Road Safety Education in Schools

Impact Assessment

Road safety is a quality aspect of road traffic and this aspect has to be balanced with aspects like: level of awareness, access to information, environmental influence.

When it comes to the decision of what interventional programs to invest has always been an argument regarding the effectiveness of the possible outcome. Therefore a survey was conducted at the end of 3 months of completion to study the retention of awareness among the children who underwent a 7 weeks program on road safety awareness focusing on pedestrian safety & passenger safety.

This document shows the result of the analysis study which aimed to measure the impact of Safety Education in Schools to weigh the effectiveness of this interventional program.

Prepared by Fleet Forum

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1. Introduction: The School Education Program

From January to March 2013, a pilot project funded by Shell India Markets Private Limited and developed and conducted by Fleet Forum, brought road safety education to a total of 604 participants of level 6 and 7 students among four schools in Bangalore, Chennai, and Surat. The program took place over seven weeks, with specially designed materials and approaches like practical learning methodologies— to help children better understand the issues of traffic and road safety and the active role they can play in their own wellbeing and safety.

This project was developed to be consistent with the school curriculum and it aimed to impart awareness and practical knowledge through road safety materials on walking safely (pedestrian safety) and travelling safely (passenger and public transport safety). The 8- to 10-hour programme was comprised of classroom lessons, take home exercises, and practical simulation activity.

This pilot program took place at four schools in three cities in India:

- **Bangalore**: Gopalan National School
- **Surat**: Ryan International School
  L. P. Savani School
- **Chennai**: Gurukulam School

In all locations, the launch of the Programme included a welcome speech, a video on road safety, a speech by the guest of honor (from traffic police department), and a skit highlighting the importance of road safety. The launch concluded with the students taking a solidarity walk to a nearby traffic signal. Escorted by a team of police personnel, the students carried placards with different slogans delivering the message of road safety to the neighborhood.

The program was developed, under the auspices of Fleet Forum, by an International consultant who had experience of working with schools on Road safety in India through a World Bank Project. The program was executed by local partners, managed by Fleet Forum, who are into life skill development of school students.
2. Description of the Curriculum and Training of the Program.

The road safety lessons were filled with activities in which the students learned through making charts of various traffic signs, enacting role plays about pedestrian responsibility and crossing behaviour, drawing various route maps, and discovering safe ways to school and to travel in the busy cities.

The curriculum included:

<table>
<thead>
<tr>
<th>WEEK</th>
<th>CURRICULUM</th>
<th>OBJECTIVE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Week 1</td>
<td>Introduction to the Road Safety Programme</td>
<td>The objective of this conversational session with students is to involve in discussions regarding road safety, various traffic signals, and precautions to take while on the road.</td>
</tr>
<tr>
<td>Week 2</td>
<td>Pedestrian Responsibility, Road Crossing Survey</td>
<td>The objective is that students learn about the term “pedestrian” and what kind of responsibilities they have when they are in traffic, various traffic symbols and their importance, as well as the rules of crossing a road.</td>
</tr>
<tr>
<td>Week 3</td>
<td>A Split Second</td>
<td>The objective is that it only takes a split second for an accident to occur. A careful approach in traffic is necessary. Traffic rules keep us safe while we are on the road.</td>
</tr>
<tr>
<td>Week 4</td>
<td>Temptation</td>
<td>Discussion with students about the reasons for accidents to occur. Various temptations—such as speeding, ignoring signals, not starting on time to school—that causes accidents.</td>
</tr>
<tr>
<td>Week 5</td>
<td>New Way, New Route</td>
<td>The opportunity to work along with their parents/siblings to create a pedestrian route to discover if there could be a better route to school for them and, if so, why.</td>
</tr>
<tr>
<td>Week 6</td>
<td>View it, Read it, Think it</td>
<td>This lesson involves students...</td>
</tr>
<tr>
<td>Week 7</td>
<td>Road Crossing, SLLT</td>
<td>Train to STOP, LOOK, LISTEN, THINK (SLLT) in various scenarios and circumstances. Students are given a scenario and asked to tell the trainers what they should do in that particular scenario and why.</td>
</tr>
</tbody>
</table>
3. Description of the survey questionnaire

The survey questionnaire had 12 questions altogether. It was a mix of objective statement like ‘true/false’, fill up the blanks with the correct option, identifying pictorial actions along with subjective questions to judge their level of understanding and recall on various scenarios & situations like ‘what needs to be done to make road safer’, ‘what more they would like to learn about road safety’.

**Question 1. Look at the picture and write what they tell us?**

_____________________ _____________________ _______ ______________ _____________________

*Description: This question was based on lesson no. 6 of training work book for identifying actions STOP, LOOK, LISTEN, & THINK which are the part of road crossing procedure.*

**Question 2. Choose the Correct Word:**

STOP one step ___________ (Back/Front) from the edge or to follow, LOOK in ___________ (All/One) directions for approaching traffic, see in all directions for approaching traffic, THINK about when it is safe to ___________ (Run/Cross) and Walk _______ (In side/Straight) across the road.

*Description: A Fill up the blank paragraph for choosing the right answer from the given options to check how they recognise that some crossing situation are safer than other road crossing behaviour.*

**Question 3. What do these Symbols mean?**

_____________________     ___________________      ___________________       ___________________     ___________________      ___________________

*Description: This question is based on one of the classroom exercise of identifying & classifying road traffic signs.*

**Question 4. Write the Helpline Numbers for the following:**

Traffic: _________ ; Ambulance: _________ ; Fire: _________ ; Police: _________

*Description: To check the recall of children on emergency phone numbers which was on the one of the school activity exercise call ‘NUMERGENCY’*
Question 5. We Should not ___________ on the road. (Run\Play\walk\all the three )

Description: The question was based on the activity called ‘Behaviours to avoid’ & ‘road laws’ that apply to pedestrians.

Question 6. Tick the driver who has got a Strong and Safe Helmet:

Description: This is a pictorial representation of choosing a safe helmet wearing scenario which was a part of practical exercise inside the classroom.

Question 7. Write Across each sentence whether they are TRUE or FALSE:

Description: There were seven objective statements for stating whether ‘T’ or ‘F’

1. Crossing a road safely requires a clear view of all approaching traffic:  
2. Pedestrian crossing facility should not be used:  
3. Children should wait until the bus moves well away before starting to cross:  
4. Head injuries are a major cause of death and serious injury for motorcyclist:  
5. The helmet should be a bright colour to make the cyclist more easily seen:  
6. A motorcycle may carry three passengers only:  
7. Wearing a Helmet is not compulsory:

(Subjective questions to understand their perception regarding road safety after they underwent the Program.)

Question 8. How would you describe a safe road?

Question 9. What needs to be done to make roads safer?

Question 10. What would you like to learn about road safety?

Question 11. Who should teach you that?

Question 12. After you learned about Road Safety, did you go & share it with anybody? If yes, than what did you share and to whom and please write your experience very briefly.
4. Survey Methodology
A survey was conducted for analysing the impact on level of awareness and change in behaviour of students by this School Road Safety Education Program in all the 4 schools were this program was implemented. The program covered 604 school students involving 4 teachers and 6 trainers for 7 weeks.

This survey was done after 12 weeks of completion of the School Road Safety Education program.

| Total no of students who participated in the survey | 540 students | 4 schools |
| Total no. of students who participated in the Program | 604 students | 4 schools |

Participation = 89 %

Reason for lesser participation of students was due to time table constrain of some class sections for conducting the survey.

These students were provided with the survey questions for 15-20 minutes (depending upon the availability of whole class attendance in every school). This survey was filled in the presence of at least 1 school teacher & 1 Program trainer, for reducing the biasness and factors that could negatively affect the result of the survey among students.
5. Survey analysis [question 1 to 12]

Question 1. Look at the picture and write what they tell us

Answer 1:

Analysis: The students had to write what these actions symbolize. 87% of the students have scored all 4 questions correct, which illustrates a high recall and awareness after 3 months on the right decision making about safe and unsafe road crossing situation.
**Question 2. Choose the Correct Word:**

STOP one step _________ (Back/Front) from the edge or to follow, LOOK in _________ (All/One) directions for approaching traffic, see in all directions for approaching traffic, THINK about when it is safe to _________(Run/Cross) and Walk ______(In side/Straight) across the road.

<table>
<thead>
<tr>
<th>4 correct</th>
<th>3 correct</th>
<th>2 correct</th>
<th>1 correct</th>
<th>All wrong</th>
</tr>
</thead>
<tbody>
<tr>
<td>410</td>
<td>25</td>
<td>19</td>
<td>43</td>
<td>40</td>
</tr>
</tbody>
</table>

**Answer 2**

- 76% 4 correct
- 5% 3 correct
- 8% 2 correct
- 4% 1 correct
- 1% 0 correct

Analysis: The result shows that 76% of students have recognised safe Road crossing procedure, rest 24% have chosen less than 4 correct answers or 0 correct.
Question 3. What do these Symbols mean?

Analysis: In identifying the 6 road traffic signs the average score of students were 4.60 out of 6. 62.2% of students answered all correct signs. This show the students have low awareness about the traffic signs and hence more time in the module have to be allocated for teaching road signs to students in the next phase of the program.

Question 4. Write the Helpline Numbers for the following:

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</thead>
<tbody>
<tr>
<td>Results</td>
<td>270</td>
<td>87</td>
<td>36</td>
<td>113</td>
<td>28</td>
</tr>
</tbody>
</table>

Analysis: 51 % of students could recall all the four emergency numbers, with an average marks of 2.85 out of 4. Most of the students were able to recall the national police & fire emergency number, but a few students could recall the local traffic and ambulance number. The reason for this can be the low publicity and awareness programs by the state authorities which makes it less recognized and popular among the citizens.
Question 5. We Should not _____________ on the road.(Run\Play\walk\all the three )

Analysis: The correct answer to this question is ‘all the three’ and 72.7 % of students responded correctly showing they could recall the ‘Behaviours to avoid’ & ‘road laws’ that apply to pedestrians. Some students choose the first two option that is ‘run’ & ‘play’ which is partially correct in Indian context as walking on roads is not considered something wrong due to unavailability of pedestrian walking footpath and zebra crossings. This is one of the major causes of Road Accidents in India.

Question 6. Tick the driver who has got a Strong and Safe Helmet:

Analysis: 79.4 % which is 429 students could identify the right way of wearing a helmet whereas 20.6% that is 111 students gave either wrong or no answer. Most of students who gave wrong answers choose option B as this helmet seems a strong one but not strapping it make it an unsafe helmet.

Question 7. Write Across each Sentence whether it’s TRUE or FALSE:

1. Crossing a road safely requires a clear view of all approaching traffic:
2. Pedestrian crossing facility should not be used:
3. Children should wait until the bus moves well away before starting to cross:
4. Head injuries are a major cause of death and serious injury for motorcyclist:
5. The helmet should be a bright colour to make the cyclist more easily seen:
6. A motorcycle may carry three passengers only:
7. Wearing a Helmet is not compulsory:

Analysis: There were seven true & false statements, in which 71.8 % students responded all correct while rest 28.2 responded with less than seven correct answers. There where no particular question which were repeatedly given incorrect answer.
Question 8 ‘How would you describe a safe road?’

Answer 8. (Subjective type)

Analysis: ‘How would you describe a safe road?’
The students had various views on how the road can be safer for both pedestrians and moving vehicles. Their answers ranged from:
- strict traffic rules
- individual responsibility
- Good road engineering like planning, design, construction of street lights, pedestrian walks, zebra crossings.

Question 9: ‘What needs to be done to make the road safer?’

Answer 9. (Subjective type)

Analysis: ‘What needs to be done to make the road safer?’
The student’s response was more on individual’s behaviours and their family members who could make road safer followed by technical intervention like street lights, speed bumps, pedestrian crossing lanes, clean roads. They also highlighted on enforcement of strict traffic regulation on fines. Some of them believed more awareness programs should be imparted to them which would eventually lead to behavioural change which at the end will make roads safer. They also mentioned remedies like less speeding, wearing helmet, deploying more traffic police.

Question 10: ‘What would you like to learn about Road safety?’

Answer 10. (Subjective type)

Analysis: ‘What would you like to learn about Road safety?’
The students express views in knowing more about
- Traffic rules
- What are the consequences of not following it?
- How they can persuade their parents & family members for following traffic rules?
- More pedestrian walking rules and SLLT procedures
- Post trauma care and first aid for road accident victims
Question 11: 'Who should teach you Road Safety?'
Answer 11. (Subjective type)

Analysis: 'Who should teach you Road Safety?'
Answering this question maximum no. of the students responded
- Teachers
- Trainers
- Parents & older siblings
- Traffic police
- Shell

Question 12: 'After you learnt about Road Safety did you go and share it with anybody? (Yes/No) If, Yes, then what did you share and with whom and please write your experience very briefly'

Answer 12. (Subjective type)

Analysis: 'After you learnt about Road Safety Did you go and Share it with anybody? (Yes/No) If, Yes, then what did you share & please write your Experience very briefly'
60 % of the students responded YES and refer to mostly friends & family members whom they shared safe and unsafe crossing, emergency numbers, safe route to school, Stop Look Listen Think procedure.
6. Conclusion and recommendation

As a result of the study on the impact of the programme, we witness that these children gained an understanding of the importance of road safety awareness, as well as a sense of responsibility for spreading the message to their peers and family. To increase parents’ knowledge and understanding of road safety issues and safer road user practices for young children.

The responses show (see below) that the children understood their role in making the road safe and if such types of program are implemented on a sustainable basis it can lead to behavioural changes which will lead to less road accidents and safer society.

Student’s responses were like:
- Want to know more about Traffic rules
- What are the consequences of not following it?
- How they can persuade their parents & family members for following traffic rules?
- Want to know more pedestrian walking rules and SLLT procedures
- Want to know post trauma care and first aid for road accident victims

Feedback of students

“Road Safety classes were so different. First I was not at all interested, but I enjoyed being a participant in role-plays. I played a role for the chapter ‘Temptations.’ I learnt that even listening to music with earphones is a reason that causes accidents. I learnt what I should not do when I am crossing the road.”
–Nirmal G. K. VI A. Gopalan National School

“I love everything about Road Safety classes. We learnt a lot. But my favourite was making various traffic signals. We had lot of fun fixing them all over the school. I learnt a lot of new traffic signals too.”
–Eashita Singh. VII B. Gopalan National School

“A split second is my favourite lesson. The discussion, charts, conversation was very interesting.”
–Shreyas Karuvat VII A. Surat

“From all the lessons, I like STOP, LOOK, LISTEN, THINK. I learnt why so many accidents are happening in India, because of temptations. I shared what I learnt with my father, brother, sister and mother.”
–Priyanka Sarda, VI A, L.P. Savani
Feedback of principals and teachers

“I was not sure how effective it would be. In the end when I saw children coming up with creative bookmarks and posters, they were around the school promoting Road Safety among the school by wearing seat belts (satin ribbons). I could see children enjoying the sessions and I am sure they have learnt about various traffic signals, traffic behaviour like cautions to take by looking at the posters they have displayed all over the school. It did break the monotony for the children.”
–Ms. Sandhya Raman, Principal, Gopalan National School, Bangalore

“I could see children anticipating Road Safety classes. Children’s active participation and also learning was seen. Not to forget the cartoon video played during the launch is very educative. Team work of both 6th and 7th students was amazing.”
–Ms. Singh, Head Mistress, Gopalan National School, Bangalore

“This is a very innovative idea to improve traffic rules and regulation implementation in early childhood, so that in future they will follow all rules and regulations in their life.”
–Mr. Sailesh Sutaria, Principal, Ryan international School, Surat

These finding and feedback give us high degree of confidence in scaling up the program for delivery to many more children in additional communities across India.

We recommend to use the results and learnings of this study as first draft information and to gain experiences about this kind of Road Safety Education in Schools.

• More time to be spent on making students aware about emergency numbers
• More time should be allocated in the module for learning road signs
• SLLT procedure and safe & unsafe situation for crossing the road was well received by students
• More time needs to be devoted in telling students how they can persuade their parents & family members for following traffic rules
• Additions like first aid care and post trauma help should be incorporated in the module for next phase of the program