

Impact of Kalvi (Education) Television Programme in Learning Science among High School Students in Tamil Nadu

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ABSTRACT

A student's academic performance is determined not only by the understanding of the subject in the school environment but also by the student's ability to learn that subject at the school level. If the school environment is not friendly, this should provide students with another alternative teaching method, allowing them to study their subjects online. To meet their academic needs, teachers can choose another way to share their lessons with students. Kalvi TV is one of the most important tools for the student community to fill gaps in subject and study skills. In the school curriculum, science subject is considered the most important factor in determining a student's success in future careers and other academic development. To strengthen students' scientific knowledge, we can teach science subjects online and improve their study skills to become masters of science subjects. To engage students and meet their needs without interrupting the school year, an alternative the Kalvi TV programming is the best TV broadcast to improve their study skills and academic performance. Modern society provides students with various educational opportunities to study their subjects. However, some natural disasters can disrupt daily educational activities, thereby affecting students' learning. Note the need for some alternative arrangements to keep students' skills and knowledge up to date, etc. Kalvi TV is one of the best media for students to study subjects within their own time constraints. Kalvi TV programmes provide the student with theory and a flexible way of learning, and they also make them more creative and active giving them benefits in learning.

Keywords: Kalvi TV, Learning science skills, Academic Achievement

Introduction

The Tamil Nadu government is pioneering the use of digital technology to improve governance, enable teachers to educate students and improve resource utilisation, resulting in excellent results. We are working hard in this direction to promote digital learning so that both students and teachers can further improve their learning and teaching skills by taking full advantage of the digital platforms available.

As a precautionary measure, all schools were closed to limit the spread of COVID-19. Students have been severely affected by the lockdown as the 2019/20 academic year could not be completed normally. Students were confined to their homes for safety reasons, with little or no access to structured learning materials for study, practice and tutoring. Due to the COVID-19 crisis, all students were confined to their homes with no access to classrooms and schools. During the school's extended emergency break, they had little opportunity to deal with science content and practice. When school students, especially younger students, spend extended periods at home without regular school attendance in conditions similar to those during the summer break, large numbers of students are at significant risk of declining academic performance during this period.

Without access to learning content, practice and appropriate remedies, learning gaps can be observed when students return to school after the lockdown crisis ends. This could have a measurable negative impact on the academic performance of students of all ages in the next school year. The amount of time teachers spend closer to their students' classrooms can also have a major impact on the pace of the dissemination of academic content planned for the school year. With these aspects in mind, the Tamil Nadu Government has launched several initiatives to support students and teachers during the lockdown. These initiatives focus on the ongoing engagement of teachers and students to enhance students' science study skills and academic achievement at the high school level by creating multimodal learning opportunities.

A day after the Tamil Nadu government launched the course through its Kalvi TV programme, activists and other stakeholders highlighted fundamental issues in the project's

implementation. From accessibility and awareness issues in the state's tribal and mountain regions to addressing concerns for students with learning disabilities, grassroots workers and experts are calling on the state to do more for the initiative.

In school education, science subject is considered important as it helps to develop students' innovative abilities, creativity, etc. Learning from science is more important than learning from textbooks. Teachers can use textbooks to teach science subjects, and it is not enough for students to memorise.

Kalvi TV is one of the leading platforms helping students improve their science learning through its programming. Kalvi TV shows are specially designed for learners to study science subjects without the help of a teacher. In general, students are very interested in watching television and programmes to enhance their science studies. Kalvi TV programme provides students with an authentic classroom environment where they can truly enjoy science subjects and study independently. Today's students have the opportunity to watch the Kalvi TV programme on their smartphones. It is also an inexpensive way for learners to watch shows through the Kalvi TV programme.

Kalvi TV Programme

The Chief Minister of Tamil Nadu launched a distance learning programme for students in the state through the state government's education programme Kalvi TV. Widely hailed as the idea of making students in public and public schools equal to those in private schools, the government launched online education, Kalvi TV, which broadcast videos every half hour from dawn to dusk.

Learning Skills in Science

Science is one of today's frontier fields, continuously gaining recognition through discovery and invention. Science is one of the most interesting subjects anyone can learn in school life. Curiosity and a desire to improve their lives lead many to turn to science and eventually become experts in the field. Students

should master all of these skills, and they are becoming the best and brightest in the field of discovery and curiosity. The following are science study skills:

Observation: This is the most fundamental skill in science. Observe with the five senses. Good observation is essential for learning other scientific process skills.

Communication: Being able to share our experiences is important. This can be done through graphs, charts, maps and spoken language.

Classification: After making observations, it is important to note similarities and differences and group objects according to specific purposes. To understand the number of objects, events and living things in the world, it is important to create order.

Inferring: Inferences are interpretations based on observations. It is the link between the observed and the known.

Measuring: Measuring is important when collecting, comparing, and interpreting data. It helps us categorise and communicate with others. The metric system should be used to understand the scientific world.

Predicting: This is an educated guess based on good observations and inferences about observed events or prior knowledge.

Improving students' science study skills and academic achievement is related to becoming familiar with the skills that help students master science subjects and help them invent innovations in science and technology.

Objectives of the Study

- 1 To assess the level of learning science among high school students.
- 2 To study the impact of the Kalvi TV programme on learning science among high school students.

- 3 To find out the significant difference if any between the Kalvi TV programme on learning science among high school students.

Tool used for the Study

The impact of the Kalvi TV programme Assessment Scale is used as a tool in this study.

Research Method & Sampling Technique

The study explores the impact of the Kalvi TV programme on learning among high school students. The researchers used a normative survey method for the present study. A simple random sampling technique was used for the data collection from the respondent. A Questionnaire was used as a research tool for data collection. The questionnaire was developed on 5 points Likert scale from strongly agree to strongly disagree and comprised 14 items. The questionnaire was distributed among high school students and data was collected from 100 students which were then analysed through SPSS (Statistical Package for Social Science) and the most frequently used statistical techniques of percentage score used.

In this study, a simple random sampling technique was adopted by the investigator. The sample was 100 students from all types of schools in the Pudukottai district.

Data Analysis

Low	Moderate	High
30%	60%	10%

The above table shows that the level of learning science, 30% is low 60% is moderate and 10% is high among high school students.

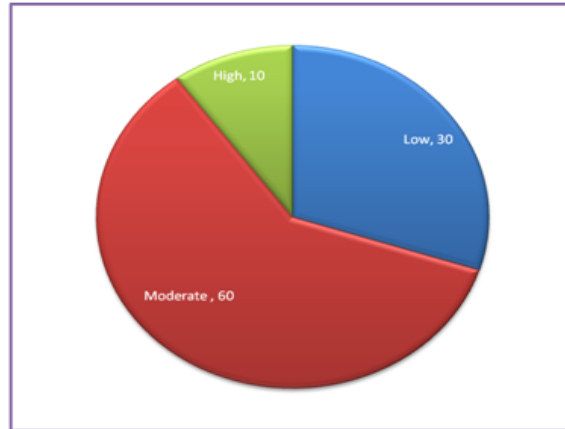
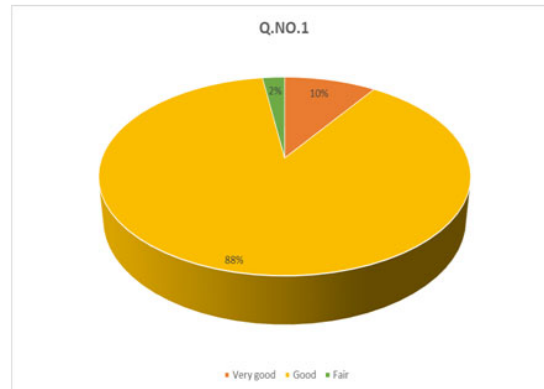


Table 2 — Item analysis of the Impact of Kalvi TV

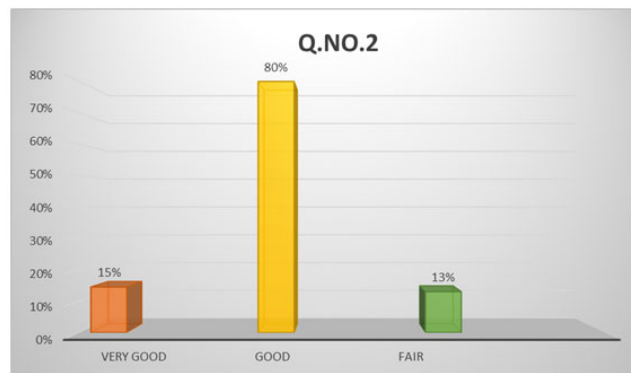
Item No	Very Good (%)	Good (%)	Average (%)
1	09.5	88.0	02.5
2	14.5	80.0	05.5
3	27.5	67.5	05.0
4	30.5	60.0	09.5
5	65.0	27.5	07.5
6	37.5	62.5	-
7	62.5	37.5	-
8	30.0	60.0	10.0
9	32.5	59.5	08.0
10	25.0	25.0	50.0
11	27.5	62.5	10.0
12	55.0	27.5	17.5
13	50.0	47.5	02.5
14	31.2	43.8	25.0

1. How videos helped during the Pandemic situation?

Table 2, Item 1, the videos witnessed during the pandemic situation were interesting and easy to learn among the students. As much as 09.5% of students replied that the videos played during the pandemic situation motivated them to learn more. 88% of students reflected that the videos witnessed in the class were good and 02.5% of students got the opinion as it served as average.



2. The understanding of the content in the Kalvi TV videos

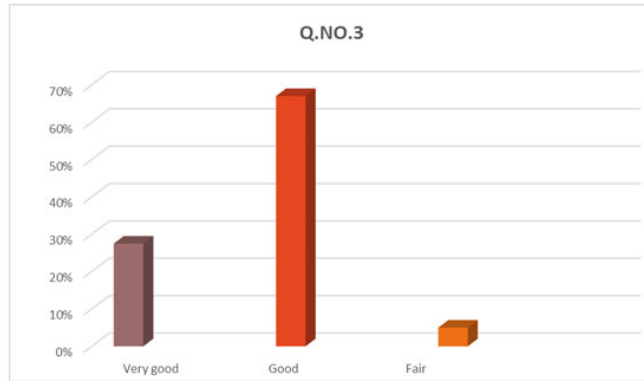


The videos witnessed during the pandemic situation were very interesting and easy to understand among the students. As much as 14.5% of students replied that the videos played during class hours motivated them to understand more and were very interesting. 80% of students reflected that the videos witnessed in the class were good and 05.5% of students got the opinion as it served an average one.

3. The marks obtained by the Kalvi TV videos

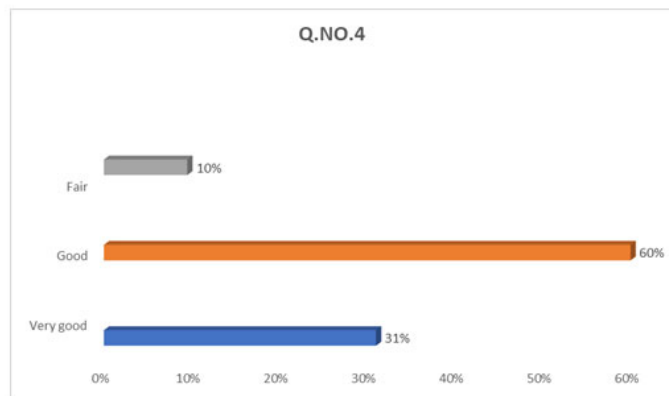
The videos witnessed during the pandemic situation were easy to get more marks in the assessment. As much as 27.5% of students replied that the videos played during class hours and they got

more marks. As much as 67.5% of students reflected that the videos witnessed in the class were good for acquiring more marks and 05.0% of students got the opinion as it served as an average.

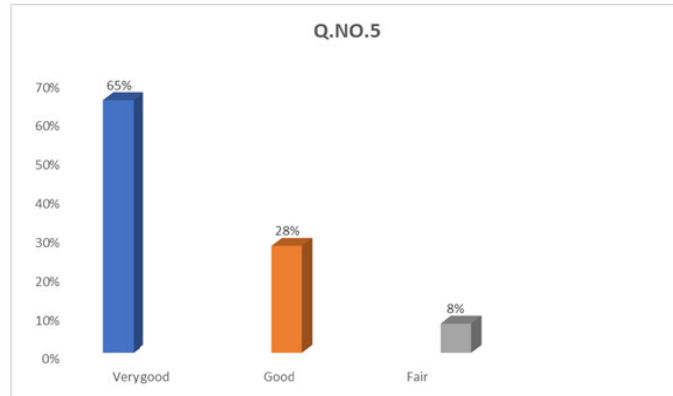


4. The teachers’ content transaction in Kalvi TV videos

The teachers’ content transactions in videos were very interesting and easy to learn among the students. As much as 30.5% of students replied that the videos played during class hours and the teachers’ content transaction were effective. As much as 60% of students reflected that the videos witnessed in the class were good and 09.5% of students got an opinion as it served as average.

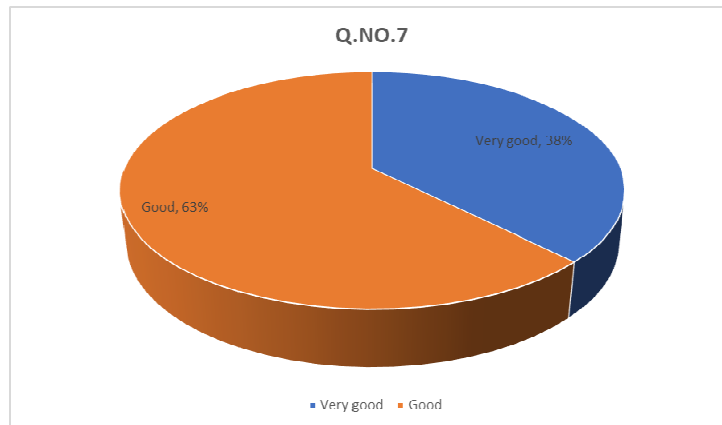


5. The way we explain the contents through Kalvi TV videos



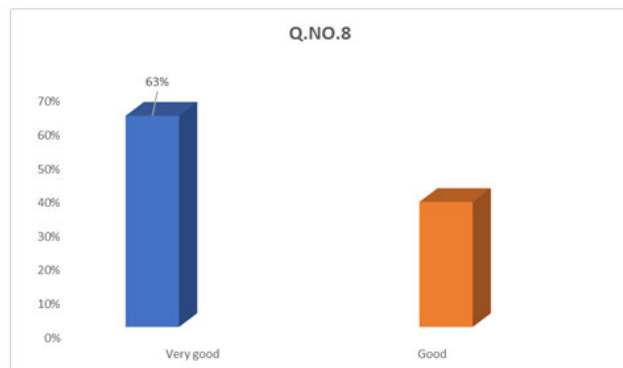
The way we explain the content through videos was very interesting and special attention was attracted to these videos. 65% of students replied that the videos motivated them to learn more. 27.5% of students reflected that the videos witnessed in the class were good and 07.5% of students got the opinion as it served as an average.

6. The featured PPTs and videos in the Kalvi TV video content



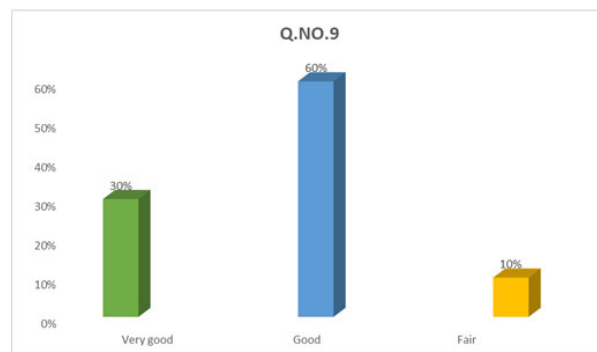
As much as 37.5% of students replied that the videos played during class hours motivated them to learn more. As much as 62.5% of students reflected that the videos were good. There are no students who got the opinion as it served as an average.

7. The audio and videos used in Kalvi TV video content



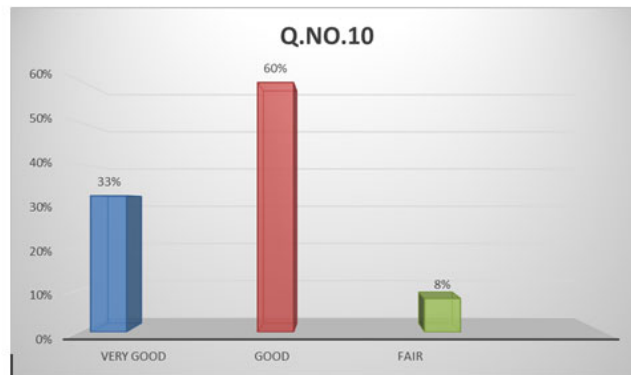
As much as 62.5% of students replied that the videos motivated them to learn more. As much as 37.5% of students reflected that the videos were good. There are no students who got the opinion as it served as an average.

8. The illustrations used to explain the content in Kalvi TV video content



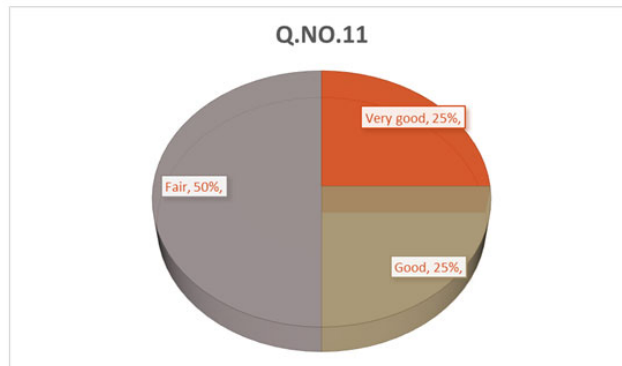
As much as 30% of students replied that the videos motivated them to learn more interestingly. As much as 60% of students reflected that the videos were good and 10% of students had the opinion as they served as average.

9. The way we used the assessment questions in the Kalvi TV video content



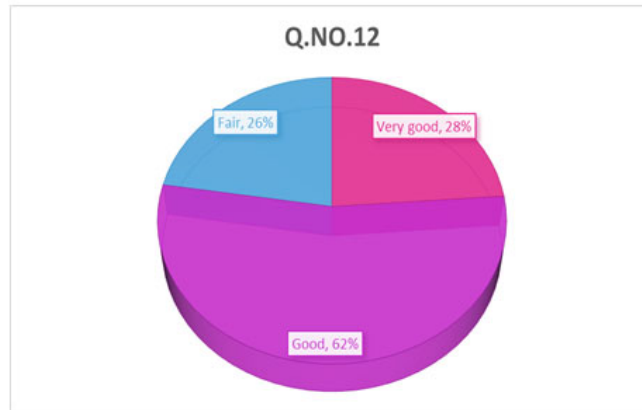
As much as 32.5% of students replied that the videos motivated them to learn more. As much as 59.5 % of students reflected that the videos were good and 08.0% of students had the opinion that it served as average.

10. The role of Kalvi TV videos used in the absence of teachers



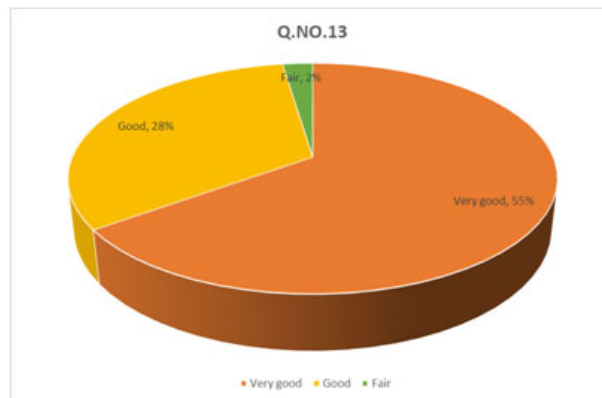
As much as 25% of students replied that the videos motivated them to learn more as they were interesting. As much as 25% of students reflected that the videos were good and 50% of students got the opinion as it served as average.

11. The explanations of practicals in Kalvi TV video contents



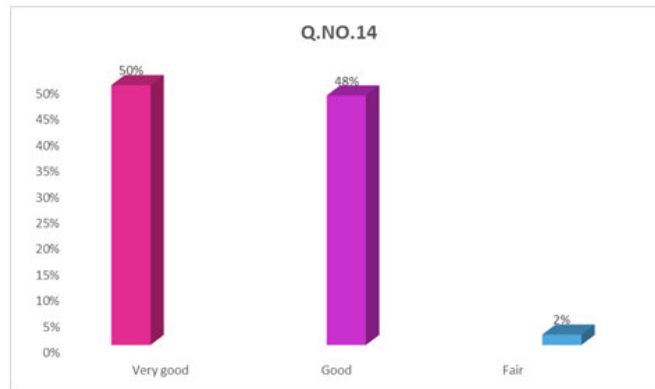
As much as 27.5% of students replied that the videos interestingly motivated them to learn. As much as 62.5 % of students reflected that the videos were good and 10% of students got an opinion as it served as average.

12. Motivation to see the videos in the Kalvi TV programme



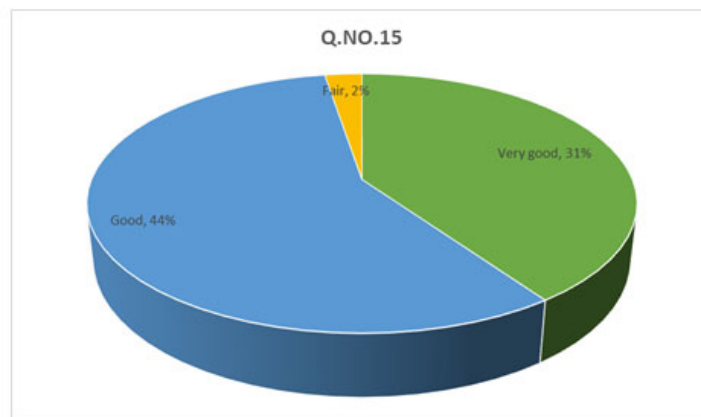
As much as 55% of students replied that the videos were interesting and encouraged them to learn more. As much as 27.5% of students reflected that the videos were good and 17.5% of students got the opinion as it served as average.

13. The way of Kalvi TV videos helped your learning



As much as 50% of students replied that the videos were interesting and motivated them to learn. As much as 47.5% of students reflected that the videos were good and 02.5% of students had the opinion that it served as average.

14. Your rating for the Kalvi TV videos production and teaching by the authors



As much as 31.2% of students replied that the videos were motivating and interesting. As much as 43.8% of students reflected that the videos were good and 25% of students got an opinion as it served as average.

Research Implication

The current findings suggest that the actual impact of the Kalvi TV programme on learning science subjects is among high school students. In the study, it is suggested that the Kalvi TV programme is logically linked to the students learning science and knowledge, which is another scientific concept by continuing to watch the Kalvi TV programme. If that means the Kalvi TV programme actively assesses the impact of science learning on students in different settings.

Conclusion

This study concluded that Kalvi TV facilitated science learning and had an impact on students' interest in science learning. Kalvi TV provided students with the information they need to improve their knowledge through their programming for a limited time. The student community is excited to refresh their skills by constantly watching Kalvi TV. The actual impact of Kalvi TV was assessed and the benefits of the study were discussed, so this study is considered more relevant to pre-setting the context and improving the learning environment for students.

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