

Parallel session 7: PCST as a performance: looking for new audiences

**S & T COMMUNICATION THROUGH PUPPETRY - A CASE STUDY
(INDIA)**

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Abstract

The social milieu of India is such that the folk dances, folk songs and folk dramas are part and parcel of our live. It has also been observed that it is possible to accelerate the pace of science communication if folk media are employed effectively in regional languages. A nation wide programme was conceived and implemented by National Council For Science & Technology Communication (NCSTC), Govt. of India, on “Science & Technology Communication Through Puppetry”.

The paper highlights and analyzes the efforts undertaken by NCSTC in the past decade with special reference to script writing and other experiments.

Key Words: Science Communication, Science Popularization

Text

India’s manifold diversity-cultural, social, religious, linguistic and regional is unparalleled in the world. In addition, nearly 70% of population are rural and about one third are still living below poverty and not literate. The reach of mass media, except radio, is still limited. These ground realities present a formidable challenge to a science communicator. In such a scenario, any centrally planned strategy employing modern means of communications does not stand much chances of success. Any strategy to be effective should be “participatory and in the local language through the familiar channels of communication”.

The first major effort on the above premise was “Bharat Jan Vigyan Jatha (1987), a massive S&T communication programme, which established the efficacy of the folk arts as a powerful mode of science communication.

Puppetry, being a traditional mean of entertainment, confined generally to semi-urban areas and villages. A characteristic of this medium is its flexibility to suit regional variations and prevailing mood of the audience. It can involve the audience in active dialogue. Illiterates and neo-literate groups can be addressed by a puppet show. It is a cost effective medium and is being used by NCSTC to communicate science.

The efforts undertaken can be divided into phases-pre and post 1996. Analysis of pre-1996 efforts revealed that all forms of puppets may not be employed and science communicators can also accomplish the task of puppet making and developing scripts. However, some issues, do call for attention were, namely:

- Scriptwriters must be expert in the subject and format of the medium to produce interesting scripts.
- Communicators must accompany every team of traditional puppeteers.
- Traditional puppeteers require training and familiarization with the scientific issues and facts

NCSTC’S Intervention

Since 1996 a much-focused programme “S&T Communication through Puppetry” is being implemented throughout the country. A 7-day training module (content and methodology wise) has been standardized with three distinguished feature as:

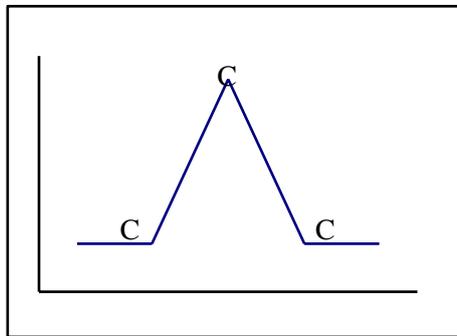
- Development of puppetry as interactive medium.
- Development of script on scientific themes, and
- Using this medium in combination with other techniques of communications

In each workshop the participants are provided with all necessary inputs to show their best creativity with the help of audio-visual aids, lectures and necessary background material for increasing the understanding of puppet as a medium for science communication.

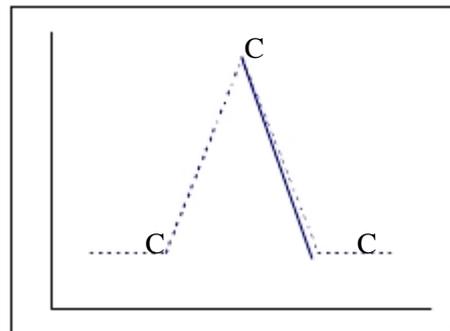
Script Writing Technique

- The basic purpose of a script is to communicate science and scientific methods. The script should be target specific and aimed at bringing science close to people by taking examples from the everyday life to the extent possible.

- The basic framework around which the script is woven must necessarily follow the scientific method and should bring out through dialogues or the situations relevant to the theme the basic elements of scientific methods.
- Scripts can be divided into two categories, (i) that emphasize the scientific method and the scientific values, and (ii) that familiarize the audience with a new scientific information/ discovery/technology etc.
- **A puppet drama is** like any science drama having three main features viz; (a) ability to create curiosity in the beginning, (b) satisfy the curiosity at the end; and (c) ability to express the up and downs of emotions through the dialogues. The difference between a script for puppet and other drama can be represented graphically as follows: -



The Curiosity graph in street Drama indicates the time and scope available to script writer (C₁, C₂, C₃)



The Curiosity graph in Puppet Drama indicates the time and scope available to script writer (C₂, C₃ only)

In Graphs, C₁ is building point of curiosity and C₂ is the peak of the curiosity and C₃ is the end of the curiosity.

(The puppet scripts, which were written on the above pattern, have proved to be very crispy and effective in catching the attention of the audience in the beginning of the play itself.)

Integration of Puppetry with other Media to improve effectiveness:

- Integration of human characters for acts and movements not possible through puppets.
- Use of other visual aids in puppetry to assure accuracy of diagrams.
- Theme Exhibition and Puppet Shows.

- Puppets in Classroom to initiate Discussion

Findings of National Convention on Puppetry (May 28-June 1 2002): About 1600 trained resource persons with scientific background.

- The medium has been used more for spreading the scientific messages on subjects like pollutions, Health & Hygiene and anti-superstitions.
- The tool of puppetry has proved to be quite handy and helpful for science communication.
- The agencies with their formal networks have quite effectively passed on the skill to other communicators.

Looking Ahead

NCSTC is now standardizing the methodologies and approaches in usage of various performing arts for science communication. An attempt is being made to standardize the training modules in terms of contents, reach, selection of participants and resource material. Tools are being developed to assess the impact of various folk Medias used for science communication.

Notes

The first author of the paper is a trained puppeteer and has done many new experiments with this medium to make it more effective for science communication. The paper is based on the experiences of the various national/ state level workshops and field performances.

References

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