





TIME ALLOCATED:	360 minutes	
LEVEL:	Expert	
TITLE OF	One Man's Trash Is Another Man's Treasure	
THE WEBQUEST:		

INTRODUCTION (It involves giving background information on the topic and, often introduces key vocabulary and concepts which learners will need to understand in order to complete the tasks involved. It should present a scenario and context for playing out the tasks in the WebQuest and it should be a fun, engaging and creative so as to draw the learners in):

Let's admit it: Our waste stream is growing out of proportion. In 2016, the total waste generated in the EU-28 countries by all economic activities and households amounted to 2 538 million tonnes.

With improper garbage disposal actively contributing towards soil and air contamination and posing to be a serious threat to the health of humans, animals, and marine life, it is time that we look into eco-friendly ways of managing waste.

You have probably heard of the famous 3 Rs - *reduce*, *reuse*, *recycle* — which encourage and remind us to seek out other waste management options instead of just throwing away items and contributing to pollution.

But do we follow through? How good are we at managing our waste – as individuals and countries? Do we see waste simply as trash or as potential treasure?

TASKS (explains clearly and precisely what learners have to do, it should be motivating and interesting and where possible, it should include activities that contribute to the development of skills that they will use in their daily lives. Guidance should be given on how to present findings; for example, maps, graphs, essays, wall displays and diagrams):

This semester, your class has decided to help spread awareness of the impact waste management has on our environment. You have decided to research how different people and countries approach and manage waste. There is much we can learn from each other on how to get the most out of waste and find hidden treasure in trash.

You believe you can help others implement good, eco-friendly changes in their everyday life. Each step, no matter how small, can contribute to creating a healthy environment for all of us.

To complete this 'Trash or Treasure?' awareness-raising research, you will have to follow the steps outlined in the process below.

PROCESS (set of steps and research tasks using predefined sources that are predominantly web-based usually in a clickable form. This stage has usually one or more "products" that learners are expected to present at the end. These products form the basis of the Evaluation stage.





Step 1 – What is waste management? How is waste managed in your country?

You might already know that possible methods for managing waste include reducing, reusing and recycling waste. But do you know what other methods of managing waste exist? What types of waste do we have? What is the waste management hierarchy?

What is being done in your country? How does your country manage waste – what waste management laws and habits are typical for your country?

To find out the answers to these questions, explore the links included in the 'Resources' section below and/or conduct your online research and see what you can learn about waste management and how it is carried out in your country!

Step 2 – 'What does waste management mean to you?': A survey

Now that you have researched waste management and have a better idea of how waste is managed in your country, it is time to research what members of your community do. How do they manage their waste? Do they follow national rules and regulations? How are their everyday habits? What does waste management mean to them?

Design a survey you can carry out in your school and community to see how eco-friendly your community is.

Think about:

- What topic of waste management will you focus on (e.g. recycling, management of hazardous waste, turning waste into energy, electronic waste)?
- Who will you ask other students, teachers, family members?
- How many questions will you have?
- How many people will participate in the survey?
- Will you carry it out online or in-person?
- How will you record and analyse the results?

Analyse your results. What answers did you get? What do they tell you about your community? Does it match your country's statistics?

Links included in the 'Resources' section will help guide you in the process of designing, carrying out and analysing your survey.

Step 3 – Waste management around the world

You now know how waste is managed in your local community and your country. But is that all that can be done? How are other countries managing waste? Are they on a good path or is there still room for progress?

Select 2-4 other EU or world countries. Research information available about those countries online to see whether they treat waste as trash or treasure.

Explore the 'Resources' links for suggestions of which countries to include in your research.

What did you find out? Were you surprised? How do your community and country measure up against others?





Step 4 – 'Trash or Treasure?': Comparison of waste management between countries

Now that you have collected information about waste management approaches in your community and country as well as other countries, it is time to compare all of the results you got. What information stands out? What do you find most interesting? Compared to others, does your community utilize the full potential of waste? What ideas that you found in your research can be implemented in your community? How can other communities learn from your example? Who treats waste as trash and who treats it as treasure?

To help raise awareness of the importance of efficient waste management in your community, create a poster summarizing the most important results. You can use 'Resources' provided as a starting point in creating your poster. You can create the poster on paper or online and hang it in your school or post it on your school's website.

RESOURCES: For each step in the process, there should also be a series of links included (3-4 per step). These links should be fore videos, articles, blogs, webpages, etc. that the learners can visit to help them to complete the task. Links should be embedded in the WebQuest to sites, pages, databases, search engines and so on.):

Resources for Step 1:

- How to manage your waste at home? https://www.commonfloor.com/guide/how-to-manage-your-waste-at-home-26881.html
- Managing The Waste We Produce https://medium.com/@swachhcoin/managing-the-waste-we-produce-5fb267b2a42d
- The Waste Management Hierarchy https://www.thebalancesmb.com/reduce-reuse-and-recycle-the-waste-management-hierarchy-2878202
- 7 Waste Disposal Methods https://www.norcalcompactors.net/waste-disposal-methods/
- Why Is Waste Sorting Important When Recycling & Easy Guide to Sorting Your Waste at Home https://greentumble.com/why-is-sorting-important-when-recycling/
- Waste Statistics https://ec.europa.eu/eurostat/statistics-explained/pdfscache/1183.pdf

Resources for Step 2:

- Survey design https://www.questionpro.com/features/survey-design/
- Designing a Survey https://www.sciencebuddies.org/science-fair-projects/references/how-to-design-a-survey
- How To Conduct A Survey In 7 Steps https://www.typeform.com/surveys/how-to-conduct-survey/
- How to use Google Forms Tutorial for Beginners (2019) https://www.youtube.com/watch?v=BtoOHhA3aPQ





Resources for Step 3:

- Global garbage: How 5 influential countries are combating issues with waste https://www.wastedive.com/news/global-garbage-how-5-influential-countries-are-combating-issues-with-waste/417895/
- 5 Countries With a Creative Approach to Trash Disposal https://www.goodnet.org/articles/5-countries-creative-approach-to-trash-disposal
- How can we manage our waste and make money doing it? -https://www.weforum.org/agenda/2015/11/how-can-we-manage-our-waste-and-make-money-doing-it/
- Waste management in the EU: infographic with facts and figures <u>https://www.europarl.europa.eu/news/en/headlines/society/20180328STO00751/eu-waste-management-infographic-with-facts-and-figures</u>
- Why are some European cities better than others at dealing with garbage? –
 https://theconversation.com/why-are-some-european-cities-better-than-others-at-dealing-with-garbage-56382

Resources for Step 4:

- How to Summarize Information and Present it Visually -https://venngage.com/blog/how-to-summarize/
- Ways to represent data https://www.youtube.com/watch?v=0ZKtsUkrgFQ
- Microsoft Sway Create, Design, and Share Your Story https://www.youtube.com/watch?v=85ZmykZjh8U
- Glogster Tutorial https://www.youtube.com/watch?v=7Hul1oP86ck

EVALUATION (self-evaluation, comparing and contrasting of what the learners have learned, giving feedback to the trainer on how they feel, what they have learned):

On completion of this WebQuest, young adults will have achieved the following learning outcomes:

Knowledge	Skills	Attitudes
 Factual knowledge about ecologically acceptable waste handling practices. Basic knowledge about concrete waste disposal methods. 	Compare waste management methods and strategies used at local, national and international level.	 Awareness of the influence of poorly handled waste on the environment. Appreciation of a lifestyle contingent on responsible handling of waste.





- Theoretical knowledge of sustainable waste management.
- Theoretical knowledge of the waste management hierarchy.
- Factual knowledge of designing a survey.
- Factual knowledge of designing a poster and visually representing data.

- Design and conduct a survey on waste management.
- Analyse survey results on waste management.
- Conduct research into national waste management policies.
- Summarize research results on national waste management policies.
- Analyse statistical data on waste management methods.
- Use digital tools to carry out a survey and present survey results.

- Openness to active contribution to reducing waste in their immediate environment.
- Openness to promoting awareness of efficient waste management methods and policies.
- Appreciation and acknowledgment of others' opinions.
- Appreciation of working as part of a team.
- Willingness to support local initiatives of sustainable waste management practices.

As part of the assessment of this WebQuest, all young people will be expected to create a poster summarizing the most important points of their research into waste management strategies at the local, national, and international level. This will also serve as a means of raising awareness of sustainable waste management practices in the local community – providing an incentive for the community to make changes in their approach to and perception of waste.

As a self- assessment exercise for this WebQuest, young people can complete a short self-reflection exercise, in writing and/or as a group discussion in class. The following questions will guide this self-assessment:

- How did you feel about participating?
- How did members of your group work together?
- How do you feel about learning in this way?
- Which competences did you develop what new knowledge, skills and attitudes do you have?
- Did the task offer enough time to complete all of the steps?





- Did you have enough materials and instructions to complete the task?
- What did you dislike about this task?
- What did you like the most about this task?

Questions that a parent or teacher might use to start a discussion with young people about the environment and to debrief this WebQuest:

- How has your perception of waste management in your community and country changed after completing this task? Did you have any misconceptions about waste management?
- How will you manage waste at home and in school after completing this task? What will you do differently?
- How can you help and support other community members in properly managing waste?
- How can you promote the positive messages you learned?

CONCLUSION (provides an opportunity to summarise the experience, to encourage reflection about the process, to extend and generalise what was learned, or some combination of these. Suggest questions that a trainer might use in a whole class discussion to debrief a WebQuest):

If we want to take part in and support an ecologically sustainable lifestyle, we have to start with ourselves – our behaviour, habits, and attitudes. While we may know general facts on waste management, we have to examine how theoretical knowledge (e.g., the 3 Rs of waste management) or inspirational adages (e.g., waste not – want not) actually look in practice.

That is why this WebQuest task is important – it forces us to really look into how community members are handling waste, not just what we think we *should* be doing. It illustrates the importance of each individual's actions.

We should also contextualize our efforts by comparing our waste handling practices with other communities. By doing that we notice what positive actions we are already taking and in which areas we may be still lacking. We should look at a sustainable lifestyle as a continually ongoing and evolving process, where there is always room for improvement or no one correct answer.

