

Litter

Before you Begin

The Merriam Webster dictionary defines litter as “trash, waste paper, or garbage lying scattered about”, and waste as “an unwanted by-product of a manufacturing process, chemical laboratory, or nuclear reactor (these could be toxic, hazardous or nuclear waste)”. Waste is also defined by Merriam Webster as “refuse from places of human or animal habitation: such as garbage, rubbish, excrement or sewage”.

In general we can understand litter as waste “littered” or “thrown” around. Litter can thus be described as waste products that have been disposed improperly, without consent, at an inappropriate location.

Litter creates toxins and pollutants that are harmful to our environment and animals. Discarded garbage clogs waterways, effects soil, and may remain in landfills for years. Litter may harm the environment and the animals which inhabit it. Animals may ingest pieces of litter like plastics, cigarette butts, or sometimes even be strangled by it. Litter is also a huge problem as it adds to the annual costs of a municipality if not properly disposed in the first place. Litter today has become a problem both on land and in our waterways including oceans.

Litter research by Keep America Beautiful (<https://www.kab.org/>) has identified seven primary sources of litter:

1. Motorists (debris thrown out of windows by passengers in vehicles including cars, buses, trains, etc).
2. Pedestrians (individual littering of packaging, beverage containers, cigarettes butts, etc.).
3. Household trash on the roadside (leaving lids off trash/ garbage cans; overflowing trash/ garbage cans; unbundled or covered paper that blows, etc.).
4. Dumpsters or large garbage cans used by businesses (overflowing or uncovered trash that invites blowing and spreading).
5. Loading docks/ bays (loading areas in buildings where goods vehicles are loaded and unloaded. Commonly found in commercial and industrial buildings including warehouses).
6. Construction and demolition sites (debris in and around sites and blown by wind or carried by rain).
7. Uncovered trucks (trash/ garbage falling or blowing off open garbage vehicles).

Keep America Beautiful studies on where pedestrians and motorists litter most revealed the following:

- Special event venues - fairs, concerts, game/ matches or other events that attract a large number of people.
- Roadways and highways – road sides, on/off ramps, median strips, and rest stops
- High traffic areas – fast food businesses, convenience stores, picnic or play grounds, stadiums, and other areas with a lot of foot fall.
- Transition points – places where someone stops eating, drinking or smoking before proceeding, such as entrances to buildings, train platforms, and bus stops.

Some of the above reveal that litter is a problem associated more with the behaviour and attitude of people. Different approaches could be adopted to look at the litter problem. Awareness and education in schools, action by different target groups including students and general public and use of different platforms for promoting information. Social media is one such platform which has been looked at in the following lesson plans for creating awareness and taking action with respect to the “litter” problem.

Merriam-Webster dictionary defines social media as "Forms of electronic communication (such as Websites) through which people create online communities to share information, ideas, personal messages, etc." Social media could be utilised as a platform to create and share information. There are many different and popular social media websites like Facebook, Google+, Instagram, Pinterest, Snapchat, Tumblr, Twitter, WhatsApp, and YouTube to name a few. Some examples of how social media platforms have also been used popularly to promote information and run campaigns associated with littering are illustrated below:-

Example 1

The Glasgow city council site <http://www.zerowastescotland.org.uk/litter-flytipping/social-media> describes how social media sites could be used to prevent litter and fly tipping (used and defined in some countries as the 'illegal deposit of any waste onto land that does not have a licence to accept it'). The Environment Protection Authority, Victoria site <http://www.epa.vic.gov.au/get-involved/report-litter/report-litter-app> encourages people to report about Litter with the help of a mobile App.

Example 2

Is a case example of how Product Design students from the Aston University were engaged in a project to design an innovative intervention to prevent littering on Birmingham's streets <http://www.aston.ac.uk/news/releases/2016/october/-product-design-hubbub/>. Students first researched and understood what motivates people to litter. They moved beyond the classroom to go and observe the littering problem in the city. Working in teams, students had to design a solution that has the potential to change behaviour. Ideas ranged from brightly coloured, seasonally shaped bins that would be placed in the city at key times of year such as Christmas and Easter, to large sticky markings on the floor which resembled chewing gum, and stated facts about the cost of chewing gum disposal. The ideas were implemented in association with a local NGO Hubbub.



Litter... How does it Matter?



INTRODUCTION:

The lesson plan encourages students to analyse people behaviour related to littering, take up investigative reporting pertaining to the litter problem and bring out the problem and the possible solutions in the form of an article/ short video.

Objectives:

Students will be able to

- undertake a survey to understand the impacts of littering on the environment, wildlife and people.
- pen down their views in the form of an article.

YRE steps: Investigate, Research Solution, Report
Curriculum Linkage: Science/ Environmental Studies/Social Science



Time required/ Duration:

- **Classroom session 1:** 45 minutes for background introduction, film screening and discussion.
- **Assignment:** 60 minutes for observing people's "littering behaviour".
- **Classroom session 2:** 45 minutes to discuss and analyze student's observations of people's "littering behaviour".
- **Assignment:** five to six hours over four to five days for background research and compiling articles/videos.



Resources Required:

- A short film on impacts of litter. One of the suggested film is <https://www.youtube.com/watch?v=Q2Prz45rdOw> (3.53 minutes)
- Laptop and projector for screening the film.
- Notebooks and other student stationery.
- A video camera/ mobile phone for capturing a video and software to edit the video.
- Resource 2 - Some useful links for social media campaigns.



Activity

Classroom session 1

- Do a background introduction on litter, screen a short film on the impacts of littering and discuss with students the problems associated with littering

Group Assignment 1

- Divide students into groups of 4-5 members.
 - Assign different areas to different groups. Groups could be assigned to monitor littering on the go, on roads, in commercial places, in open places and parks or in schools.
- Provide 60 minutes to students to “observe people's behaviour”. All locations should be monitored simultaneously.
- Guide students to carefully observe people, what they are doing especially in terms of their behaviour of “littering”. Some of the following indicators could be used for observing people
 - age group which littered the most
 - how many people littered in one minute
 - what was littered most frequentlyGuide students to take photographs where appropriate.

Classroom session 2

- Discuss the findings of the different groups subsequent to this observation exercise. The discussions should enable students to put together their thoughts for compiling an article or a script for video.

Group Assignment 2

- As part of this groups take up two major types of assignments (4-5 days time need to be provided to student groups to accomplish these tasks):

(i) **Internet based search:** Internet based search to do some background research on “littering”.
Provide 1-2 days for the same.

(ii) **Writing Articles/developing a video:** Ask each student group to pen down one article/script for a video based on their observations as well as the internet based search.

Student's report should present the problem (based on observations and internet search) and solutions to tackle these problems.

Evaluation: Ask the student groups to share their articles/video to create awareness through a local newspaper, or share the same on the school social media page or share the same during an assembly in the school, etc.

- For article: Refer Lesson Plan 1 from chapter “Learning to be an Environmental Journalist”
- For video: Refer Lesson Plan 5 from chapter “Learning to be an Environmental Journalist”

Litter Blitz...



INTRODUCTION:

The lesson plan encourages students to utilise the social media network and design an online campaign to create awareness about litter.

Objectives:

Students will be able to

- undertake a social media campaign to understand perspectives of littering.
- design an online campaign to promote information on the impacts of littering and encourage people to avoid littering.

YRE steps: Investigate, Research Solution, Report, Disseminate

Curriculum Linkage: Science/ Environmental Studies/Social Science

Time required/ Duration:

- **Classroom session 1:** 45 minutes to set the context, brainstorm with students about social media campaigns.
- **Classroom session 2:** 45 minutes to develop an online pre-survey questionnaire.
- **Classroom session 3:** 45 minutes for analysing the results of the pre-survey questionnaire.
- **Assignment:** one week response time for the questionnaire; which should also be used to collect information about social media campaigns and choose an appropriate platform.
- **Mission session 5:** 45 minutes to discuss the result of the campaign, scope of improvement, impact of the campaign and way forward.

Resources Required:

- Pre-survey questionnaire and writing material
- Internet
- Useful links
- Lesson Plan - Learning to be an Environmental Journalist



Activity

Classroom session 1

- Give a background introduction and help students understand the problem associated with litter.
- Discuss with students why people litter, think of ways to address the litter problem and introduce them to social media as an important platform for communicating about litter.
- Use resources provided as links for some social media campaigns to initiate the process.

Classroom session 2

- Divide students into groups of 4-5 members.
- Set aside 60 minutes and help each group to first develop an online survey to understand why and where people litter (exemplar survey has been provided, the same could also be used/ modified further).

Classroom session 3

- Conduct this session based interaction following the online survey.
- Facilitate the groups to analyze the results of the online survey and help them design a campaign based on the response of the survey.

Group Assignment 1

- As part of this groups take up two major types of tasks (14 days need to be provided to student groups to accomplish these tasks):

(i) Online questionnaire: (7 days)

- One week set aside to obtain responses to the online questionnaire.
- Simultaneously, ask students to study about different types of social media campaigns (effectiveness, ease of accessibility by student community) and how these might be used to discuss the litter issue.

(ii) Online campaign: (7 days)

- Help students choose an appropriate platform.
- Guide students to design and implement the social media campaign use resource 2 for links to some social media campaign.
- Discuss the different aspects of getting attention to the message - appropriate media (images, etc) and effective punch lines, to help make the campaign successful.
- The online campaign should at least run for a period of 7 days.

Resource

Resource 2

Some useful links for social media campaigns.

<https://www.hubbub.org.uk>

<http://www.zerowastescotland.org.uk/litter-flytipping/social-media>

<http://www.zerowastescotland.org.uk/litter-flytipping/prevention-action-plans>

<https://www.slideshare.net/arkoashraf/anti-littering-campaign>

Resource 3

Pre-campaign Litter survey

1. What is your name and age?

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2. Gender? Male/Female

3. Are you interested in topic “litter”?

- Interested
- Not Interested
- Never thought about it?

4. Do you think that there is a problem associated with litter?

- The problem has become much more
- It is the same as before
- It was never a problem

5. If you think there is a problem associated with litter, then what is the problem?

- Litter only poses an aesthetic problem in nature
- Litter and illegal dumping can pose health and safety risks to humans
- Litter and illegal dumping can pose health and safety risks to other animals
- Provide two examples of how litter can harm a community economically:

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6. Have you ever littered?

- Yes
- No

7. If yes, why?

8. Which are the places you would tend to litter most?

- Roadside (from a moving vehicle)
- Parks or other recreational places
- Outside buildings
- Common transit areas like bus stops, railway station and airport

9. Have you ever made a special effort not to litter?

- Yes
- No

10. If yes, why?

11. If there was a law against Littering, would you still litter

- Yes
- No
- Couldn't be bothered

References:

1. Keep America Beautiful (<https://www.kab.org/>)
2. Glasgow city council site <http://www.zerowastescotland.org.uk/litter-flytipping/social-media>
3. Environment Protection Authority, Victoria site <http://www.epa.vic.gov.au/get-involved/report-litter/report-litter-app>
4. Aston University site <http://www.aston.ac.uk/news/releases/2016/october/-product-design-hubbub/>
5. Merriam - Wester Dictionary <https://www.merriam-webster.com>
6. Slide Share <https://www.slideshare.net/arkoashraf/anti-littering-campaign>