Exemplary Learning Material for Science Education

Waist Deep in Waste – Necessity or Irresponsibility?

Developer: Jack Holbrook

Institute: ICASE Country: UK

Subject: Biology/Chemistry/Physics/Science

Grade level: 10-11

Overall Objectives/Competencies: The students are expected to:

- 1. decide, with justification, the most appropriate way to deal with plastic waste
- 2. classify plastics as thermoplastic or thermosetting
- design and carry out an experiment to test gases liberated when plastics are heated and identifying the products formed.
- 4. carry out a survey and analyse, organise and critically evaluate findings.
- 5. cooperate by discussing meaningfully, listen to others opinions, and reach consensus in a group
- 6. communicate effectively using language skills and appropriate visual aids and present the findings from the survey in a meaningful way to the class
- 7. explain the term plastics and the classification into thermoplastic and thermosetting.

Curriculum content: Meaning of plastics, meaning of thermoplastics and thermosetting plastics, products from burning plastics.

Kind of activity: Designing, administering and analysing a survey among households, designing and carrying out experiments, decision making discussion.

Anticipated time: 4 Lessons

Abstract:

This module highlights the problem of plastic waste and the effects it has on the community. It tries to find a solution to the problem.

Attached files		
1.	Students' activities	Students activities in a separate file
2.	Teaching guide	Teaching guide in a separate file
3.	Assessment	Assessment tool linked to teaching in a separate file
4.	Teacher's notes	Teacher's notes in a separate file