided to close down all educational institutions to prevent the spread of the novel corona virus. It has indeed had a great impact on the continuity of all the academic activities across the nation. Using the exception's justification—that extraordinary circumstances require extraordinary action- one common trend in education systems around the world has been to respond to the pandemic with "emergency e Learning" protocols, marking the rapid transition of face-to-face classes to online learning systems[1]. At the dawn of this pandemic, pedagogy got a new meaning altogether. The use of educational technology in the classroom is crucial now more than ever because of the use of information and communication technologies[2]. This crisis has given a great opportunity for educational institutions to adopt an alternative pedagogy to facilitate academic activities and to continue in the virtual world without compromising the safety of the students. Digitally available resources are not new and they have been evolving over a decade now. Effective teaching often escorts innovative pedagogical use. It has also included with it the necessity of providing training to induct innovative methods[3]. Meeting on digital platforms like zoom, Skype, Google Meet, Microsoft Teams and Google Duo and even WhatsApp. The feasibility factor is a major concern when it comes to online mode of learning. Added to these are elements like internet accessibility, the cost of an online system, laptops, desktops, hardware, and software, etc. Teaching prior to now focused on interpersonal relationships, connections, and bonds between teachers and pupils. The pandemic has forced us to rethink about this concept of work fromhome (WFH).

"The highest function of education is to bring about an integrated individual who is capable of dealing with life as a whole" – J Krishnamurti. Education is and has been one of the most important index of human development, economic growth and definitely empowerment. Globalization and liberalization coupled with the Information and Communication technology revolution has both pros and cons. Governments across all states in India have been coping with and responding to the problems due to closure of educational institutions. Tamil Nadu has been no different. Varied socio-economic, technological and other lapses are highly responsible to handle the disruptions and the reactions caused due to the Covid-19 lockdown. The government of Tamil Nadu under the leadership of Thiru M.K Stalin and his education minister Thiru Anbil Mahesh

Poyyamozhi have taken every possible step to bridge the gap created due to Covid-19 pandemic lockdown.It is a welfare state where public policy initiatives have always been a benchmark for social justice. The study attempts to explore how the launch and implementation of various academic missions not only tried to reduce the learning losses caused due to pandemic lockdown but also increased their creativity and self-confidence of the students. Public education in Tamil Nadu is attracting attention of the academia across the world. A study carried out on the impact of Covid-19 on learning Abhijeet Singh, Associate Professor of Economics at the Stockholm School of Economics, Mauricio Romero, Assistant Professor of Economics at Instituto Tecnológico Autónomo de México (ITAM) and Karthik Muralidharan, Tata Chancellor's Professor of Economics, University of California, San Diego. The working paper was published by the Research on Improving Systems of Education (RISE) programme, an international study programme that focuses on how learning crises in educational systems can be solved in developing countries[4]. Even before Independence education has always been a priority for Tamil Nadu. Almost 70 years later, public education is experiencing yet another renaissance and has attracted attention -a recovery of two-thirds of the learning loss caused by Pandemic lockdown. Keeping this in background the researchers in the paper have analysed the schemes introduced by the Tamil Nadu government exclusively for its students in the post pandemic times.

Illam Thedi Kalvi or 'education reaches home' scheme launched on October 2021, a brainchild of Tamil Nadu Government. A scheme to help students against the vacuum created by the lockdown. Two lakh volunteers were recruited with a stringent filtering system, trained and sent out to reach children at their homes to compensate for the losses during pandemic. The school management committee got the task of choosing the volunteers. The scheme aimed to enroll one lakh students who are already in Government or Government aided schools. Devised in accordance with the inputs given by educationists, UNESCO along with Economic Advisory Council for State Government. School students who are already enrolled with government schools are eligible for the scheme.The programme was intended to be put into effect for a period of six months in order to provide educational skills to kids who have been missing classes since lockdown. As part of the scheme volunteers will take course classes close to the homes of scholars after faculty hours from 5 pm to 7 pm regularly. Around six hours of courses were held for each cohort of scholars. Other than members of the local NGO parent volunteers were also invited to participate in the scheme.

Volunteers should know Tamil to communicate with the students. They must teach Tamil, English and Mathematics subjects to the students[5].

Along with this initiative, the "Read Along" software was released by the state school education department in collaboration with Google to support students' reading instruction. In order to ensure that all pupils read with comprehension, Chief Minister M.K. Stalin announced a cooperation at a meeting to strengthen language formative reading assessments as part of the "Ennum Ezhutum mission." It can also be used in English laboratories as a tool to enhance students' reading and speaking abilities. To support the project, the app will be fed with state-licensed content. (New Indian Express 6th May 2022)

An extension of the Illam Thedi Kalvi programme is the **"Ennum Ezhuthum" scheme,** another milestone initiated with the aim to ensure that by 2021 students by the age of eight possess reading, writing comprehension and basic arithmetic skills.An event was held at the Azhinjivakkam panchayat union middle school in Tiruvallur to launch the programme, which included a special training programme for teachers and the distribution of handbooks. The education department felt that ordinary classrooms alone could not bridge the learning gap, thus this programme was started to assist each child individually.Around 92,300 (approximately) primary school teachers attended the session who were invited to express their opinion and also provide suggestions for the scheme. Tamil, Mathematics and English were the subjects which were chosen will be taught to fill the learning gaps. Workbooks from Grades 1 to 3 were provided to the children and teachers were encouraged to use singing, dance puppetry and storytelling to deliver the lessons to the students.A high-level committee has been established to oversee the full implementation of this plan and ensure that every lesson has been created using dance, singing, puppetry and narrative to make every element of learning engaging and appealing..

Another exclusive initiative by the Government of Tamil Nadu again keeping in mind the welfare of the students and the teachers is the TN EMIS portal (Educational Management Information System). The purpose of this initiative is to store data and provide quality education to students. Using the official website students can get access to various online courses, educational videos etc. A unique code of 8 digits is generated for each school which is the EMIS number and the access code. The portal is exclusive for student attendance and both teaching and non- teaching staff details. The Chief Education Officer (CEO) audit all the information that come under the district jurisdiction.

The chief minister of Tamil Nadu announced the free breakfast programme for students in primary schools as well as the nutrition programme for children who are malnourished to commemorate the first year of the DMK administration. The programme was implemented for pupils in grades I through V, and the state's chief minister, Mk Stalin, saw to it that kids in the state are fed adequately. However, free breakfast plan is not new. Tracing back history, Theagraja Chetty, the then President of the Corporation (Mayor) of the Justice Party, in the past has approved the proposal to provide tiffin to the children of a Corporation School.

Apart from the above schemes many other schemes like **Pudumai Penn Thittam**-a scheme to increase the ratio of girl students who decides to take up higher education. Government proposed the financial assistance in 2022-23 budget, a sum of 1000 rupees who studied class 6 to 12 in government schools without any interruption.

Yet another initiative by the Government of Tamil Nadu towards a holistic development of a child is the **Sports Battery Test**-an initiative to ensure the physiological needs of sports with the help of the Tamil Nadu Sports Development Authority. The test will be given to students in grades VI through VIII at the start of the academic year. The government ensures a complete database of the students' physical fitness across the state by recording it in a mobile application.

Review of Literature- The school education in India is indeed the largest in the world. Particularly for those who have been who have been socially and economically disadvantaged. To improve access to quality education a number of initiatives have been undertaken both at the center and the state level. The government sector has made evident attempts to provide the children with what they need and want—quality education leading to greater life opportunities—despite thriving competition from the private sector.[6].

Blended learning is not new. A term given to the educational practice of combining digital learning tools with more traditional classroom face to face teaching. It is a situation where both the student and the teacher are physically located in the same space. The author in the paper has also mentioned about the flipped classroom model that aims to utilize technology to rearrange the learning experience and maximize the effectiveness of valuable face to face time in classroom[7].

A few decades ago, teaching and learning were improved by the use of technical tools including radio, television, film strips, OHP, audio, and video cassettes. With the use of ICT (Information and Communication Technologies) for applications in the areas of communications and multimedia. It offers information access through a number of services. The authors of the paper

highlight the existing educational environment and concentrate on integrating ICT in the sphere of education.[8].

The Digital Divide has long been a topic of extensive investigation, discussion, and conjecture regarding all possible outcomes. The difference between people who have access to ICTs and those who do not is discussed in the article. According to the author, the digital gap can be divided into three categories: global, regional, and national. The digital divide between rural and urban areas in the context of this particular study mainly refers to tele density, mobile, and internet disparity.[9].

The Covid-19 pandemic has presented a significant obstacle to the global educational system. One of the main issues for all institutions in the last few decades was reassuring students, professors, institutional heads, and officials about how to address the crisis. Asynchronous learning is what the author has suggested which works best in digital format. The author also stressed on different types of assignments for students to put Covid-19 in a global and historical context. Emphasis was also put on flexible ways to repair the damage to students' learning trajectories once the pandemic is over[10].

The closure of educational institutions globally starting in March 2020 has had a significant impact on the global education system. The tight engagement between teachers and students as a result of online learning has changed how teaching and learning are done. The authors thus against this backdrop, have found relevant to analyze the perception of students and the challenges of online classes during Covid-19. Survey method using Google questionnaire was used in Delhi and 385 secondary school students from grades 8 to 12 were chosen in the months January to February 2021. Descriptive Statistics, Chi-Square Test, Factor Analysis, Reliability Test and Logistic Regression, were used for analyzing the data. Aim was to encourage policy makers and educational institutes to handle online classes in a better way by applying latest techniques of online classes and reduce digital divide[11]

Another study which aims to address the state of teaching- learning during the Covid-19 pandemic by assessing the pedagogies used, best practices used and technologies used in higher education institutions. This study also analyses the impact of online academic motivation of the teachers on the student during the remote learning period. It uses a mixed technique of qualitative and quantitative approach for the analysis. The Data used have been taken from educationists teaching in various HEIs. The entire paper stresses on students' functioning from an educator's perspective [12].

When choosing the method of data collection, consider this intriguing study from the area of pedagogic research in higher geography education. The study also focusses on guidelines on using focus-group studies, ethical issues involved, review of the purpose of pilot study, few common focus-group studies and its reporting style[13].

The India Report on Digital Education 2020 contains all possible initiatives by education departments of both and State Governments and Union Territories to meet the challenges brought by the Pandemic. Resilienceof the education system to take hold, and it started to react quickly and creatively. The government of India's then-minister of human resource development spoke about all the digital initiatives established at the time, making the most of both state-level and federal resources and programmes to effectively reach the most disadvantaged segments of society in the long run. This report served the purpose of cross-learning, adapting and adopting the best practices across all states in India. The report contains several initiatives undertaken by each state that time to address the challenges of remote learning to assist students, teachers in their pursuit of education. The School Education Department of Tamil Nadu also started a number of programmes, such as the Tamil Nadu Teachers Platform, to give teachers the training and resources they need to create interesting and high-quality lessons for their students. Student learning outside of the classroom was encouraged through KalviTholaikatchi, another unique education channel that streams programmes linked to state curriculum for instructors and students. The Tamil Nadu government's TNSCERT, a significant effort, offered more than 3390 channels that covered a range of subjects.[14].

The Government of Tamil Nadu conducted an after-school remedial programme run by volunteers for 1 hour each day after school hours in anticipation of the difficulties in addressing learning loss when schools reopened. The paper presents a large panel dataset from the representative sample of rural students in Tamil Nadu. Data available for them was the household census conducted in 2019 in 220 villages, which includes cognitive tests for all children aged 2-7 years as a baseline. Each student was revisited once in 2021-22 and the timing of these revisits was randomized within village. The Tamil Nadu Illam Thedi Kalvi programme was thus chosen by the authors as the subject of their research in order to serve as a beneficial model for both recovering from Covid-19learning losses and closing the gaps in other low- or middle-income nations.[4]

Objectives

The study was conducted between November and December 2022

➢ To analyse and apply two theories in context of the study- Actor-Network Theory and Constructivsim.

➢ To analyse the effectiveness of two major schemes introduced by the education department of Tamil Nadu mainly- Illam Thedi Kalvi and Ennum Ezhtum.

➢ To understand the volunteer's perspective towards Illam Thedi Kalvi Scheme and teacher's perspective towards Ennum Ezhtum scheme.

Methodology

Social science research is a methodological approach that collect and analyse data for the purpose of finding an answer and or meaning of social issues[15]. It focuses on acquiring and comprehending non-numerical data in order to interpret social and human contexts. Research method could be either a qualitative or a quantitative in its nature The paper is based on qualitative research and has particularly used Focus Group and In-depth Interview as tools to collect data. It also involves content analysis as another method to assess the implications of the Tamil Nadu initiates schemes for students.

Six government schools were chosen for analysing the implications of the schemes- Illam Thedi Kalvi and Ennum Ezhtum. 50 students from each school were chosen for focus group interview for both Illam Thedi Kalvi andEnnum Ezhuthum Scheme. Out of these students, 30of them were selected for Illam Thedi Kalvi, and 20 students were selected for Ennum Ezhutum scheme.A total of 6 focus groups discussions were conducted in allschools. Each group had five students All the student respondents are from the primary section of the government schools selected for the survey.12 teachers were chosen for In-depth interview to understand their perceptions about education especially in post pandemic scenario and how government has taken initiatives to fill those learning gaps post pandemic. 6 volunteers werechosen as part of the Illam Thedi Kalvi scheme for analyzing their experience about the entire initiative.

Theoretical Framework

Actor-Network theory is a methodological approach to social theory where everything occurs in dynamic networks of relationships where all the elements in a social situation are on the same level. Objects, ideas, processes and any other factor which can be technology as well are

considered important in creating social situations as humans. This theory in particular provides a lens through which the role of technology is identified and considered to have an active role in this context. This theory maps relations that are simultaneously material and semiotic as well. A school for example can be considered as an entity that can act both as a network and an actor. Interactions in school involve teachers and children who comes regularly to school, chairs tables, computers networks, both hardware and software which works hand in hand to form a coherent whole. This network may look at explicit strategies for relating different elements together into a coherent whole. Bruno Latourexpanding on his earlier work, he argued that networks of connections between human and non-human agents may be used to understand how scientific knowledge is produced. Many social scientists praised this method for its novel and creative approach to the study of science.

Constructivism emphasizes on prior knowledge. To solve existing problem, they try to recall prior knowledge. This is more relevant for children where they try to connect and create a new world of their own with prior knowledge. It also involves active participation of the students. The concept of Scaffolding is closely connecting to constructivism. According to Vygotsky, Scaffolding has a tight relationship to constructivism. He identified three categories for the students' problem-solving abilities:

a) Can perform independently

b) Cannot perform even without help

c) Can perform with help

The task that students can complete with assistance is in the learning zone. The phrase "Zone of Proximal Development" describes this area (ZPD). It can be equated to a "Construction Zone" where students receive just the proper amount of help from peers and the teacher to finish the assignment effectively. Thus, in a constructivist classroom learning happens where teachers provide assistance or scaffold by guiding students within their ZPD

Theoretical Application

The current study deals with education and the authors have suggested as to how communication technologies like Smartphones, Desktops laptops can help the entire process of education. It seeks to understand and articulate the interrelationships among two disciplines-education and technology. The authors in the paper have spoken about the Covid-19 lockdown has

created the learning gaps and how the Government is trying its best to fill those gaps. In this context the authors have suggested how communication technologies can support and eventually empower children irrespective of socio-economic status. Covid-19 pandemic was a lesson for all of us to realize that children today will face many more new challenges in the near future. Therefore adopting, if not advanced, basic technologies which can take care of the studies on days is the most important factor to survive in this digital world, to further create network, to create new meanings, new knowledge and new forms of interactions to survive in an increasingly digital world. Thus, using communication technologies like basic smartphones which act as networks to emphasize and reinforce and create an imaginative picture themselves undoubtedly with the teacher's help who provide assistance to them. Post Covid-19 time when the government realized a learning losses amongst school students the schemes like Illam Thedi Kalvi and Ennum Ezhutum schemes were the two most relevant solutions. Adding basic technology, just as an aid is what the authors are suggesting which can be as a hybrid model of education in times of crisis.

Illam Thedi kalvi Overall Focus Analysis

How useful did you find the program ?
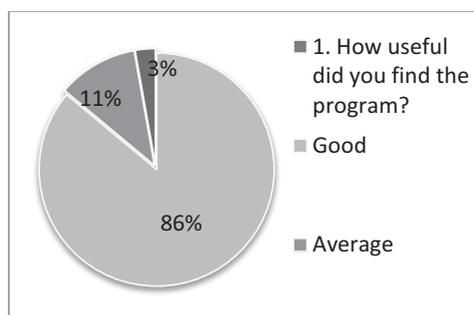
Were you comfortable learning after long school hours ?
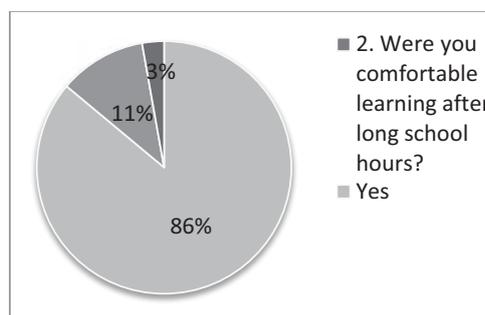
Did you find the reading material to be sufficient ?
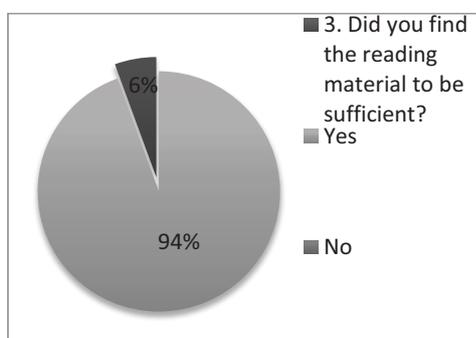
How was learning experience with the volunteers?
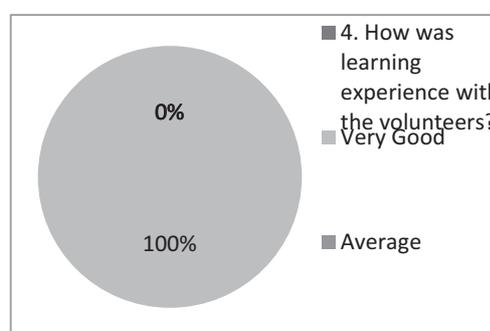
Did you face any difficulty with volunteers while Learning ?
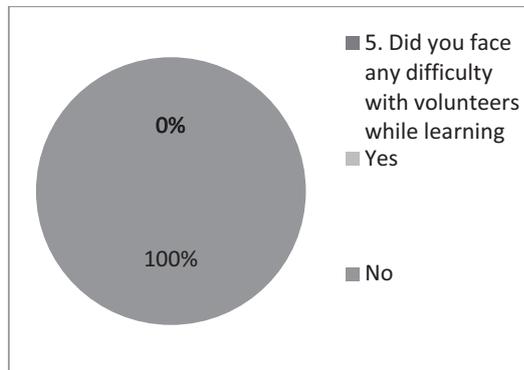
Did you find any difference in teaching between a volunteer and a school teacher ?
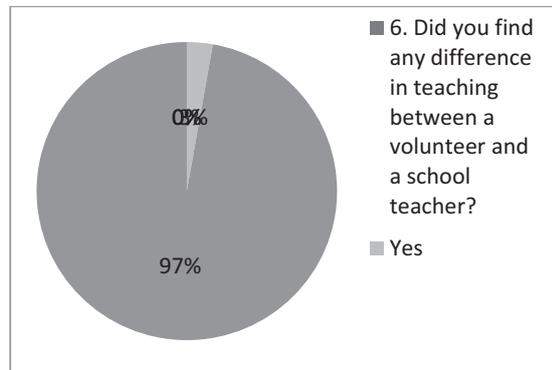
Did the scheme help you in your homework ?
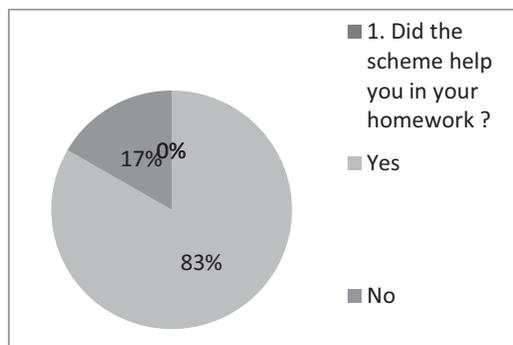
How did you find the volunteers?
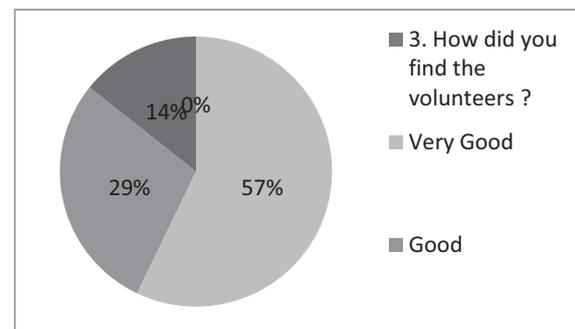
Did you learn anything new while the scheme was imparted ?
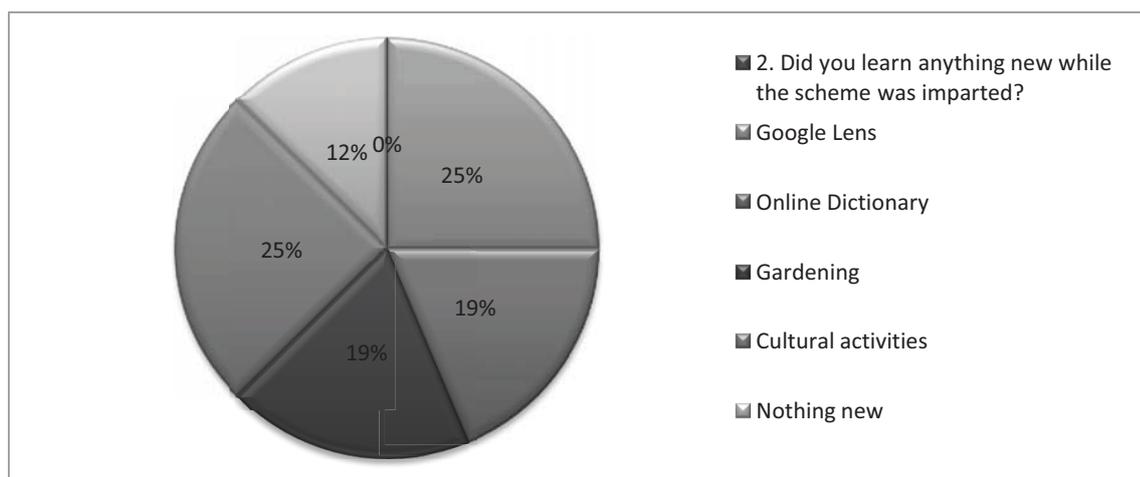
Students agreed that the Illam Thedi Kalvi scheme was useful especially post pandemic it was welcome change for all the students when the parents of these students were looking for someone to help their children for the learning losses that has happened in 19 months. Reading material given were easy to understand and the volunteers were always ready to reinforce the existing concepts. Students were comfortable with the volunteers as they were very patient with the students always. Sessions were highly interactive and students were never forced to learn anything. Play way method, social interaction which was totally no there for so many months.

Ennum Ezuthum Overall Focus Analysis

Do you find the Ennum Ezuthum sessions easy to follow?
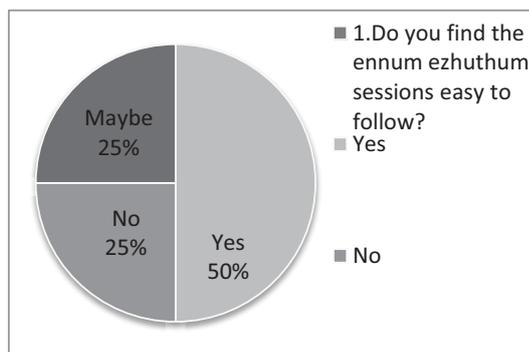
Do you have fun in learning numbers and? languages?
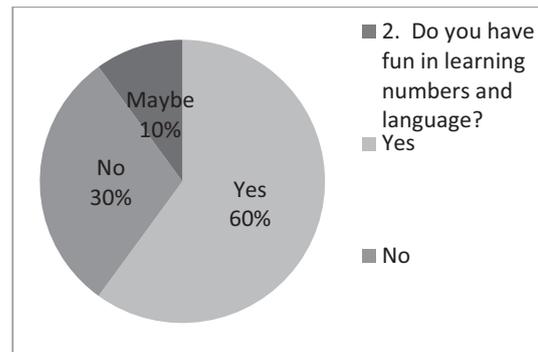
Do you find english hard to follow? Regular?
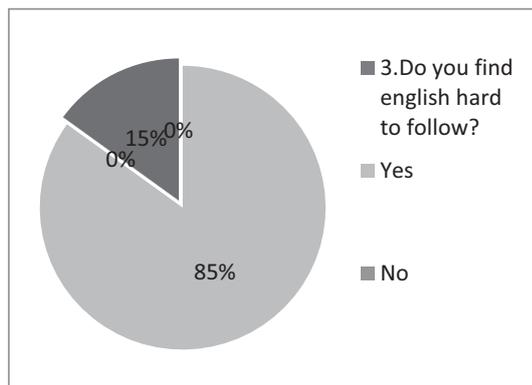
Are you still finding it difficult to come with Classes
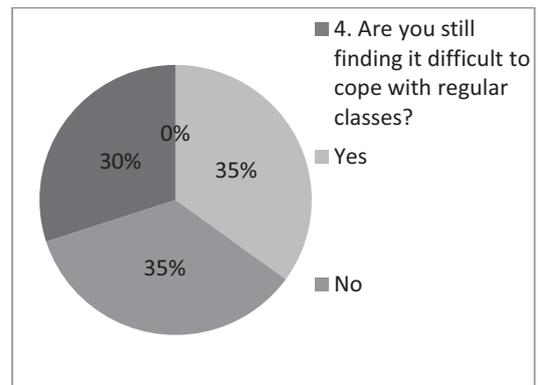
The researchers had a very positive learning experience from the programme. According to the focus group interview with students, both teachers and students found it to be an overwhelming experience to see their teachers again after 19 months. The students found it simple because they were studying with their own teachers at school. Teachers no doubt had a huge responsibility to bridging the gap and ensuring foundational literacy and numeracy by 2025. Teachers in the schools who were chosen to work for the scheme did a phenomenal job by identifying students who were very weak, who were little better and who were ready for the next level. Languages were taught with each letter on different chart papers and connecting words with each letter. Similarly, each number were also put in the chart papers and additions and subtractions were shown with creativity and ease to explain concepts in a lucid way.

In-depth Interview are methods of collecting qualitative data that allows a researcher to gather information about the behavior, attitude and perceptions of the respondents who are part of the sample. Multiple strategies can be adopted according to the needs of the research in In-depth interview. For the study in- depth interview methodology was taken to understand the perceptions of teachers who are into Ennum Ezhutum scheme. Volunteers who registered for Illam Thedi Kalvi scheme were also selected for in-depth interview.

Illam Thedi Kalvi from a Volunteers Point of View:

Illam Thedi Kalvi to begin with was an excellent initiative adopted by the government to help students catch up. By involving volunteers into the education system, it not only helped to supplement what the students had forgotten but also helped the weaker students to catch up and the good students to further strengthen with practice. Volunteers' selection involved a standard SOP of an interview and computer test to check whether they are eligible. Initially students came regularly and there was hardly any difference in the attendance when compared with pre covid times but the moment school started, it became difficult for many students to continue for another hour. The reasons were a mix of issues such as students getting exhausted after 8 hours of school or parents not being able to come later to pick them up due to time or their professional work constraints. Most importantly since it was not compulsory, it became very convenient for students and their parents to simply stop coming and avail the extra classes.

Ennum EzuthumfromTeachers point of view:

The government has taken great care to provide books which are colourful and inculcate creativity in the child. The EMIS app which has been built such that student progress can be regularly updated. The government has taken extra care in creating a software which will keep track of each student's progress with assessments and evaluations. The students are themselves have been very eager to use the study material, however it was found that English was not an accepted so easily across all schools. Teachers also took the responsibility of identifying students who were not able to cope with the syllabus and introduce new and innovative methods to teach them. Students were able to approach problems in Maths more easily and were able to relate to tamil very easily. On the whole a very good scheme, however more importance to be given in giving practice.

Conclusion:

Learning cannot happen in isolation. Classroom environment, teachers being in front of the students in class continuously, explaining, answering to the student's queries and initiating debates and discussions. Experiments in science subjects cannot happen virtually. Social sciences to a great extent can do some justice but again face to face discussions, brain storming in class with anecdotes makes a huge difference. For brains to remain active it is important for students to go to school every day. That is what the Tamil Nadu Government's vision is and to a great extent it has been successful by introducing different schemes and executing them for a better future of the students of Tamil Nadu. Now it's time that we think differently, learn some deep lessons from this crisis and endorse a new path of redefining education. The authors suggest a hybrid form of learning for the near future. Little and gradual improvements rather than a radical overhaul always serve as a reminder for all of us to comprehend and utilize accessible communication technology effectively and continuously. We all belong to a society where education has forced us to become logical, and focus on our career is priority, with very less space for spirituality and sometimes ethics too.

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