Guidelines for Monitoring of Litter and Waste in Schools

In the registration form and in the final report, choose one Litter Criterion to measure during the Campaign. You should complete the first monitoring of the chosen criterion when you register for the Campaign.

You must choose one measurement criterion from the list below:

1. Amount of litter found in the school yard
2. Amount of litter and waste collected in the school
3. Amount of paper collected in the school or classrooms
4. Amount of waste recycled in the school or classrooms

**Note: Data must be filled in kilograms (kg).**

You must monitor and measure your chosen criterion 6 times in order to demonstrate a change during the campaign. In the following pages, you can find four frameworks (one for each criterion) which provide guidelines for scheduling and carrying out monitoring and measurement activities.

Please use the table for your chosen criterion to record your data, and once the campaign is finished, remember to include the table in your final report.

**Additional notes:**

The main aim of monitoring the flows of waste is to assess the effect of the Litter Less Campaign on student behavior in relation to littering, recycling and waste minimization as well as to serve as an educational exercise. Students should understand how to measure and report waste/litter and reflect on any trends they notice.

However, educating students to minimize waste production can counterbalance the amount of waste diverted to recycling, making detection of the campaign’s effects more difficult. We would therefore appreciate the teacher’s comments on the results, as well as on the educational value of the monitoring exercise.

Thank you for your participation.

**CRITERION 1 – Amount of litter found in the school yard**

|  |  |
| --- | --- |
| **Consideration** | **Description** |
| Area to be monitored | Define a fixed school yard area for the litter-pick. **Be aware: The exact same area must be monitored at all times.** Make sure that the area is representative. |
| Objects to be monitored | Please collect and monitor all types of litter in your area. |
| Period and frequency of monitoring | Make a schedule and assign students. Make sure that no one else empties the bins during the monitoring period (you can inform the cleaner or put a note on the bins). **Be aware: You have to monitor 6 times during the campaign** (for example: during 6 consequent Tuesdays, in the morning). |
| Who will monitor | Choose the same number of students to collect and weigh the waste. |
| Homogeneity | Try to make sure that the students have the same understanding of how to monitor. |
| Comparability | Can the data collected be compared? Was it collected in the same way? |
| Avoid externalities | Avoid monitoring during weeks where the school produces an unusual amount of litter, e.g. during festive occasions. The data should be representative. |
| Weighing the litter | Weigh the litter you collected and note the results in kg in the table below |
| Analyze the result in class. | Discuss the results of the measurements with your students. You can e.g. plot the results over time and ask the students whether they see a trend. Is the trend/change positive or negative? What could explain the results? |

**CRITERION 1**

**School name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Number of students in school:\_\_\_\_\_\_\_ Area size:\_\_\_\_\_\_\_\_\_\_\_\_\_m2**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| i.d. | Date | Time | Duration (minutes) | Weight (kg) |
| 1 |  |  |  |  |
| 2 |  |  |  |  |
| 3 |  |  |  |  |
| 4 |  |  |  |  |
| 5 |  |  |  |  |
| 6 |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |

Teacher comments about the results:

**CRITERION 2 – Amount of litter and waste collected in the school**

|  |  |
| --- | --- |
| **Consideration** | **Description** |
| Area to be monitored | Decide on an area to be monitored. E.g. specific classrooms and/or offices. **Be aware: The exact same area must be monitored at all times.** |
| Objects to be monitored | Monitor the waste in bins used for general waste (not segregated according to types). The bins should be located in classes/areas used by students that participate in the Litter Less Campaign. |
| Period and frequency of monitoring | Make a schedule and assign students. Make sure that no one else empties the bins during the monitoring period (you can inform the cleaner or put a note on the bins). **Be aware: You have to monitor 6 times during the campaign (f**or example: during 6 consequent Tuesdays, in the morning). |
| Who will monitor? | Choose more or less the same number of students to collect and weigh the waste. |
| Homogeneity | Try to make sure that the students have the same understanding of how to monitor. |
| Comparability | Can the data collected be compared? Was it collected in the same way? |
| Avoid externalities | Avoid monitoring during weeks where the school produces an unusual amount of litter, e.g. during festive occasions. The data should be representative. |
| Weighing the litter | Weigh the waste you collected and note the results in kg in the table below (subtract the weight of the bin if necessary). |
| Analyze the result in class. | Discuss the results of your measurements with your students. You can e.g. plot the results over time and ask the students whether they see a trend. Is the trend/change positive or negative? Can changes in the separation of waste or in the recycling of waste explain the results? |

**CRITERION 2**

**School name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Number of students in school:\_\_\_\_\_\_\_**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| i.d. | Date | Time  (e.g. morning, afternoon) | Classroom/Offices  (e.g. 1a, secretariat) | Weight (kg) |
| 1 |  |  |  |  |
| 2 |  |  |  |  |
| 3 |  |  |  |  |
| 4 |  |  |  |  |
| 5 |  |  |  |  |
| 6 |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |

Teacher comments about the results:

**CRITERION 3 – Amount of paper collected in the school or classrooms** (Select this option if your school plans to implement initiatives to reduce staff and student paper usage during the campaign)

|  |  |
| --- | --- |
| **Consideration** | **Description** |
| Area to be monitored | Monitor the paper bins in specific classes, halls and/or offices. **Be aware: The same bins must be monitored at all times.** Choose a bin that is representative and is emptied on a regular basis. |
| Objects to be monitored | Monitor the paper waste in the paper bins. The bins should be located in classes/offices used by students or staff that participate in the Litter Less Campaign. |
| Period and frequency of monitoring | Make a schedule and assign students. Make sure that no one else empties the bins during the monitoring period (you can inform the cleaner or put a note on the bins). **Be aware: You have to monitor 6 times during the campaign** (for example: during 6 consequent Tuesdays, in the morning). |
| Who will monitor? | Choose the same number of students to collect and weigh the waste. |
| Homogeneity | Ensure that the students have the same understanding of how to monitor. |
| Comparability | Can the data collected be compared? Was it collected in the same way? |
| Avoid externalities | For example: **Avoid collecting paper during periods where classes hold unusual creative activities in which paper is used in large amounts.** The data should be representative. |
| Weighing the litter | Weigh the waste you collect and record the results in kg in the table below (subtract the weight of the bin if necessary). |
| Analyse the result in class. | Discuss the results of your measurements with your students. You can e.g. plot the results over time and ask the students whether they can see a trend. Is the trend/change positive? Can changes in the school activities, student use of paper resources (e.g. one-side vs. double-side) explain the results? |

**CRITERION 3**

**School name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Number of students in school and/or in sampled classrooms:\_\_\_\_\_\_\_**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| i.d. | Date | Time | Does the sampling include offices? (Yes/No) | weight of paper waste (kg) |
| 1 |  |  |  |  |
| 2 |  |  |  |  |
| 3 |  |  |  |  |
| 4 |  |  |  |  |
| 5 |  |  |  |  |
| 6 |  |  |  |  |

Teacher comments about the results:

**CRITERION 4 – Amount of waste recycled in school or classrooms**

(Use this option if your school just started implementing initiatives to improve waste recycling by staff and students during the campaign)

|  |  |
| --- | --- |
| **Consideration** | **Description** |
| Area to be monitored | Decide on an area/bin to be monitored. E.g. specific classrooms and/or offices. **Be aware: The same bins must be monitored at all times.** |
| Objects to be monitored | Choose one type of waste to monitor (e.g. bio, plastic, paper, metal). **Be aware: The same type of objects must be monitored at all times.** |
| Period and frequency of monitoring | Make a schedule and assign students. Make sure that no one else empties the bins during the monitoring period (you can inform the cleaner or put a note on the bins). **Be aware: You have to monitor 6 times during the campaign** (for example: during 6 consequent Tuesdays, in the morning). |
| Who will monitor? | Choose the same number of students to collect and weigh the waste. |
| Homogeneity | Ensure that the students have the same understanding of how to monitor. |
| Comparability | Can the data collected be compared? Was it collected in the same way? |
| Were externalities avoided? | For example: **Avoid collecting paper during periods where classes hold unusual creative activity in which paper is used in large amounts or during festive occasions.** The data should be representative. |
| Weighing the litter | Weigh the waste you collect and note the results for each waste type in kg in the table below. |
| Analyze the result in class. | Discuss the results of your measurements with your students. You can e.g. plot the results over time and ask the students whether they can see a trend. Is the trend/change positive for specific waste types? Can changes in the school activities, student use of resources (e.g. one-side vs. double-side paper use or reduced use of plastic) explain the results? |

**CRITERION 4**

**School name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Number of students in sampled classrooms:\_\_\_\_\_\_\_**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| i.d. | Date | Time | Waste type  (only choose one type e.g. bio, plastic, paper, metal) | Weight of waste (kg) |
| 1 |  |  |  |  |
| 2 |  |  |  |
| 3 |  |  |  |
| 4 |  |  |  |
| 5 |  |  |  |
| 6 |  |  |  |

Teacher comments about the results: