



# THE PROOF IS IN IMPROVED READING: SAME LANGUAGE SUBTITLING ON TELEVISION IN INDIA

By

Brij Kothari

W.P.No. 2001-07-04 July 2001 / 1 66 2

The main objective of the working paper series of the IIMA is to help faculty members to test out their research findings at the pre-publication stage.

INDIAN INSTITUTE OF MANAGEMENT AHMEDABAD-380 015 INDIA

# IIMA WP-2001-07-04



# The Proof is in improved reading:

## Same Language Subtitling on television in India

Brij Kothari, Avinash Pandey, Amita Chudgar, Ashok Joshi, Hemlata Jadwani, Kalpesh Patel, Pawan Bharadwaj, and Darshana Patel

Indian Institute of Management, Ahmedahad
(Ravi J. Matthai Center for Educational Innovation)



Address for correspondence:

Brij Kothari Wing 14, IIM Ahmedabad Vastrapur, Ahmedabad – 380015 Gujarat, India

e-mail: brij@iimahd.ernet.in

fax: 91-79-6306896 tel: 91-79-6307241

#### Acknowledgment

We would like to thank three policy champions of this idea, Satish Saxena, Director at Doordarshan Kendra (DDK), Ahmedabad (State Television for Gujarat), B. S. Bhatia, Director, Development and Educational Communication Unit (DECU) of the Indian Space Research Organization, and M. K. Kaw, Education Secretary, Government of India (GOI). We are also grateful to Nirali Joshi at DDK and S.R. Joshi at DECU for their coordination support. The project was funded by DECU, the Department of Education under the Ministry of Human Resource Development, GOI, and the Research and Publications Unit at IIM.

#### Summary

One-third of India's 7+ population is literate, one-third non-literate, and one-third very partially literate. In declarations of literacy rates, the 285 million very partially literate people are counted as literate even though they can barely read a newspaper or write a letter. While the National Literacy Mission continues to generate millions of partially literate people, the transition from partial to irreversible literacy has vexed planners. Unless reading transactions are inextricably woven in everyday life, stagnation at low skill levels and a slide back into non-literacy are to be expected, causing the nation considerable wastage in effort and resources. Same Language Subtitling (SLS) is a simple, powerful, and extremely economical idea with the potential to introduce reading practice in everyday television entertainment. Its recommendation is to subtitle the lyrics of all the film songs and music-videos shown nationally, in the same language as the audio. Earlier studies have shown that the idea enhances entertainment and enjoys overwhelming popularity with viewers. There is also evidence from a controlled experiment with school children that SLS can contribute to reading skill improvement. The present study assesses the impact of SLS on reading improvement by implementing the idea on a television program of Gujarati film songs. The results provide strong support for the possible contribution of SLS to mass reading skill improvement. Although support for SLS from research and viewer feedback has been mounting, the idea has not yet caught the imagination of policy-makers. Hurdles to implementation are discussed.

Summary: 244 words

#### The Proof is in improved reading:

#### Same Language Subtitling on television in India

#### Introduction

India is home to over one billion people with an officially projected literacy rate pegged at 68% in 2001 in the 7+ age group (NLM, 2000a). In numbers, the total population of 1031.63 million comprises of 838.82 million people in the 7+ age group, of which, 570.4 million are considered to be literate and 268.42 million non-literate.

Although India has the dubious distinction of having a third of the world's non-literates, policy-makers are optimistic that the country is well on the path to a sustainable threshold of 75% literacy by 2006.

While the optimism is not unfounded given an average decadal growth of 8.5% since 1950s, a crucial question that policy-making has not grappled with adequately, is, "How literate are our so-called 'literate'?" What percentages among the literates can read, write, and perform numerical operations at what school grade level? Do our labels of literacy imply an ability to read a newspaper with comprehension? Can 570 million people in India write letters and fill out simple forms? Presently we are in the dark about these questions since the relationship of census operations with literacy is primarily one of enumerating individuals who are reported by a member of the household to be literate or non-literate. We have little data on how literate people actually are. One understands the exigencies of a census as massive as that in India. However, sample surveys that could build a correspondence between literacy rates and levels of literacy are unheard of.

To hazard a guess, half of India's literates are neo- or semi-literate, making India a land of roughly 34% literate, 34% neo-semi literate, and 32% non-literate by 2001 figures.

With all the energies of bodies such as the National Literacy Mission (NLM) converging on the non-literate for over a decade, policy making has only recently begun to focus on the realities of partial (or neo-semi) literacy. On an unprecedented scale the NLM has recently launched its Scheme of Continuing Education (CE) with a strong emphasis on CE centers, including village-based libraries (NLM, 2000b). CE programs in India generally aim to strengthen early literacy skills. As necessary as CE initiatives are, they depend on an adult's self-motivation to visit the centers or libraries on a sustained basis. Experience cautions us, though, that one cannot expect contact with libraries and CE centers to be frequent or lifelong. Financial implications of setting up and running centers also limit their unbridled expansion to the multitude of villages in India. Hence, without a richness of literacy transactions in everyday life, the reality of 285 million neo-semi literates is one of skill stagnation at lower than functional levels or gradual skill erosion and even relapse into non-literacy.

#### The promise of Same Language Subtitling (SLS)

Same Language Subtitling (SLS) is the idea of exactly matching audio and subtitles in television or film-based programmes. The subtitles are in the same language and script as the audio. Thus, transliteration or Karoake subtitling of Hindi songs in Roman script, as is common on MTV and Channel V in India, is not SLS. SLS requires, e.g., Hindi songs to be subtitled word for word in Hindi (which uses the *Devanagari* script). However, both SLS and transliteration could be useful for the cause of literacy as

long as the chosen script is meaningful for the target neo-semi literates. Weaving of SLS in everyday television entertainment offers to the sea of neo-semi literates in India, practice opportunities that are lifelong, engaging, incidental, and inescapable.

Several studies have argued that incidental foreign language learning occurs by watching subtitled television programs (e.g., see Pavakanun and d'Ydewalle, 1992; d'Ydewalle and Pavakanun, 1997; and other studies referenced in Kothari 2000). However, few studies have explicitly explored the possibility of literacy skill enhancement through subtitling, especially in developing countries. Most studies on subtitling have been conducted in the European or North American context. The enormous potential and rationale for the implementation of SLS in film and non-film songs has been argued elsewhere (Kothari, 2000; 1999; 1998). Most importantly, these studies have found that SLS is popular with literate and neo-semi literate viewers alike, thus, creating a win-win possibility for education and entertainment. SLS is popular among the literate because the concept allows them to sing along, know the song lyrics and even 'hear' the songs better. The same reasons are also voiced by neo-semi literate viewers in addition to the challenges and thrills SLS provides in terms of reading practice. Despite a general acceptance of SLS by a range of viewers as an enhancer of entertainment, until recently there was little evidence that it also contributed to literacy skill improvement. An experiment with primary school children from disadvantaged backgrounds provided the first concrete evidence of the contribution that SLS could make to reading skills (Kothari et al., 2001). The experimental group that saw songs with SLS evinced greater improvement in reading ability than the group that saw the same songs without subtitles or the control group that saw no songs at all. Building upon this

Same Language Subtitling

research, the present study explores the impact of SLS on the reading skills of adult neosemi literates.

Subtitled songs were not shown in a controlled experiment, but on Doordarshan Kendra (DDK), Ahmedabad, television for Gujarat State. Prior to this, SLS had never been implemented in India, on TV or films, in a manner that is sustained, systematic, and consciously planned for literacy and backed by research on literacy skill development. Gujarat is the first Indian state where SLS was implemented during May, 1999 to April, 2000. SLS was simply added to an existing weekly program of Gujarati film songs, called *Chitrageet*, telecast all over Gujarat state. The color of the Gujarati subtitles were designed to change in perfect timing with the songs to facilitate even a non-literate person's identification of the word being sung. This article presents the impact of SLS on the reading skills of early literates.

#### Methodology

A two-group, pre and post experimental design was used. Although the weekly 30 minute *Chitrageet* program was subtitled for a year, the study measures the impact of SLS shown during a six-month period. Pretest for the Experimental Group (EG) was conducted in May 1999 and post-test in January 2000. For the Control Group (CG), pretest was conducted in June 1999 and post-test in February 2000. The treatment period of SLS was six months, June-December 1999, during which, 25 episodes of *Chitrageet* were telecast. At 20 minutes of SLS per 30 minute episode, the maximum possible exposure to SLS during the study period was roughly 8 hours. Since this exposure was in a natural telecast situation, actual exposure was much less and varied from person to

Same Language Subtitling 5

person. On average a person saw 13 of the 25 episodes or a total of slightly over four hours of SLS. A reading test was developed that could be used exactly as is for both, pre and post-tests. It was designed to leave an insignificant imprint, if any, on learning as a result of administration. The test consisted of three blocks of reading matter. The first block (Exercise 1 or Ex. 1) had 40 single syllables covering most of the common ones used in Gujarati.<sup>2</sup> The second block (Ex. 2) had 20 two-syllable words, covering the range of syllables and syllable-vowel combinations. The third block (Ex. 3) was composed of 20 three-syllable words. If a testee was unable to read any whole word, he/she was asked to read individual syllables of that word and part credit given for the syllables read. Thus, the test could measure small improvements in reading skill, besides being quick and simple to administer. The reading of every text block was timed.

#### Experimental Group (EG) selection

A wide-net literacy survey was conducted with the reading test. Four villages each in Ahmedabad and Surendranagar Districts in Gujarat State were covered.<sup>3</sup> In addition, two slums in Ahmedabad city were chosen. The EG was drawn from those who claimed to see the *Chitrageet* program regularly, and hence, were likely to repeat this pattern during the treatment period from June-December, 1999. The total number of people tested from the villages and slums was 1500 and of these, 521 neo-literate people were included in the EG at the time of pretest. Conditions laid out for inclusion in the EG were:

- 1) out of the 40 syllables in Ex. 1, those able to read 35 or less,
- not attending or expected to attend formal or non-formal schooling during the June-December, 1999 period, and

3) moderate to high viewing of the Chitrageet program.

During the post-test, 358 of the 521 people in the EG were contactable. Those in the EG regularly kept a record of the number of *Chitrageet* programmes seen. So as not to draw undue attention on *Chitrageet*, participants also recorded their viewing frequency for *Chitrahaar* and *Rangoli* programmes of Hindi film songs. To ensure the reliability of this information, field researchers gave participants monthly forms with bi-weekly follow-up to cross-check for possible discrepancies.

#### Control Group selection

The CG was selected from Nepalpura village, Thasra Block, Kheda District. The penetration of cable television (satellite channels) is high in Nepalpura. Therefore, the viewership of Doordarshan's *Chitrageet* and other programmes, is low. The entire 7+ population of the village (2148 people) was tested. People were included in the CG based on the same first two conditions for the EG but replacing the third condition by those who report very low or practically no viewing of the *Chitrageet* program. Out of the 260 qualifying individuals in the CG at the time of pretest, 121 were reachable for the post-test conducted during February, 2000. The background of valid cases for the EG and CG, i.e., those who were reachable for both the pre and post-tests, is presented in Table 1.

Table 1: Background information

	Experimental Group	Control Group
Valid Cases	358	121
SC/ST <sup>4</sup>	238 (66.5%)	54 (44.6 %)
General	120 (33.5%)	67 (55.5%)
Male	173 (48.3%)	62 (51.2%)
Female	185 (51.7%)	59 (48.8%)
Mean Age (years)	27.15	32
Mean Education (grades)	3.64	5.3
Own a TV	202 (56.4%)	56 (46.3%)
Do not own TV but see elsewhere	156 (43.6%)	65 (53.7%)
Mean Chitrageet programs seen (out of 25)	13	

The final EG turned out to be much larger than the CG and also had a significantly lower mean level of formal education. On other factors, such as representation by caste, sex, age, and TV ownership, group differences exist but are not exaggerated.

#### Results

Pretest scores reveal that the CG did better than the EG on all the exercises (Table 2). On average, in Ex. 1 of 40 mono-syllables, the EG read 24.1 syllables correctly as compared to 30.6 in the CG. A similar pattern was observed in the other exercises of two and three syllable words. For example, in Ex. 2 of 20 two-syllable words, on average 10.1 words were read correctly by the EG as compared to 14.7 by the CG. The CG's better performance in the pretest is also reflected in the time taken for each of the exercises. These differences can be explained by the fact that the average educational level of the CG was higher. Due to the considerable difference in pretest scores between the groups, two approaches were adopted for comparing the groups: i) the entire CG and EG were compared for improvement, and ii) a subset of the EG comparable to the CG in terms of pretest scores, was selected for analysis.

Table 2: Pretest scores

		Exercise	e One	E	xercise T	wo	Exercise Three		
Group	n	S/40	Time	S/40	W/20	Time	S/60	W/20	Time
Exp.	358	24.1	94	26.8	10.1	77	42.6	9.6	93.3
Control	121	30.6	51	33.1	14.7	36	50.1	14.2	42.2

Time (seconds)

No major differences were found within the groups, based on sex and caste. In the EG, the average score for Ex. 1 was 25.1 for males and 23.1 for females. In the CG the same scores were 31.5 for males and 29.6 for females. SC/ST subjects in the EG scored 23.3 (Ex. 1) as compared to 25.5 for the General caste groups. SC/ST and General caste subjects in the CG scored 30.6 and 30.5 respectively.

#### Impact of subtitling

Without heeding differences in initial conditions, in the first part of this analysis we look at average improvements for each of the indicators. The impact of subtitling on reading skill was measured as post-test minus pretest scores for all the three exercises (Table 3).

Table 3: Difference: Post-test minus pretest scores

		Exercise	e One	Exercise Two			Exercise Three		
Group	n	_d_S	d_Time	d_S	d_W	d_Time	d_S	d_W	d_Time
Exp.	358	4.4	-5.0	3.5	2.4	-2.7	3.9	2.8	+0.1
Control	121	0.4	+7.2	0.9	0.5	+4.6	2.9	0.9	+9.5
p <		0.00*	0.01*	0.00*	0.00*	0.09	0.27	0.00*	0.12

d = difference at Syllable (S) and Word (W) level and Time (T) taken

<sup>\*</sup> Significant differences between groups (p < 0.05)

On several indicators, the EG showed greater improvement than the CG, with statistical significance (t-tests were conducted to assess group differences). For instance, those who saw *Chitrageet* regularly during the study period, read an average of 4.4 more syllables in the post-test than their own pretest score for Ex. 1. In addition, this improvement was demonstrated in 5 seconds less time. Comparable average improvement in the CG was only 0.4 syllables for Ex. 1 and the time taken increased. Greater improvement in the EG was also found to be statistically significant in the two and three-syllable exercises, as shown in Table 3. Within both groups, improvement in reading was not linked to sex, caste, and age. However, there seems to be a link between formal education and improvement in the EG (Table 4).

Table 4: Experimental Group: link between improvement and formal education

Education (Grade)	0	I	П	III	IV	V	VI	VII	VIII
Improvement: Ex. 1	3.3	3.6	5.3	4.0	4.8	4.1	5.0	5.3	5.2
n	41	24	50	55	56	60	27	36	6

Generally, people who had formal education between Grade II-VIII, showed more improvement than those who had no education or only up to Grade I.

Another factor that one would expect to impact improvement is exposure to SLS.

Out of the 25 subtitled *Chitrageet* programmes shown during the study period, the average number of *Chitrageet* programmes seen in the EG was 13. The minimum reported was 5 and maximum was 20. However, the variation in exposure within the EG was generally too small to expect any definitive conclusions. Hence, this part of the analysis was forgone.

Subtitling of Chitrageet in the same language did lead to measurable improvement in reading skills, in telecast mode. As noted earlier, the EG's pretest means were considerably lower than the CG's. Thus, if one were to control for skill levels and have comparable groups to begin with, would one still find greater improvement in the EG? In order to test this hypothesis, a subset of the EG was created, having similar initial conditions to that of the CG.

Impact of subtitling: comparison of Experimental Group Subset and Control Group

A subset of the EG with comparable reading skills to the CG at the pretest stage, was created. Henceforth, the subset will be called the Experimental Group Subset (EGS). The EGS was drawn from the EG by selecting all those who read 25-35 syllables correctly in the mono-syllable exercise, during the pretest. This resulted in an EGS of 189 people (Table 5).

Table 5: Experimental Group Subset (EGS), background information

	EGS
Valid Cases	189
SC/ST	119 (63.0%)
General	70 (37.0%)
Male	102 (54.0%)
Female	87 (46.0%)
Mean Age (years)	27.9
Mean Education (grades)	4.3
Own a TV	107 (56.6%)
Do not own TV but see elsewhere	82 (43.4%)

On most background factors, the EGS is comparable to the CG (compare with Table 1). More importantly, Table 6 confirms the comparability of these two groups on pretest scores. For example, the average number of syllables read correctly in the monosyllable exercise was 30.5 for the EGS and 30.6 for the CG. The mean values of the other pretest indicators are also very similar. Pretest scores for males and females within and across these two groups are also comparable (Ex. 1: EGS, male = 30.4 and female = 30.5; Control, male = 31.5 and female = 29.6).

Table 6: Pretest scores

		Exercis	se One	Exercise Two			Exercise Three		
Group	n	S/40	Time	S/40	W/20	Time	S/60	W/20	Time
EGS	189	30.5	72	34.0	15.1	49.4	52.2	14.2	60.4
Control	121	30.6	51	33.1	14.7	36	50.1	14.2	42.2

Time (seconds)

Comparative improvement between the EGS and the CG are given in Table 7.

The earlier finding that subtitling contributes to reading skill improvement, is further strengthened by the statistically significant results of Table 7. Except for improvement in Ex. 3 at the syllable level, all the other group differences with respect to improvement

were significant. A comparison of Table 3 with Table 7 suggests that improvement in the EG is very similar to that found in its subset which scored better on the pretest. Thus, greater reading improvement was found in the EG, irrespective of pretest scores. People with a range of neo-semi literacy skills benefit from SLS.

Table 7: Post-test minus pretest scores for Experimental Group Subset and Control Group

		Exercise	Exercise One E			wo	_Exercise Three_		
Group	n	_d_S	d_Time	d_S	d_W	d_Time	d_S	d_W	d_Time
EGS	189	4.1	-10.8	2.8	2.2	-5.5	4.1	3.0	-4.2
Control	121	0.4	+7.2	0.9	0.5	+4.6	2.9	0.9	+9.5
p <		0.00*	0.00*	0.00*	0.00*	0.00*	0.20	0.00*	0.01*

d = difference at Syllable (S) and Word (W) level and Time (T) taken

Experimental Group: Impact of subtitling in villages and slums

No major differences were found between villages and slums, regarding the impact of SLS. For the entire EG, the average improvement in the villages was 4.4 for Ex. 1 as compared to 4.3 in the slums. In the villages, there was no sex-based difference in improvement as a result of watching SLS. But in the slums, improvement among males for Ex. 1 was 5.6 and among females, it was 3.7. The significance of these gender differences was p < 0.06, close but not quite statistically significant.

### Discussion

The present study provides the first concrete evidence of the contribution of SLS to the reading skills of adults. The outcomes are all the more meaningful given that the study was conducted in a natural setting since the impact of SLS was explored by implementing it on an existing television program. Thus, the frequency of viewing the

<sup>\*</sup> Significant differences between groups (p < 0.05)

Same Language Subtitling 13

subtitled program could not be controlled as was done in the earlier experiment with primary school children (Kothari et al., 2001). The findings presently and in the earlier study are consistent in pointing out that viewing of film songs with SLS leads to measurable reading skill improvement. Improvement in skill levels occurred in a short span of six months or less, in both studies. Frequency of exposure to SLS was also very low. Thus, one can only imagine the power of SLS for national literacy skill improvement, if every film song or music video that is shown on television is subtitled in the same language. Indians' passion for film songs is unbridled, which explains the plethora of film-song and music-video programmes. SLS, riding on this passion can be assured of a captive audience for reading and contribute to make reading a national habit.

Everybody benefits from SLS on television. The direct beneficiaries are children enrolled in school who can get reading skill reinforcement at home, child and adult school drop-outs who have picked up rudimentary skills but are not able to sustain or improve upon them due to the near absence of reading in their lives, and adults who have attended or are attending non-formal education classes. SLS promotes a culture of reading and writing. Viewers are known to try and write down the lyrics from the screen. Parents and teachers have written that they encourage children to watch the subtitled Chitrageet program because it makes them read. Since SLS creates an environment for literacy activity through entertainment, it may also motivate non-literates for literacy. Non-literates may see in the acquisition of literacy skills, the possibility of enhanced entertainment such as being able to sing along and know song lyrics. These very reasons are responsible for the widespread popularity of SLS, not only among the partially literate, but also literate viewers.

Kothari et al. (2001) pointed out that the idea is not just simple to implement in all major Indian languages with a thriving film industry, it is also ridiculously economical. In Gujarat State alone there are estimated to be 14 million partially literate people of which less than half a million enroll and attend classes in non-formal CE centers. SLS on just one program such as *Chitrageet*, gives at least 35% of the total number of partially literate people, 30 minutes of reading practice a week at a cost of US\$ 0.0066 per person per year. In the Hindi speaking states, where half the country's non- and partially literate people reside, the cost comes down to a lowly US\$ 0.0007/person/annum.<sup>6</sup>

The encouraging results on the impact of SLS, its popularity among viewers, simplicity of implementation, and low cost are persuasive reasons, one would hope, for policy makers in education and media to take over the idea for large scale replication in a country that is desperately in need of catapulting itself out of the clutches of non-literacy and low skill levels. While the idea has generated a good deal of interest among international and civil society agencies, it has found few champions in policy-making with the power and willingness to ensure sustained implementation on a wider scale. As of date, there is no single program with SLS that is telecast nationally. Even in Gujarat State where SLS on *Chitrageet* has proven its success in a pilot mode, policy-makers in education and the State Resource Center for literacy with considerable funds at their disposal, have not so far expressed enthusiasm to take over the project. Showing an SLS program on television implies diversion of less than 1 % of the State's annual budget for CE. Furthermore, the reach of SLS on television is at least 10 times more than the roughly half-a-million people served under the CE program in Gujarat. Why then does the idea not find the required support in policy-making?

One can only speculate since policy-making rarely exposes its logic. A conjecture is that the SLS idea was not born within policy-making circles, including a small and select group of "inner-circle-experts" that policy-making turns to for direction. Any idea born outside these circles already faces a daunting challenge to even be heard, let alone find acceptance. Because SLS is astoundingly simple and any lay person could have suggested it, the "why did we not think about it ourselves" syndrome conspires to its detriment. Creating lifelong reading opportunities in a country of such diversity and size as India has vexed experts in the literacy movement since the beginning. If SLS delivers so simply, its success may well be seen by experts as their own failure. Another speculation is linked to the fact that SLS is an extremely low-cost approach in relation to the mass impact it promises. The expense elements and the number of agencies involved are few. The entire implementation process is straightforward and transparent, leaving little room for project fund misappropriation. Functionaries used to complicated projects replete with monitoring difficulties and several agency interfaces are likely to find the SLS project disappointing.

Policy-makers have voiced several concerns with SLS, of which, we discuss six of the most common ones below.

#### 1) Subtitling is generally distracting

This assertion is true when subtitling is used for translation and the viewer already knows the language of the audio, hence, does not need the subtitles and/or the viewer knows both the language of the audio and the translated subtitles and finds himself/herself switching constantly between languages. Subtitling is also a source of irritation when additional or unconnected information is provided (such as scrolling advertisements or

weather information). SLS is not distracting because the text only complements the audio, since they are in the "same" language, and does not require the viewer to switch between languages. What one misses out sometimes in the audio, and this is common in song videos, one can pick up from the subtitles.

- 2) SLS may be popular only with neo-literates; or popular only with literates

  Both sides of the argument are put forward despite the overwhelming evidence to the

  contrary. Out of the over three thousand post-cards received from viewers with a range of

  literacy levels during the telecast of subtitled Chitrageet, only three expressed not liking

  the idea. In media, this is an overwhelming endorsement.
- 3) SLS cannot contribute because neo-literates cannot keep up with the pace of songs

  The latter part of the assertion is true. When viewing SLS, partially literate people cannot keep up with the pace of all songs. But the question is not whether they can keep up (if they could they would not be partially literate) but whether they try to. Reading skill improvement lies in "trying" and not only in "succeeding". Observations of lip movement while viewing SLS and interviews confirm that neo-literate people do indeed put in an effort to read and whatever snatches they are able to read are gratifying by themselves.
- 4) Why should people read the lyrics when the visuals are far more exciting?

  No one reads SLS throughout nor can they be ignored throughout. Gery d'Ydewalle has proven over years of painstaking research, including the tracking of eye-ball movement, that subtitles on television just cannot be ignored. Reading subtitles is mandatory and inescapable (d'Ydewalle and Gielen, 1992).
- 5) SLS will compromise entertainment

This argument generally comes from policy-makers in media, afraid to give the idea a chance. That SLS is a win-win solution for education and entertainment can only be proven by implementing the idea on a presently unsubtitled song program and evaluating viewer feedback. This was done on *Chitrageet* for three episodes. Viewer feedback was assessed and only thereafter was a decision made to implement the idea for a year. National Hindi film song programs such as *Chitrahaar* and *Rangoli* need only try on a pilot basis to know the popularity of SLS among viewers.

6) We should not be imparting literacy skills through film songs – they are obscene

The majority of film songs are not obscene. There is an abundant choice of lyrics, visual content and pace in songs. The fact is that film songs are ubiquitously seen with ever-increasing popularity. If they are shown already, then all that SLS does is create a positive externality, that of reading practice. If obscenity is a concern, then the fight is over pulling certain songs off the air, not preventing the use of all songs for a social good.

As the evidence mounts in support of SLS, arguments against SLS are steadily eroded. However, policy-making is not often swayed by research or evidence but by personal predilection. The proof is already in the reading. But, is this proof sufficient to catch the fancy of a powerful policy-maker who can implement it, nationally and in different states?

#### REFERENCES

d'YDEWALLE, G. & GIELEN, I. (2000). Attention allocation with overlapping sound, image, and text. In K. Rayner (Ed.), Eye movements and visual cognition: Scene perception and reading (pp. 415-427). New York: Springer-Verlag.

d'YDEWALLE, G. & PAVAKANUN, U. (1997). Could enjoying a movie lead to language acquisition? In P. Winterhoff-Spurk & T. Van der Voort (Eds.), New horizons in media psychology (pp. 145-155). Opladen, Germany: Westdeutscher-Verlag GmbH.

KOTHARI, B., TAKEDA, J., JOSHI, A., & PANDEY, A. (2001, forthcoming).

Same Language Subtitling: A butterfly for literacy? *International Journal of Lifelong Education*.

KOTHARI, B. (2000). Same Language Subtitling on Indian television:

Harnessing the power of popular culture for literacy. In Karin Wilkins (Ed.),

Redeveloping communication for social change: Theory, practice and power (pp. 135146). New York: Rowman & Littlefield.

KOTHARI, B. (1999). Same Language Subtitling: Integrating post literacy development and popular culture on television. *Media and Technology for Human Resource Development*, 11(3), 111-119.

KOTHARI, B. (1998). Film songs as continuing education: Same Language Subtitling for literacy. *Economic and Political Weekly*, 33(39), 2507-2510.

NLM (National Literacy Mission). (2000a). Literacy Rates: An Analysis Based on NSSO Survey 1998: New Delhi.

NLM (National Literacy Mission). (2000b). Literacy Rates: An Analysis Based on NSSO Survey 1998: New Delhi.

PAVAKANUN, U. & d'YDEWALLE, G. (1997). Watching foreign television programs and language learning. In F. L. Engel, D. G. Bouwhuis, T. Bosser, & G. d'Ydewalle (Eds.), Cognitive modelling and interactive environments in language learning (pp. 193-198). Berlin: Springer.

Literacy is seen as a continuum from non to neo to semi to functional to irreversible literacy. Partial or early literacy in this article is a reference to the neo-semi literacy phase.

<sup>&</sup>lt;sup>2</sup> Gujarati, like other Indian languages, has syllables rather than alphabets.

<sup>&</sup>lt;sup>3</sup> A State is divided into administrative Districts and these in turn divided into administrative Blocks. Panchayats, and Villages.

<sup>&</sup>lt;sup>4</sup> SC=Scheduled Castes and ST=Scheduled Tribes, which are generally considered to be disadvantaged groups in India. The "General" category is a reference to advantaged caste groups.

3 35% is based on the fact that nearly 50% have direct or indirect access to television in India and this is

rising rapidly.

<sup>&</sup>lt;sup>6</sup> Details for other states and the assumptions underlying these figures may be found in Kothari et al. (20001).

ARTROVAL ORATE/ENGRANCE

PRICE

ACC MQ. VIRRAM SARABHAI SISMAA L. E. M., AMMEDABAD