



SID 5 **Research Project Final Report**

● **Note**

In line with the Freedom of Information Act 2000, Defra aims to place the results of its completed research projects in the public domain wherever possible. The SID 5 (Research Project Final Report) is designed to capture the information on the results and outputs of Defra-funded research in a format that is easily publishable through the Defra website. A SID 5 must be completed for all projects.

● This form is in Word format and the boxes may be expanded or reduced, as appropriate.

● **ACCESS TO INFORMATION**

The information collected on this form will be stored electronically and may be sent to any part of Defra, or to individual researchers or organisations outside Defra for the purposes of reviewing the project. Defra may also disclose the information to any outside organisation acting as an agent authorised by Defra to process final research reports on its behalf. Defra intends to publish this form on its website, unless there are strong reasons not to, which fully comply with exemptions under the Environmental Information Regulations or the Freedom of Information Act 2000.

Defra may be required to release information, including personal data and commercial information, on request under the Environmental Information Regulations or the Freedom of Information Act 2000. However, Defra will not permit any unwarranted breach of confidentiality or act in contravention of its obligations under the Data Protection Act 1998. Defra or its appointed agents may use the name, address or other details on your form to contact you in connection with occasional customer research aimed at improving the processes through which Defra works with its contractors.

Project identification

1. Defra Project code

2. Project title

3. Contractor organisation(s)

4. Total Defra project costs (agreed fixed price)

5. Project: start date

end date

6. It is Defra's intention to publish this form.
Please confirm your agreement to do so..... YES NO

(a) When preparing SID 5s contractors should bear in mind that Defra intends that they be made public. They should be written in a clear and concise manner and represent a full account of the research project which someone not closely associated with the project can follow.

Defra recognises that in a small minority of cases there may be information, such as intellectual property or commercially confidential data, used in or generated by the research project, which should not be disclosed. In these cases, such information should be detailed in a separate annex (not to be published) so that the SID 5 can be placed in the public domain. Where it is impossible to complete the Final Report without including references to any sensitive or confidential data, the information should be included and section (b) completed. NB: only in exceptional circumstances will Defra expect contractors to give a "No" answer.

In all cases, reasons for withholding information must be fully in line with exemptions under the Environmental Information Regulations or the Freedom of Information Act 2000.

(b) If you have answered NO, please explain why the Final report should not be released into public domain

Executive Summary

7. The executive summary must not exceed 2 sides in total of A4 and should be understandable to the intelligent non-scientist. It should cover the main objectives, methods and findings of the research, together with any other significant events and options for new work.

1. Introduction

This project involved young people in schools Luton and in Aylesbury / Buckinghamshire during 2006/07. It was commissioned by the Defra Waste Evidence Programme to gather insight into young people's understanding, attitudes, motivations, and barriers to community participation in kitchen waste kerbside collections. Young people: were introduced to issues around food waste, researched the wider context, identified policy options for consideration by policy makers, investigated the views of peers and significant adults, and made recommendations. End-of-project conferences were attended by project Steering Committee members, waste management and education officers, Council officers, and elected members.

2. Objectives

The objectives were to:

1. provide insight into understanding, attitudes, motivations, and barriers to participating in kitchen waste kerbside collections.
2. investigate the behavioural determinants for participants and non-participants, both at the individual and household level.
3. ascertain the effects of scheme design variables on participation rates and bio-waste collected, in the context of different socio-demographic groups and housing types.

3. Methods

Inception

Working with groups in three pilot schools, the WTA project worker trialled both the approach to the project, and the instrumentation. From this, twelve potential policy options for managing food waste were identified. These were discussed and agreed with the Steering Committee in order to provide *construct* validity of them as appropriate options to use in further work with the groups in the project.

Stage 1- An overview of the DEFRA process by the WTA project worker was provided that generated an understanding of the level of young people's knowledge and their ideas at the start of the research process. The young people were then asked to research key questions to ensure they had appropriate background knowledge and understanding relating to: the amount of food waste now produced in England, current government targets for reducing waste going to landfill, and available options for managing food waste.

Stage 2- Each group's research was reviewed and discussed. Matters of accepted fact relating to food waste management were established, and each group then agreed a 1 to 12 ranking of the policy options that they would use in their own research with others in order that they could then evaluate their own preferred rankings. Twenty research teams were formed, directly and extensively involving 206 young people, and a research framework was provided that would help ensure consistency of approach across the project. Research was undertaken by research teams with their target audiences. Overall, the research teams consulted 2532 people. Each research team conducted an initial analysis of data, and refined their ideas, providing written reasons for their suggestions about the ranking of the policy options.

Stage 3- Research teams presented their research results and confirmed their preferred policy rankings in a report and consolidated sets of results for both Luton and Aylesbury / Buckinghamshire were produced. These identified preferred policy options and the strategies raised for encouraging people to participate in food waste management schemes. Conferences were held in Luton and in Aylesbury / Buckinghamshire. These saw the first presentation of the overall rankings of policy options, and associated recommendations with participants commenting on these. The policy options were reviewed in the light of the national waste strategy, and each young person present was then asked to reflect on the discussions and select their top three policy preferences, which resulted in a final set of recommendations that reflected their own research.

4. Outcomes

Although there were differences in recommendations and rationale, overall, the prime emphasis was the same, with the most-favoured from each conference being the same: option G: *Explain why you should compost* which received 25% of all preferences cast. This, together with option H: *Explain how to compost*, constituted 43 % of all preferences in Luton and Aylesbury / Buckinghamshire combined. This would seem a recognition by the young people that the key challenge that policy-makers face is *not* that of making information *available* to people. Rather, it is helping them *access* and *understand* it in the context of their own highly contingent personal circumstances, and then to weigh it, not only in terms of information available from other sources, but also in relation to existing personal understandings, often tacitly held.

5. Implications

The difficulties inherent in an expert-to-consumer model of information flow are well documented. Both information provision and communication are obviously important, but need to be recognised as limited, basic strategies which work only under certain circumstances and which need targeting. Often, the role of pedagogy is neglected in settings that are not obviously 'educational', such as most contexts where waste issues are significant. This is another way of saying that the processes through which people learn tend to

be neglected because it is assumed that in such information-led strategies, learning is not significant or necessary. However, information provision needs to be viewed as a component of *pedagogic practice* which emphasises the idea that learning is a process that needs some expert mediation that involve 'responsive dialogues' between teacher and taught (i.e., expert and novice learner) in relation to both everyday and scientific understandings. The distinction between the instruction and engagement of learners (through information & communication), and the facilitation of learning (through mediation) ought to be based on whether significant parameters and assumptions (i.e., facts & values) are disputed or not. The idea of 'navigating knowledge landscapes' is a helpful way of viewing the process whereby people consult wider sources of information so that they can begin to learn more about the relevant aspects of a problem where it is better to think about the complexity of the fluid, complex, continuously changing landscape of everyday life in terms of a seascape that requires navigational skills.

6. Recommendations

There is considerable scope, both locally and nationally, to extend and build on the work that has been done in this project. We make a number of recommendations in relation to waste policy and the work of local authorities and schools. Although these are couched in terms of actions that we think that local authorities and schools across the country ought to pursue, we are conscious that Defra and DCSF also have a responsibility to encourage and support schools and local authorities in this work, and the recommendations need to be seen in that light.

Local Authorities need, and need to be encouraged by government, to ...

- Ensure that traditional information / communication strategies and techniques (leaflets, adverts, etc.) are appropriately targeted at audiences which need and hence will likely use them. Develop sophisticated approaches that allow people to gain understanding of the issues around reducing both total waste, and the proportion of waste going to landfill, doing this by working with groups fully representative of community interests and expertise.
- Involve young people in the design and targeting of local campaigns on waste reduction, recycling, food waste, and composting by working with schools and / or through the development of youth panels which might also help in bin design
- Provide opportunities for local people (of all ages), linked to neighbourhood and social enterprises, to acquire skills in composting and waste reduction, and in teaching others about these, and then provide the means whereby these skills can be used with peer and other groups.
- Consider the use of carefully-targeted incentive schemes that encouraging waste reduction, recycling, composting, etc., and which are selectively used in specific contexts that are sympathetic to their use.

Schools need, and need to be encouraged by government, to ...

- Work with local authorities to set up visible, efficient and reliable recycling systems in order to reduce the proportion of waste in schools going to landfill.
- Have a governing body policy to progressively reduce the absolute amount of waste of all kinds produced by school activities, and actively involve students in the on-going monitoring and reporting progress on this policy to governors and the whole school, to the local authority, and to the community.
- Focus on local waste issues, and particularly food waste, as part of their response to the DCSF's *Sustainable Schools* agenda, seeking, to have a positive impact on reducing waste locally, to enhance the value of the curriculum experience for students, and to act as a role model for others in the community. Working with local authority agencies to set up collaborative schemes would be an important aspect of this.
- Take the opportunities afforded by current curriculum reviews to enable active student involvement and responsibility in 'real world' issues through both curricular and extra-curricular activities, working closely with local authorities and other community groups on significant local issues. Creating dedicated time for this in a working week would be helpful.

7. Possible future work

This includes: monitoring of activity in relation to minimisation, recycling and waste in the participating schools; development of a Youth Board in Luton, and the monitoring of its work; a consultation project in Luton on how young people can contribute towards waste minimisation and reduction; appointing a Waste Education Officer in Luton to promote sustainable waste management within schools, colleges and universities as well as to the residents of Luton and focussing Aylesbury Vale's recycling officer's work in secondary schools. Conference reports and project outputs are to be distributed within the local authorities.

Project Report to Defra

8. As a guide this report should be no longer than 20 sides of A4. This report is to provide Defra with details of the outputs of the research project for internal purposes; to meet the terms of the contract; and to allow Defra to publish details of the outputs to meet Environmental Information Regulation or Freedom of Information obligations. This short report to Defra does not preclude contractors from also seeking to publish a full, formal scientific report/paper in an appropriate scientific or other journal/publication. Indeed, Defra actively encourages such publications as part of the contract terms. The report to Defra should include:
- the scientific objectives as set out in the contract;
 - the extent to which the objectives set out in the contract have been met;
 - details of methods used and the results obtained, including statistical analysis (if appropriate);
 - a discussion of the results and their reliability;
 - the main implications of the findings;
 - possible future work; and
 - any action resulting from the research (e.g. IP, Knowledge Transfer).

References to published material

9. This section should be used to record links (hypertext links where possible) or references to other published material generated by, or relating to this project.

- Blair, A.C.L. (2004) PM speech on climate change; <http://www.number-0.gov.uk/output/page6333.asp>
- Daniels, H. (2001) *Vygotsky and Pedagogy*. London: Routledge.
- Daniels, H., James, N., Rahman, R., Young, A., Derry, J., and McConkey, C. (2007) Learning about Cancer. *Mind, Culture and Activity* 14(1-2) 128-141
- Defra (2007) Waste Strategy for England, <http://www.defra.gov.uk/environment/waste/strategy/index.htm>
- DfES (2006a) Sustainable School consultation document; <http://publications.teachernet.gov.uk/default.aspx?PageFunction=productdetails&PageMode=publications&ProductId=DFES-0470-2006&>
- DfES (2006b) Government Response to the Sustainable Schools consultation; <http://publications.teachernet.gov.uk/default.aspx?PageFunction=productdetails&PageMode=publications&ProductId=DFES-04294-2006&>
- DfES (2006c) Year of Action; <http://www.teachernet.gov.uk/sustainableschools/support/support.cfm?id=54>
- Haste, H. & Hogan, A. (2006) Beyond conventional civic participation, beyond the moral-political divide: young people and contemporary debates about citizenship *Journal of Moral Education*, 35(4), 473 – 493.
- HMG (2005) *Securing the Future*: <http://www.sustainable-development.gov.uk/publications/uk-strategy/index.htm>
- IUCN (1980) *World conservation strategy* (Gland, Switzerland, International Union for the Conservation of Nature and Natural Resources).
- Jensen, B. B. & Schnack, K. (1997): 'The action competence approach in environmental education', *Environmental Education Research*, 3(2), 163-178
- Jensen, B. B. (2004): 'Environmental and health education viewed from an action-oriented perspective: a case from Denmark', *J. Curriculum Studies*, 36(4), 405-425
- Jensen, B.B. (2002): 'Knowledge, Action and Pro-environmental Behaviour', *Environmental Education Research*, 8(3), 325-334
- Kollmuss, A. and Aygeman, J. (2002), Mind the gap: why do people act environmentally and what are the barriers to pro-environmental behaviour? *Environmental Education Research*, 8:3, 239-260
- Owens, S. (2000), Engaging the Public: information and deliberation in environmental policy, *Environment and Planning A*, 32, 141-1148
- Scott, W.A.H. & Gough, S.R. (2004) Rethinking Relationships between Education and Capacity-building: remodelling the learning process; *Applied Environmental Education and Communication* 2(4) 213-220
- Scott, W. A. H. & Gough, S. R. (2003) *Sustainable development and learning: framing the issues* (London/New York: RoutledgeFalmer)
- Smyth, J.C. (1995) Environment and education: a view of a changing scene, *Environmental Education Research* 1(1), pp. 3–20
- Sterling, S.R. (1992) *Coming of Age – A Short History of Environmental Education*. Walsall: NAEF
- UNCED (2002) *Key commitments, targets and timetables from the Johannesburg plan of implementation* (New York, United Nations).
- UNESCO (2002-2007) United Nations Decade of Education for Sustainable Development (2005-2014) www.unesco.org/education/desd/

WCED (World Commission on Environment and Development) (1987) *Our common future* (Oxford, Oxford University Press).

WCED (World Commission on Environment and Development) (1993) *Agenda 21 – Sustainable development action program - Rio declaration on environment and development*, United Nation Conference on Environment and Development, June 92, Rio de Janeiro, Brazil (New York, United Nations)