

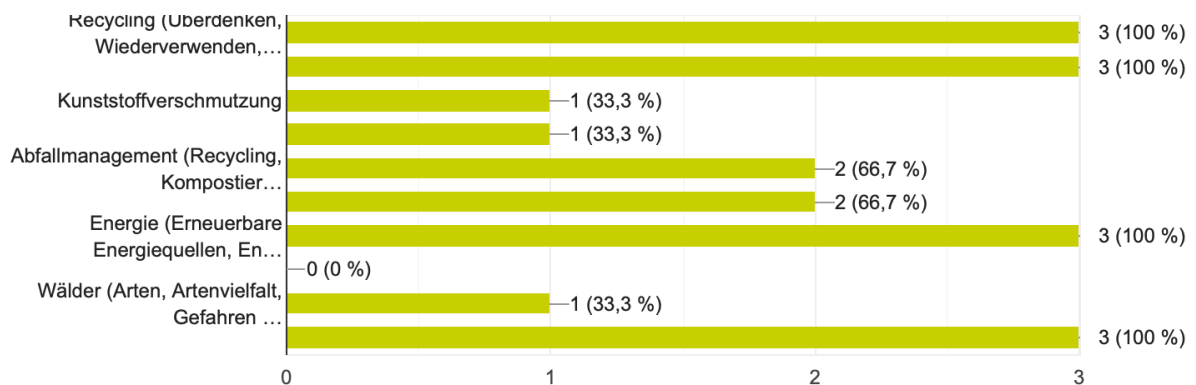


School Staff_Questionnaire_Analysis “Plastic Free Heroes” - VG-IN-BY-19-30-060140 Innovation in Learning Institute, Germany

The questionnaire was submitted by 3 teachers, teaching different subjects from different schools in Germany.

- **Grades taught:**
100% of teachers responding stated that they teach all grades (14 – 18 years) of secondary education.
- **Is Environmental Education part of you school curriculum?**
The majority of teachers (66,7%) stated that environmental education is part of the curriculum.
As an explanation for the question, it was stated that a school specialises in solar energy and for this reason these contents are part of the curriculum. Another teacher emphasizes that these can be addressed as voluntary group work. One teacher points out that this is treated as a topic in German and social studies lessons.
- **If Environmental Education is part of your School Curriculum, what topics are covered? The answers were:**
 1. Recycling (Rethink, Reuse, Reduce, Recycle) – 100 %
 2. Climate Change (greenhouse gases, effects of Climate change, actions to curb Climate Change) – 100 %
 3. Plastic pollution – 33,3 %
 4. Nature, Biodiversity and Conservation (species, biodiversity, threats to terrestrial environments) – 33,3 %
 5. Waste Management (Recycling, Composting, Reducing waste) – 66,7 %
 6. Water (resources, use, consumption) – 66,7 %
 7. Energy (Renewable Energy Sources, Energy savings, Energy consumption) – 100 %
 8. Marine Biology (species, biodiversity, threats to our marine environment) – 0 %
 9. Forests (species, biodiversity, threats to our forests) – 33,3 %
 10. Environmental citizenship (taking actions to save our planet) – 100 %

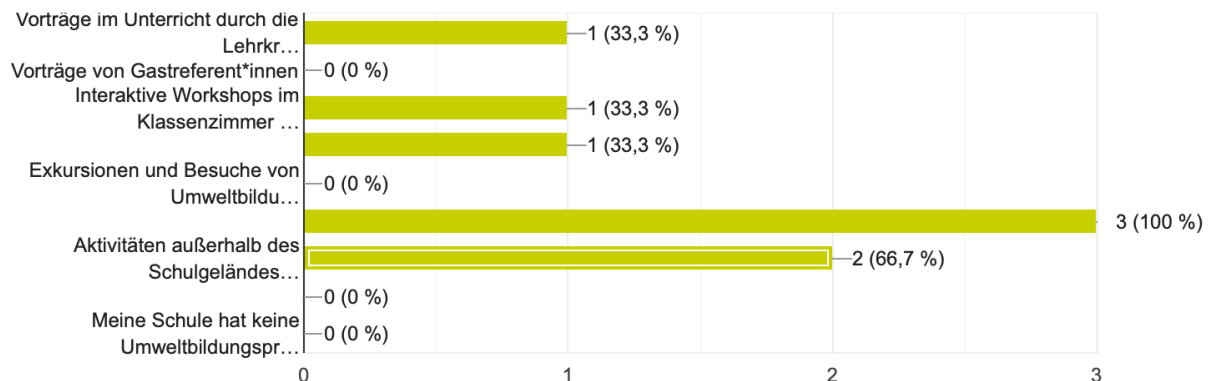
Remark: All teachers mention recycling, climate change, energy and environmental citizenship as covered topics as part of their school curriculum.



• **Please choose the ways your school is delivering Environmental Education programmes teachers answered:**

1. Lectures in class by teachers – 33,3 %
2. Lectures in class by guest speakers – 0 %
3. Interactive workshops in the classroom (online, eplatforms, games) – 33,3 %
4. Excursions and visits to nature – 33,3 %
5. Excursions and visits to environmental education centers – 0 %
6. Activities in school premises (e.g. clean ups, recycling) – 100 %
7. Activities outside school premises (e.g. clean ups) – 66,7 %
8. Interactive and creative activities (environment and art, theatrical plays about the environment, documentary screenings) – 0 %
9. Optional courses – 0 %

Remark: Only activities in school premises are mentioned by all teachers as method to deliver environmental education programmes.



• **How important is Plastic Pollution to you?**

100 % of the teachers considered it as extremely important.

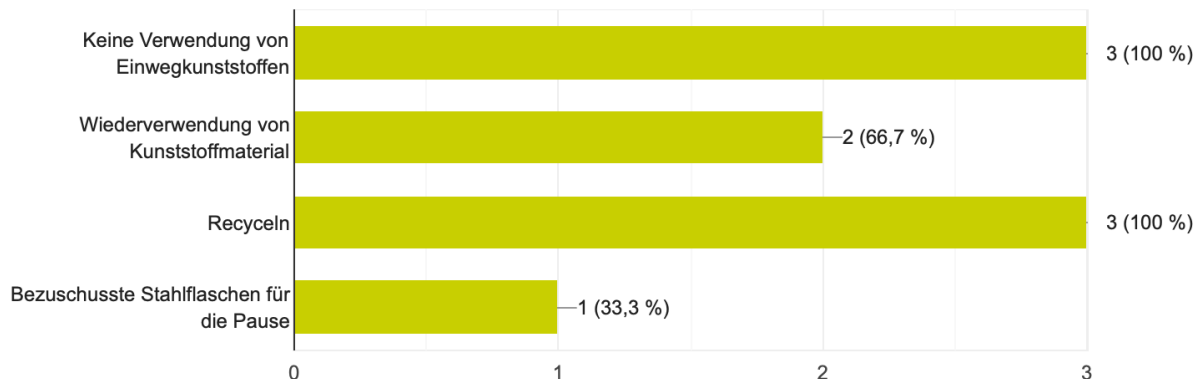
- **WHY is plastic pollution important teachers reacted with:**

1. Toxic material in our environment – 100 %
2. Animals eat plastic and they die – 100 %
3. Plastic is indestructible – 100 %
4. We use plastic once and then we throw it away (single use plastic) – 66,7 %
5. Plastic contains chemicals that pollute our environment – 100 %



- **How do you urge students to reduce Plastic Pollution?**

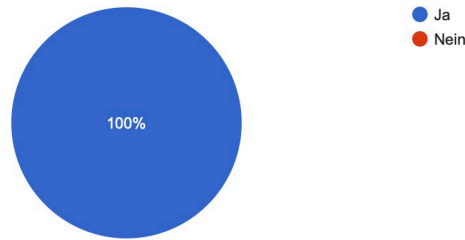
1. Stop using single use plastics – 100 %
2. Reuse Plastic Material – 66,7 %
3. Recycle – 100 %
4. Subsidized steel bottle for the break – 33,3 %



- **Do you know any recycling policies and initiatives that are implemented in our country?**

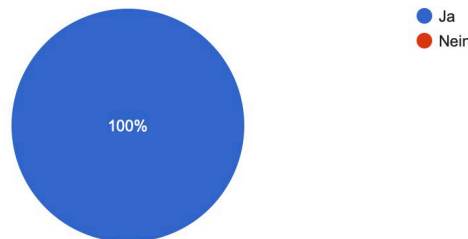
All teachers participating in the survey answered this question in the affirmative.

Twice the separation/recycling of plastic was mentioned as a strategy (separate plastic, paper, bio, glass; recycling of plastic, glass, paper and bio) and once tidy towns.



- **Are you aware of any projects that are promoting public awareness on the issue of plastic pollution?**

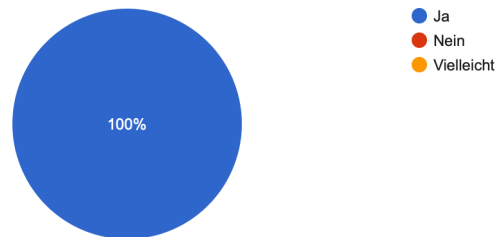
All teachers participating in the survey answered this question in the affirmative.



- **Do you urge your students to participate in these actions?**

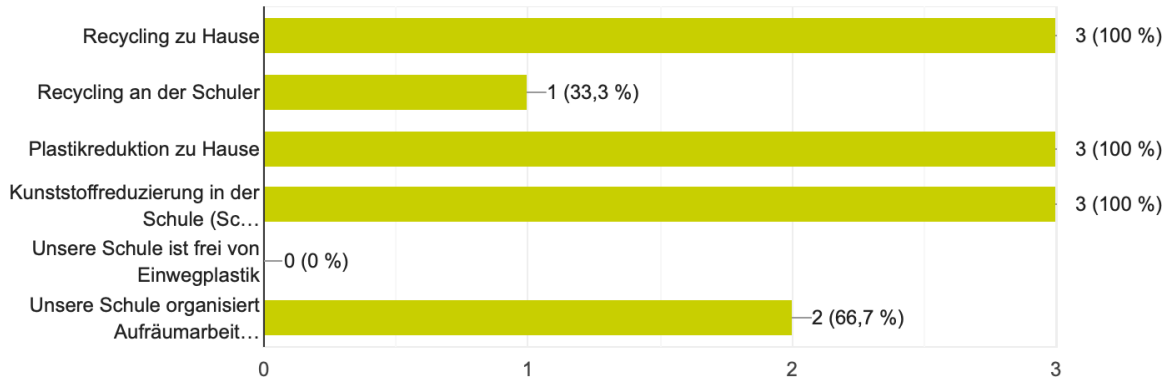
All teachers participating in the survey answered this question in the affirmative.

The answer was further explained with the following answers: Try to get the students to participate in environmental actions; Try to make the students environmentally aware and Park clean ups.



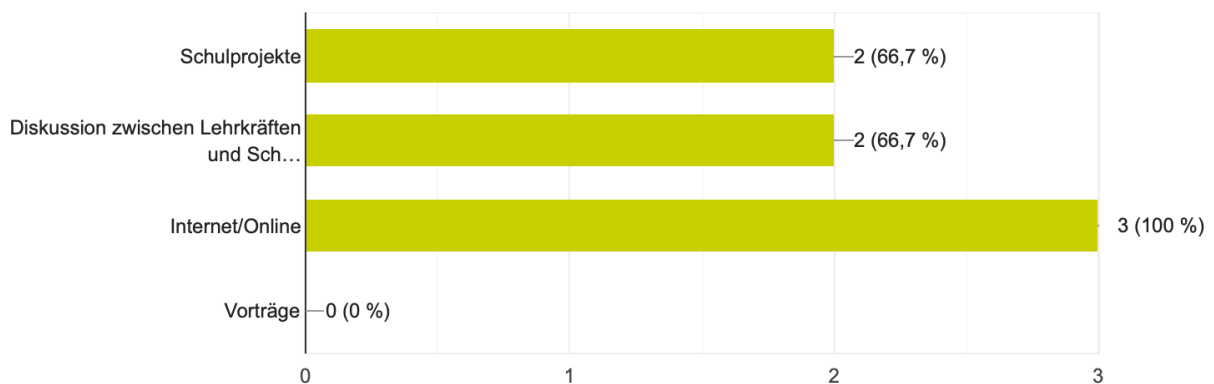
- **Please list your actions regarding plastic pollution**

1. Recycling at home – 100 %
2. Recycling at school – 33,3 %
3. Plastic reduction at home – 100 %
4. Plastic reduction at school (school implementing projects for students to reduce their plastic consumption) – 100 %
5. Our school is single use plastic free – 0 %
6. Our school is organizing clean ups – 66,7 %



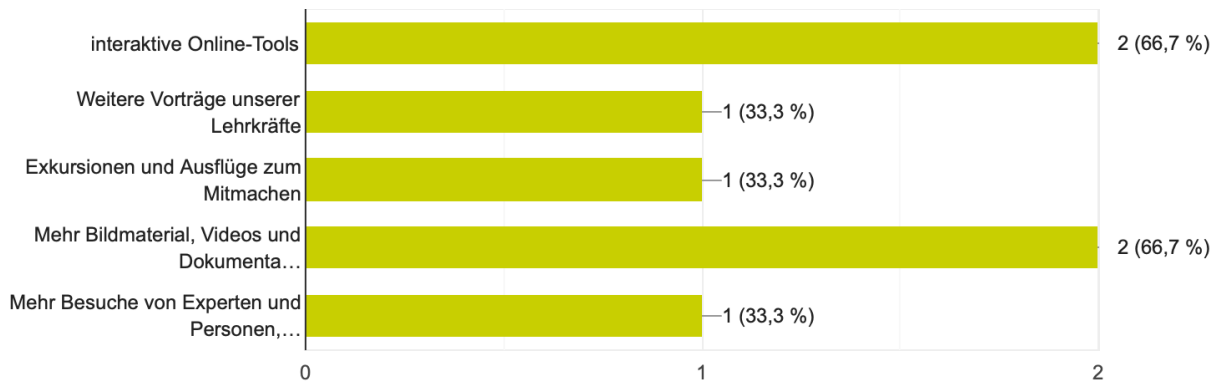
- **How are you delivering your knowledge of plastic pollution to the students?**

1. School projects – 66,7 %
2. Discussion between teachers and students – 66,7 %
3. Internet/Online – 100 %
4. Lectures – 0 %



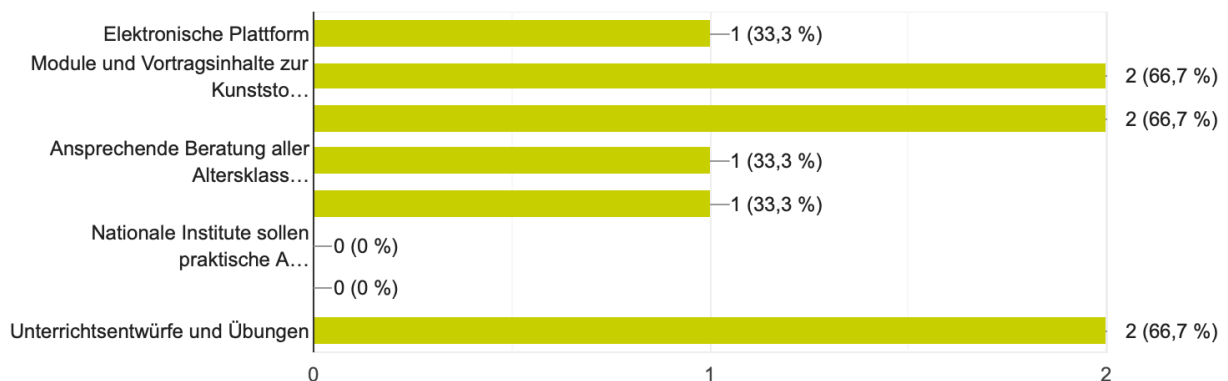
- **How would you like to teach on the issue of plastic pollution?**

1. Interactive tools online – 66,7 %
2. More lectures by our teachers – 33,3 %
3. Excursions and hands on trips – 33,3 %
4. More visuals, videos and documentaries – 66,7 %
5. More visits from experts and people who work on plastic pollution prevention – 33,3 %



- **What tools would you like to have in order to help you with your teaching on plastic pollution?**

1. Electronic platform – 33,3 %
2. Modules and lecture outlines on plastic pollution – 66,7 %
3. Case studies, visuals, documentaries on the issue – 66,7 %
4. Set courses for all ages regarding plastic pollution – 33,3 %
5. Collaboration with other organisations to provide the training – 33,3 %
6. National institutes to provide hands on training in nature – 0 %
7. Lecture presentations and notes – 0 %
8. Lesson outlines and exercises – 66,7 %



- **In what other ways you would like to learn and be informed about plastic pollution?**

In response to this question, the interviewed teachers indicated the following information channels: Films, documentaries, online and email.

- **What other information could be provided to help you understand the issue and become more active?**

One teacher mentioned posters as a suitable tool and two people mentioned surveys.

- **Is there any school-specific, community-specific, or cultural factors that may affect the implementation of an environmental education programme?**

The teachers participating in the survey named internships, excursions and school gardens as important factors.

Conclusions

Analysing all the answered that German teachers provided we could conclude that:

- For most of the teachers interviewed, environmental education plays a role in the school curriculum.
- The main focus is on topics related to recycling, climate change, energy and environmental citizenship.
- Environmental education programmes vary, but activities on school grounds were mentioned by all teachers.
- Plastic pollution as a topic is important for all teachers.
- Teachers are aware of recycling strategies and initiatives; awareness raising projects in their country and urge their students to participate.
- Interactive and online available tools as well as further visuals, videos and documentations are desired as teaching materials.
- For Tools to support the own teaching they highlighted modules an lecture outlines on plastic pollution, case studies, visuals, documentaries on the issues, and lesson outlines and exercises.

Students_Questionnaire_Analysis “Plastic Free Heroes” - VG-IN-BY-19-30-060140 Innovation in Learning Institute, Germany

The questionnaire was submitted by 21 students between 11-18 years old studying at different schools in Germany.

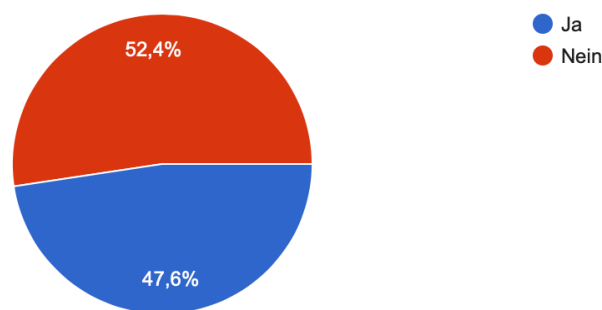
- **Is Environmental Education part of your school curriculum?**

52,4 % of the the young people participating in the survey answered **no** and 47,6 answered % **yes**.

Eleven of the young people interviewed stated that environmental education takes place in some way at their school (Various answers: is addressed; no independent subject but thematisation in class or through seminars and excursions; part of biology lessons; Not part of the curriculum but thematisation in geology (8th grade, ozone holes); some information about climate change; Many seminars and information from the teachers; Mostly environmental education takes place in lessons as part of the curriculum. In addition, our school has also been participating in various projects for a few years now, which teach students about climate and environmental protection (e.g. environmentally friendly energy sources, etc); I think it's in there; Some teachers teach environmental education voluntarily).

Seven of the young people stated that environmental education is a topic of discussion in their school, but assessed this as insufficient (Various answers: Only information, no concrete opinions; mention only incidentally or in passing; explanations but no appeals; at least not regularly; only in the form of a voluntary environmental working group; there are optional subjects on the topic, but they are not very well filled).

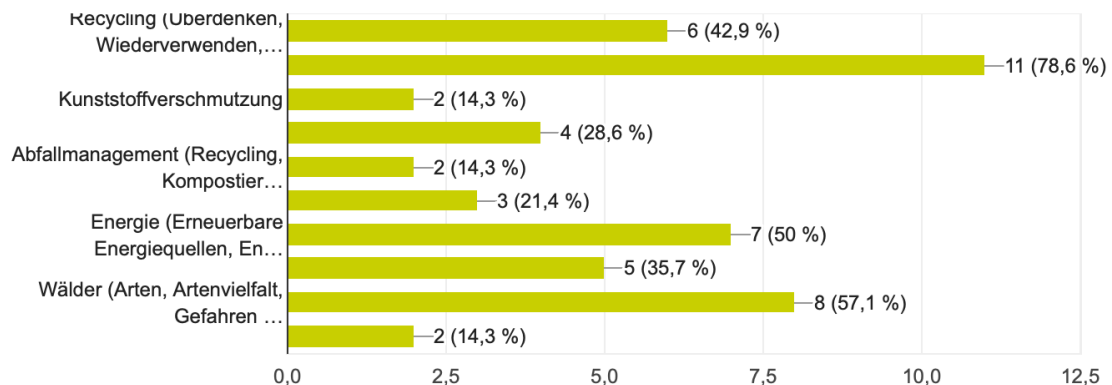
Two of the participating young people emphasized that environmental education is not a topic at their school (Various answers: so far nothing on the topic; environmental education is not discussed in detail in class).



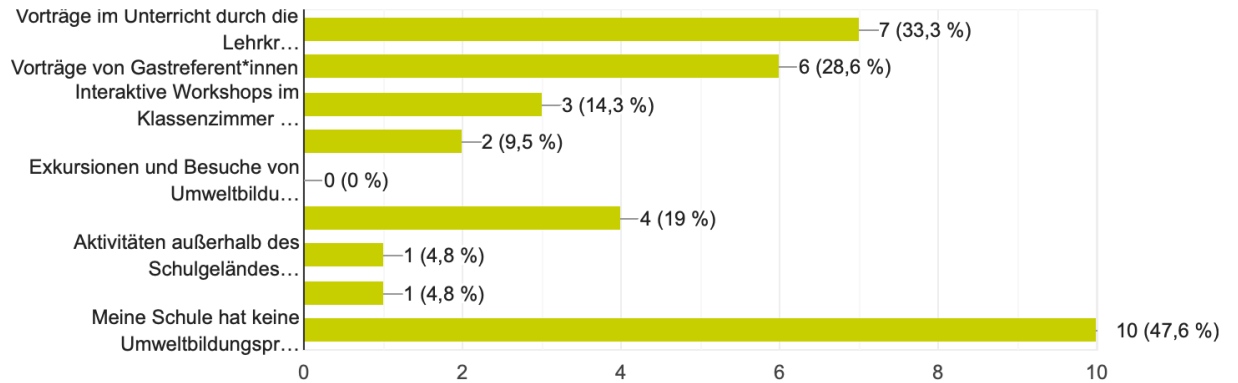
- **If Environmental Education is part of your School Curriculum, what topics are covered the answers were:**

1. Recycling (Rethink, Reuse, Reduce, Recycle) – 42,9%

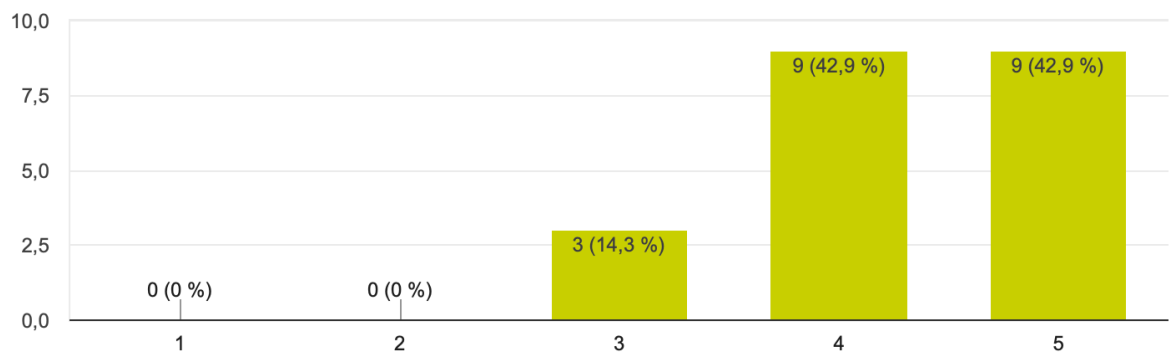
2. Climate Change (greenhouse gases, effects of Climate change, actions to curb Climate Change) – 78,6%
3. Plastic pollution – 14,3%
4. Nature, Biodiversity and Conservation (species, biodiversity, threats to terrestrial environments) – 28,6%
5. Waste Management (Recycling, Composting, Reducing waste) – 14,3%
6. Water (resources, use, consumption) – 21,4%
7. Energy (Renewable Energy Sources, Energy savings, Energy consumption) – 50,0%
8. Marine Biology (species, biodiversity, threats to our marine environment) – 35,7%
9. Forests (species, biodiversity, threats to our forests) – 57,1%
10. Environmental citizenship (taking actions to save our planet) – 14,3%



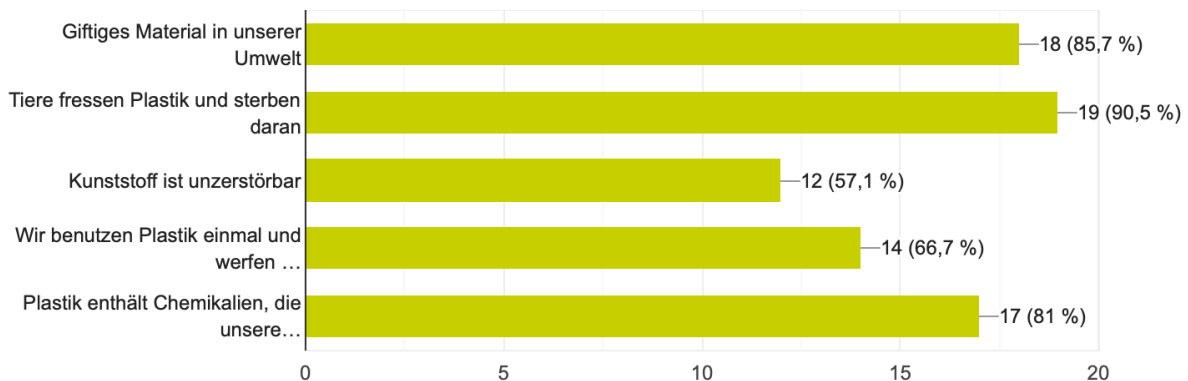
- **Please choose the ways your school is delivering Environmental Education programmes students answered:**
 1. Lectures in class by the teachers – 33,3 %
 2. Lectures by guest speakers – 28,6 %
 3. Interactive workshops in the classroom (online, eplatforms, games) – 14,3 %
 4. Excursions and visits to nature – 9,5 %
 5. Excursions and visits to Environmental Education Centers – 0 %
 6. Activities in school premises (e.g. clean ups, recycling) – 19 %
 7. Activities outside school premises (e.g. clean ups) – 4,8 %
 8. Interactive and creative activities (environment and art, theatrical plays about the environment, documentary screenings) – 4,8 %
 9. My School does not have any Environmental Education programmes – 47,6 %



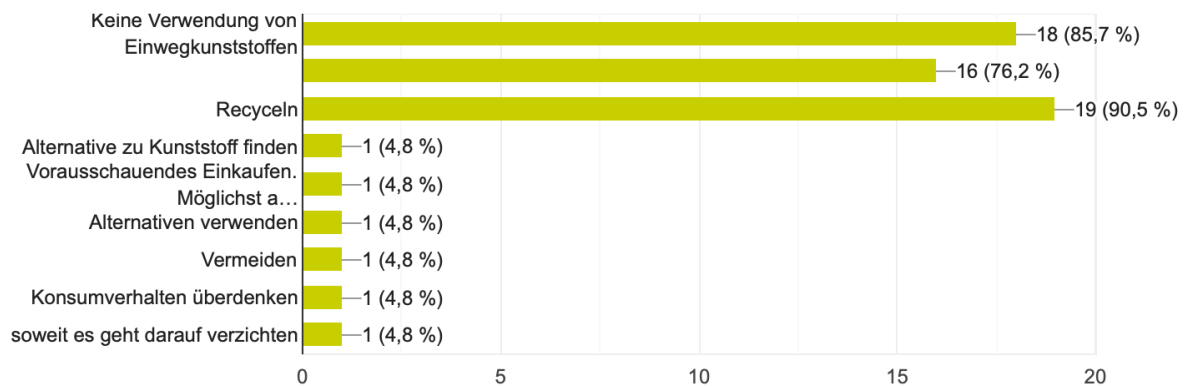
- **How important is Plastic Pollution to you?**
- 85,8 % of the young people participating in the survey stated that the issue of plastic pollution is important or extremely important to them (42,9 % each).



- **At the question: Why do you think Plastic Pollution is an issue?**
 1. Toxic material in our environment – 85,7 %
 2. Animals eat plastic and they die – 90,5 %
 3. Plastic is indestructible – 57,1 %
 4. We use plastic once and then we throw it away (single use plastic) – 66,7 %
 5. Plastic contains chemicals that pollute our environment – 81 %



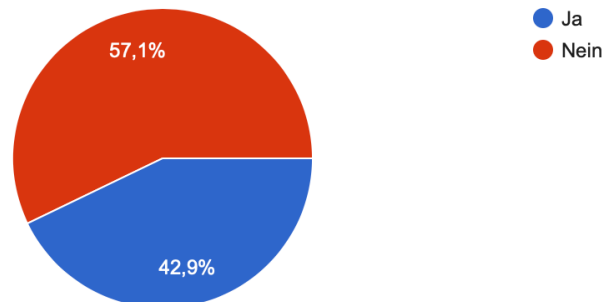
- **At the question: How can we help reduce Plastic Pollution?**
 1. Stop using single use plastics – 85,7 %
 2. Reuse Plastic Material – 76,2 %
 3. Recycle – 90,5 %
 4. Others: Do without as far as possible – 4,8 %
 5. Other: Rethinking consumer behaviour – 4,8 %
 6. Other: Avoid – 4,8 %
 7. Others: anticipatory shopping, avoid plastic if possible; demand falls, production and supply become less – 4,8 %
 8. Other: Use alternatives – 4,8 %
 9. Other: Find an alternative to plastic – 4,8 %



- **At the question: Do you know any recycling policies and initiatives that are implemented in our country?**

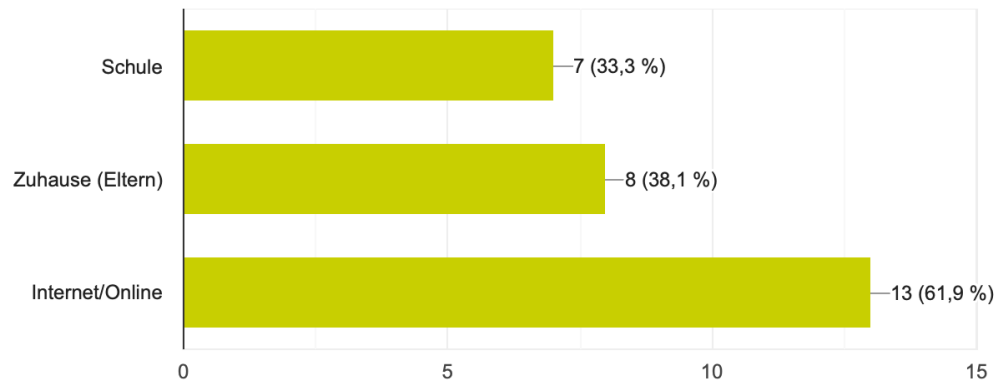
42,9 % of the young people stated that they were aware of strategies and initiatives, more than half (57,1 %) negated this question.

The strategies mentioned are: Deposit; yellow bag, recycling and reuse of plastic and paper, waste glass container, waste clothing container, zero-waste, recuperation system, waste separation, upcycling.



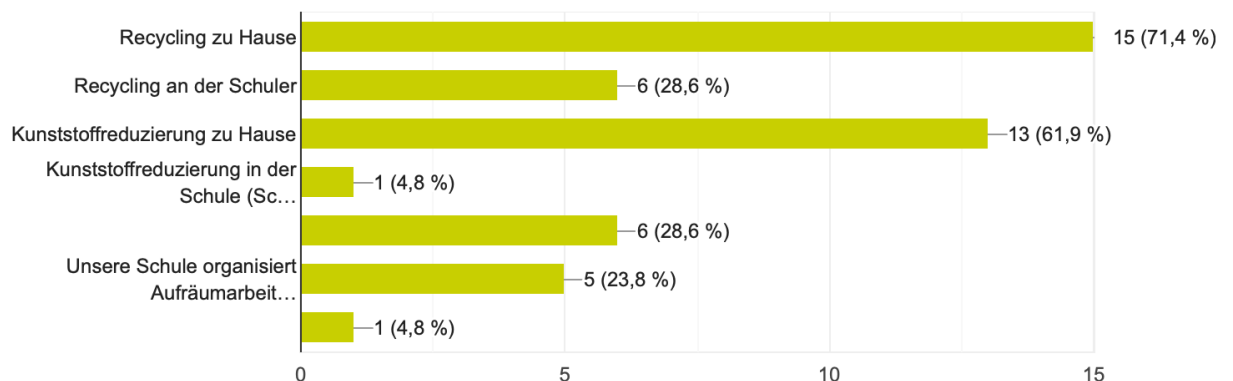
- **At the question: Where did you learn about these recycling policies or initiatives?**

1. School – 33,3 %
2. Home (Parents) – 38,1 %
3. Internet / Online – 61,9 %



- **At the question: Please list your actions regarding plastic pollution**

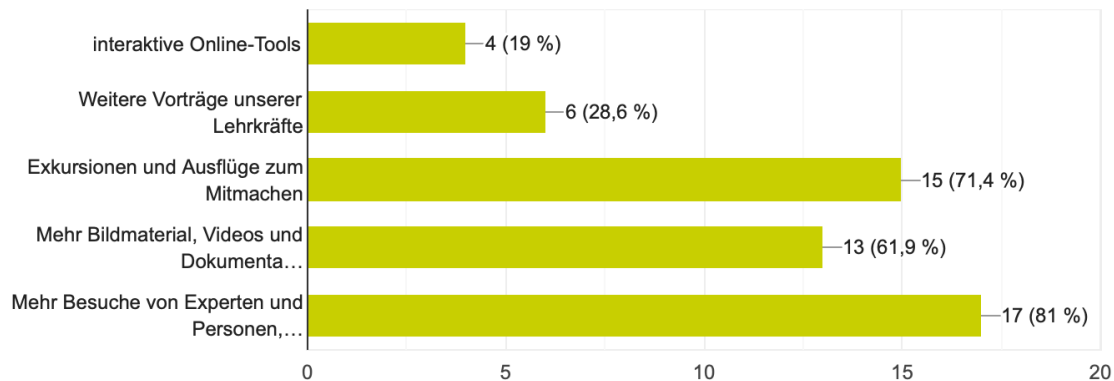
1. Recycling at home – 71,4 %
2. Recycling at school – 28,6 %
3. Plastic reduction at home – 61,9 %
4. Plastic reduction at school (school implementing projects for students to reduce their plastic consumption) – 4,8 %
5. Our school is single use plastic free – 28,6 %
6. Our school is organizing clean ups – 23,8 %
7. Other: I am involved with Fridays for future and give sustainability tips via Instagram – 4,8 %



- **At the question: How would you like to be taught on the issue of plastic pollution?**

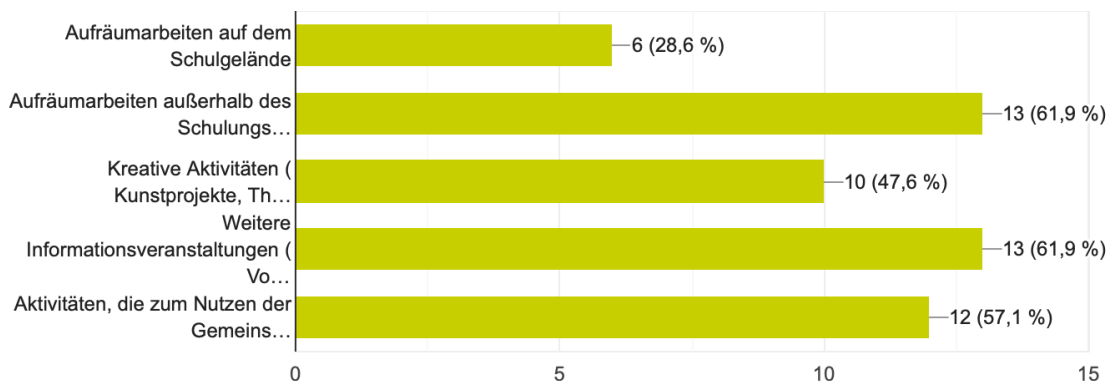
1. Interactive tools online – 19%
2. More lectures by our teachers – 28,6 %
3. Excursions and hands on trips – 71,4 %
4. More visuals, videos and documentaries – 61,9 %

5. More visits from experts and people who work on plastic pollution prevention – 81 %



• **At the question: In which activities organised by your school on plastic pollution you would prefer to participate?**

1. Clean ups in school premises – 28,6 %
2. Clean ups outside of school premises 61,9 %
3. Creative activities (art projects, theatre plays) – 47,6 %
4. More informative activities (lectures) – 61,9 %
5. Activities organised to benefit the community (public awareness, leaflets) – 57,1 %



• **At the question: In what other ways you would like to learn and be informed about plastic pollution?**

- Thematization by teachers
- School (lessons, school projects, interactive works) (5 x)
- Voluntary education exclusively related to sustainability or plastic pollution
- Creative activities (projects, making films, organising exhibitions)

- Visits/excursions by the authorities/institutes responsible for this area
 - Experts who are perfectly familiar with the topic and can present strategies (2 x)
 - While shopping, see what impact it will have in the future to buy these things (packaging) now (as an eye opener).
 - Cleaning up outside the school grounds.
 - Interactive
 - magazines
 - Internet (3 x)
 - Documentations (2 x)
 - News (2 x)
 - Games
 - No other than those mentioned in the previous question
- **At the question: What other information could be provided to help you understand the issue and become more active?**
 - Addressing the issue already in primary school to apply recycling strategies throughout life
 - Integration into relevant related school topics
 - Grading of such projects
 - Just casual lessons
 - Expert lectures at school
 - Lectures for pupils and citizens: Not only clarification, but also suggestions for reducing plastic in everyday life
 - Contact person (e.g. from Greenpeace, Friday for Future, Bund Naturschutz ...)
 - Concrete actions for everyday life
 - Showing alternatives
 - Avoidance of plastic
 - Avoidance of plastic/heavy degradable materials in everyday life.
 - Proper waste separation. How does recycling work?
 - More about the nature of plastic
 - Examples of solutions: It seems as if there is currently no solution for problems like plastic contamination
 - Videos/ Internet contributions with background information on this topic as well as possibilities for reducing plastic pollution in everyday life
 - pictures
 - Videos
 - Games
 - No idea
 - I must inform myself

Conclusions

Analysing all the answered that German students provided we could conclude that:

- About half of the young people interviewed emphasised that environmental education at their school does not play a major role or only takes place on the fringe. An anchoring in the curriculum is not apparent to the students, but rather prescribes the topic to be dealt with in individual subjects.
- The issue of plastic pollution plays a special role for the young people, they are aware of the importance of this problem.
- Even if they are not necessarily familiar with the various existing strategies and initiatives in their country, they have a number of suggestions for addressing the issue in class or in everyday life.
- So far, the most important source of information on this topic has been the Internet or online formats.
- As a teaching method they wish in particular excursions and hands on trips, more visuals, videos and documentaries and more visits from experts and people who work on plastic pollution prevention
- In summary, it can be seen that the young people would like to see the topic more firmly anchored in schools. Strategies that have been implemented so far are mainly carried out in private life.