



GOVERNING SUSTAINABLE WASTE MANAGEMENT

Freda the Frog
Education Initiative



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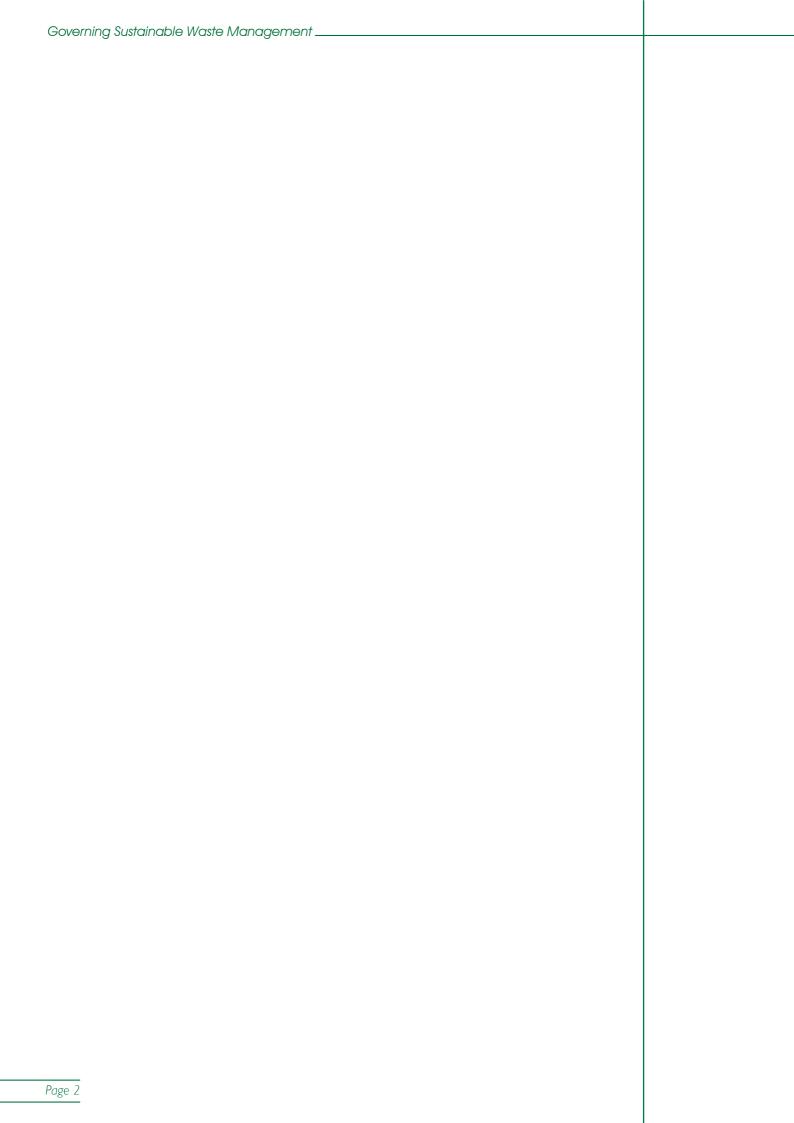
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1 INTRODUCTION

Since Waste Strategy 2000, municipal waste policy (MWP) has undergone considerable upheaval. Local authorities which until recently had to concern themselves with little more than the collection, planning and disposal of waste, and a relatively narrow range of regulations, today have a radically broadened agenda with progressive statutory performance targets for recycling and composting, as well as responsibilities for diversion of waste from landfill, recovery from waste and waste minimisation. In the wake of these developments, the Governing Sustainable Waste Management¹ project seeks to examine what facilitates, and what prevents, the development and implementation of sustainable MWP in the North East of England, and the wider lessons which can be learned across the UK. The project involves an overview of MWP across the region, and the analysis of three case-studies: Durham County Council; Newcastle City Council; and Stockton Borough Council. In each case, semi-structured interviews have been conducted with local policy-makers and stakeholders, and a range of policy documents have been analysed. Six initiatives which aim to reduce, re-use or recycle waste have been selected for further research, involving semi-structured interviews with relevant actors, documentary analysis, and interviews and participant observation with those communities involved in the particular waste management initiative. These research 'snapshots' are intended to illustrate the range of good practice taking place across the region and the challenges facing the development of sustainable waste management policy and practice.

This report focuses on one such scheme: Freda the Frog education initiative run by Stockton Borough Council (SBC). The research involved semi-structured interviews with managers of the initiative, informal interviews with members of staff involved in the project as well as the public at community events, and participant observation at public events and a school presentation. The report considers the ways in which the Freda the Frog initiative engages with its target audience, the messages it encompasses, and how effective these factors may be in terms of raising awareness of waste issues and changing household practices around waste. We hope that in highlighting the positive lessons and the challenges that our research has uncovered, the report will be of interest to local authorities and waste education projects more broadly, as well as to regional and national government.



The report is structured in the following way. Section 2 provides some background to MWP in Stockton and the context of waste education initiatives, and Section 3 gives an overview of the Freda the Frog initiative. Section 4 highlights the good practice evident in this case, while Section 5 considers the key challenges the research uncovers, particularly in relation to the initiative's target audience and how effective education may be in terms of effecting changes to household waste practices. Drawing on this analysis, Section 6 identifies the implications of these findings for sustainable waste management, and Section 7, in conclusion, places this report within the broader framework of the findings from the research project as a whole.

2 BACKGROUND

2.1 Municipal waste policy in SBC

SBC is a Unitary Authority and has responsibility for the collection and disposal of municipal waste, as well as for planning for the facilities to provide these services. Together with the other successor local authorities to the former Cleveland County Council, the majority of SBC's waste is contracted to an Energy from Waste plant, operated by the waste contractor

¹ The project team acknowledges the support of H J Banks & Co. Ltd. funders of the project through the Landfill Tax Credits Scheme, facilitated by Entrust. We are also grateful for the support of the International Centre for Regional Regeneration and Development, University of Durham. Finally we wish to thank our many respondents for the time and support they have given to the project to date. For more details, visit the project web pages via www.dur.ac.uk/geography/research/researc

³ SBC (2004) 'Cabinet Decision, Wastes Management'. Stockton-on-Tees, Stockton Borough Council.

SITA. In 2002/03, 83% of waste generated in Stockton was disposed of via the Energy from Waste plant, with 8.5% recycled or composted, and 8.4% sent to landfill². Responsibility for municipal waste is split between the Waste and Fleet Services division, who undertake strategic work, and the Care for Your Area division, who provide day to day waste services.

Following the publication of *Waste Strategy 2000*, SBC began to diversify the services offered for the collection and disposal of waste, developing a new Civic Amenity site at Haverton Hill in 2001, and introducing kerbside collection of recyclables (glass, paper, tins, cans) to all households over the period 2001-2004. SBC have also successfully gained bids for the piloting and roll-out of a kerbside green waste collection and centralised composting service, and for participation in WRAP's home composting project (see separate research project report on composting). In addition to the initiatives adopted directly in response to changing national government agendas on waste, SBC's waste policy framework has been influenced by its role in the development of an Interreg project, *Making Waste Work*. The project involves five European partners from the 'North Sea' region focused on the development and exchange of best practice among the partners in the areas of waste management systems, business and employment opportunities in the waste sector, and public education and awareness³.

2.2 Key drivers for waste education

Since *Waste Strategy 2000*, and in response to the 1999 Landfill Directive, the ways in which municipal waste is managed has come under critical scrutiny and legislative pressure. The introduction in 2001 of statutory performance targets for recycling and composting waste for each local authority under the Best Value Performance Indicators (BVPI) framework has had a significant impact on policy and practice across the UK. SBC was tasked with recycling or composting 10% of its municipal waste in 2003/04, a target it exceeded by achieving a rate of 11%, and will need to reach a rate of 18% by 2005/06. Moreover, with the introduction of the Landfill Allowance and Trading Scheme (LATS), SBC face potential financial penalties if they do not divert a sufficient fraction of the biodegradable waste stream from landfill.

Complicating these regulatory and financial pressures are increasing rates of waste arisings in SBC, which are 5% a year⁴, significantly above the national average, standing at 1.8% from 2001/02 to 2002/03, but below the trend in the North East which witnessed an increase of almost 7% between 2001/02 and 2002/03⁵. In this context, engaging the public in changing their waste practices, away from simply disposing of waste in the bin to reducing the waste produced in the first place, and re-using and recycling materials, is a key imperative.

2.3 The waste awareness and education context

The importance of public education about waste, and what to do with it, is widely recognised. The latest national waste awareness initiative is run by the Waste and Resources Action Programme (WRAP), an agency funded by the Department for Environment, Food and Rural Affairs and the Department for Trade and Industry, who are responsible for a £10 million campaign, 'Recycle Now!', which aims to get the message about the need and potential for recycling across to the general public⁶. With the tag line 'the possibilities are endless', the campaign has involved a series of national media adverts which show materials being recycled into new goods/things, as well as a dedicated week, The Big Recycle, in which the message is pushed through local events and press across the country. The campaign also provides information leaflets and publicity materials on-line, which are available to local authorities to use alongside their own information locally. Other campaigns, on specific issues such as 'real nappies' and home composting, have also been launched (see separate research project reports). In addition, WRAP has made funding available to local authorities to undertake locally targeted awareness raising and communication initiatives.

³ See the project web site for more details at *http://waste.tec-hh.net/uk/*

⁴ SBC (2004) 'Cabinet Decision, Wastes Management'. Stockton-on-Tees, Stockton Borough Council.

⁵ DEFRA (2004) 'Municipal Waste Management Survey 2002/03'. London, Department for Environment, Food and Rural Affairs.

⁶ See http://www.recyclenow.com/index.html

As well as campaigns to raise awareness, the need for specific education initiatives has also been long recognised. Organisations such as Waste Watch and Recycle More provide dedicated education materials predominantly aimed at primary school children – on the Recycle More website, for example, three times as many ideas/examples of educational materials were offered for this age group than for secondary school children, while on the Waste Watch recycle zone, the 'Wise up to Waste' resource pack aimed at older secondary school students was no longer available⁷. There are also a multitude of locally based education schemes. In Stockton, alongside the development of the Freda the frog project, there are plans to develop an education centre at the Haverton Hill Civic Amenity site.

3 IMPLEMENTING FREDA THE FROG

3.1 Conceiving Freda

Following one unsuccessful bid to DEFRA's Waste Minimisation and Recycling Fund, SBC were successful in applying for funding for the development and roll-out of kerbside recycling services across the Borough in 2003/04. The Freda the Frog initiative was developed as the educational arm of this project, with the intention of reaching households through interaction with primary school children. Freda the character was originally conceived by the local artist contracted to come up with a 'mascot' for the education initiative. The artist put forward several 'animal' suggestions, and the SBC member of staff with direct day to day responsibility for the project liked the frog character best. However, this persona was male Fred the Frog – and the member of staff (a woman) stated that "I was insistent that I wanted a female mascot ... I knew that I would be doing the bulk of the work and I had to be able to slot into her persona". Hence Fred was "made much girlier, with big eyelashes, very cute and lovable" and became



Freda. The character of Freda the Frog was developed as fun, friendly and approachable, is utilised in cartoon (pictoral) form on all the initiative's promotional material and website, and rendered in physical form for school and community work with a person inside a bright green frog costume, complete with large green webbed feet and hands.

Freda is now funded from the central waste management budget. However, reflecting the strong horizontal links between a range of waste/environmental agendas within SBC, other 'pots of money' have been utilised to bolster Freda activity. For example, a specific focus on Neighbourhood Renewal Areas has supported presence of the Freda project in schools in those areas within a broader remit. Separate WRAP funding under the 'communications' grant scheme has gone towards employing a dedicated member of staff to deal with all the initiative's administration (post, answering Fan Club members' e-mails) – and 'be' Freda on visits. In addition, funding obtained through the Interreg project is being used to develop a web-based teachers' pack, with lesson plan suggestions regarding a range of waste issues available to download, linked to the Freda project. Furthermore, 'Care for Your Area' staff are involved with delivering the Freda project, through the 'Grot Spot' reports (see below), thus funding is also drawn from across other areas of the council indirectly.

3.2 Freda in action

Although the Freda the Frog education initiative is aimed at primary aged children (4 to 12 years old), the Freda character has been used for other SBC schemes (garden waste services literature, on the side of recycling collection vehicles). However, this is now being phased out to ensure the Freda branding is restricted to work with primary aged children, to prevent 'mixed messages'. The main activities of the project are school visits/presentations and atten-

⁷ See Waste Watch http://www.recyclezone.org.uk and Recycle More http://www.recycle-more.co.uk/.

dance at community events in the area, tied in to a website incorporating a 'Freda the Frog Fan Club'⁸. Children are encouraged to join the club, which stimulates on-going, interactive activity around issues of waste. There are a number of activities, competitions, and games hosted on the website for fan club members and other children, as well as information about waste and how to recycle it, a newsletter and photographs. One recent initiative was the recording of the 'Freda song', undertaken after a 10 year old girl sent the song to the website – the song was then recorded and made available to download.

The main focus of the project is recycling, specifically encouraging children to recycle at school (SBC offers a paper recycling service across all its education facilities) and at home. However, the project is also able to incorporate other SBC environmental agendas, in particular promoting 'Care for Your Area' messages regarding not littering and keeping local environments clean and tidy: Fan Club Members can report fly tipping and litter on a Freda web page called 'Grot Spot', receive a reply from the SBC 'Care for Your Area' team and a 'I'm a Groovy Grot Spot Spotter' certificate. The project is also involved with the SBC regeneration agenda, through the Neighbourhood Renewal (NR) scheme – increased emphasis has been placed on liasing with schools in NR areas, to encourage uptake of paper recycling (with a visit from the Freda team) and try to link recycling within a broader social and economic framework. Waste minimisation is a consideration within the initiative, but is currently less of a priority.

4 GOOD PRACTICE IN STOCKTON

4.1 Joined-up working

As outlined above, although the Freda project has focused on young children, it has been successful in creating links across different sections of the local authority – neighbourhood renewal, 'liveability' and waste – and as a result has built up widespread political support and attracted more resources than might otherwise have been the case. These resources do, however, come at the cost of continually needing to develop and reinvent Freda to fit new pots of funding and to be innovative. Whether this can be sustained over the long term is perhaps debateable.

4.2 Outreach and recognition

The Freda initiative has been hugely successful in terms of the Fan Club, with around 3,600 local members, and in the first 12 months the website received over 60,000 hits. The project was working with around 50 schools at time of research, with this number continually rising, and community events have generated large amounts of positive local press coverage.

This outreach has been achieved by making the Freda character irresistible – to children and adults alike. The employment of an actual character rendered physical is critical to this success. The bodily presence of a large bright green frog immediately engages children's attention. This 'hook' engenders interest, which the website and fan club successfully follow up on. Whether Freda is encountered through school or in the public domain, there is a strong recognition among children for the character, which is consistently branded throughout the project. Indeed, Freda has long since ceased to be an object within the initiative, but developed 'her' own character! Staff, teacher, parents and children alike refer to Freda as an embodied person in 'her' own right – 'she' appears, dances, shakes hands and in so doing actually engenders the recycling/minimisation message. Children often initially react in awe when they meet Freda in the 'flesh', then laugh and smile and cuddle Freda – she appears to get similar responses among younger children as Father Christmas, including (though a minority) a few scared faces!

At the same time, the key message which Freda communicates – 'its easy being green' – is simple and clearly associated with the 'green' Frog. This association ensures that while children and adults remember Freda, they also remember the message – that recycling is easy and that they should take part. By creating a 'club' through which this is taking place,

 $^{^8}$ www.fredathefrog.co.uk.

the Freda project also overcomes one of the key barriers to participation in environmental initiatives – feelings of isolation and futility – and ensures that children see this as a collective activity.

4.3 Making waste real

One of the key parts of Freda's success is the way in which waste has been made literally 'real' through the project. There are well thought through connections made with everyday objects within the school presentations. Children are asked about items they encounter day to day, such as newspapers, glass bottles, cans, plastics, etc., while these items are held up together with the local kerbside recycling containers into which they can be placed – physically demonstrating to, rather than just telling, the children what actions they should be taking. Moreover, these items are linked to children's interests and consumption: the question "Who likes chocolate spread and tomato ketchup?" generates a positive response, and followed up with an explanation that these popular foodstuffs come in containers that can be recycled. This in turn moves recycling as something with which adults are concerned to an arena within which children have their own agency (consumption) and responsibility (recycling).

In addition, children joining the club receive a pack that containers not only promotional material (leaflets and stickers), but recycled items such as pencils made from plastic cups, which demonstrates in a material way how recycling can recreate things which they use everyday. Finally, attempts are made within the initiative itself to prevent waste production. For example staff resist handing out copious amounts of flyers/material at public events, but rather take names and addresses of children wishing to join the fan club – this both ensures that intentions to become involved with the fan club are followed up, and avoids the common problem at public events of promotional material ending up in the bin/as litter.

5 KEY CHALLENGES

5.1 Auditing pressures

In large part, the Freda the Frog project has been dependent on grant funding from external bodies. In the context of the escalating target and audit culture surrounding waste, central government funding has become increasingly onerous in terms of feedback and auditing requirements, which are often opaque until after the funding is granted, putting increased pressure on local authority staff to fulfil the necessary paperwork and provide statistics. Under the BVPI framework, local authorities have to not only achieve recycling and composting targets, but also ensure that the measures they implement to reach targets offer best value for taxpayers. Within this context waste minimisation schemes must find ways to monitor their 'outcomes'. Freda the Frog manages this by auditing numbers of schools and community events attended, collecting data regarding total hits for the website pages, and keeping account of Freda the Frog Fan Club members. However, more recently there has been an attempt to quantify whether membership of the Fan Club/schools presentations is having a direct impact on household waste behaviour. Doorstep canvassers have been monitoring Freda Fan Club member households recycling activity over the summer period (2005) to ascertain levels of kerbside recycling at home, and how they differ from other households who are not members of the scheme. While results are unavailable at time of writing, it is hoped that such auditing over time will show the impact of the initiative in terms of tonnages of waste arisings being diverted from landfill. Such differences are difficult to determine – not least because of the multitude of factors which affect consumption and waste practices in any one household.

Moreover, there is a danger that in focusing on the material impacts of the initative in this way, its other benefits will be neglected. Attempting to audit what are, by their very nature, more qualitative aspects of the project is difficult, with 'results' only ever offering a partial reflection on a project's achievements. In common with broader environmental education initiatives, Freda the Frog engages with issues and incorporates techniques that predominantly aim for long term change in values and waste behaviours. Assessing how these have changed

and their longer term implications is challenging. In this sense, political will as much as balance sheet returns will play a vital role in ensuring that benefit continues to be placed on waste education for its own sake, and the initiative's continuance and success.

5.2 Target group bias

The decision to target only primary aged children means that to date, no particular initiatives focusing on the waste agenda have been undertaken which are targeted at the secondary school level. Freda the Frog is, of course, limited by time and money in how much it can attempt, but there appears to be a significant trend across waste awareness initiatives to focus on younger children, in a perceived belief that they, and their teachers and parents, are more open to environmental messages, and will therefore be more amenable to joining in activities. Not only is this seen to be a benefit in environmental terms – the messages will reach a large audience – but it also has the added benefit of offering better 'results' in terms of the auditing pressures discussed above. Despite this bias in terms of the target group reached, it must be noted that, unlike many other initiatives seeking to change waste practices, the Freda project has not shied away from engaging in areas of socio-economic deprivation, and to this end the joined up work with the 'neighbourhood renewal' project is to be commended.

Although beyond the scope of the current initiative, the challenge will be to ensure that that good work achieved at the primary level is not lost through a failure to reinforce the waste minimisation/recycling message throughout teenage education. While a large green frog will not be appropriate for older children/young adults, SBC needs to consider how it may implement a 'sister'/concurrent scheme that addresses the waste agenda at secondary school level. The 'Wise Up to Waste' resource pack produced by Waste Watch, or their 'Schools Waste Action Club' (SWAC) initiative may offer some models which could be followed in the future.

5.3 From education to action



Linked to both the issues of auditing pressures and target group bias, there remains the thorny issue of how effective Freda the Frog's message is in achieving actual increases in recycling and waste reduction behaviour within everyday household activity. Within the Freda project, as in many others, there is a presumption regarding the agency of primary aged children at home - that they can persuade parents to change consumption and recycling practices or indeed are able to take on the responsibility for such activities themselves. Where family environments are sympathetic to environmental and waste issues, there is likely to be positive support for a child's learning around recycling/reduction, and changes to waste habits encouraged and enacted together with the child. However, in less affirmative surroundings, a child's learning may be contested and rebuffed, resulting in mixed messages for the child and potential resentment towards an initiative that engenders conflict with parents.

While the Freda the Frog initiative attempts to connect to some extent with a more holistic family approach through its presence at community/public events, the main emphasis on children alone may prove detrimental unless the scheme engages with other education/recycling/reduction initiatives within a broader community framework. This is an issue SBC and the Freda the Frog project management are well aware of, and

Image courtesy of www.fredathefrog.co.uk

other work is being done to link waste issues across a wider spectrum of society. In recent years, SBC has developed links with Teesside Play and Education Resource Centre (PERCY) and discussions have been held with the Tees Valley Wildlife Trust regarding holding joint community workshops in areas of low kerbside recycling participation, and the possibility of involving parents together with children at after-school club sessions is being considered. Information is provided to secondary schools and further education colleges who approach SBC, but this remains ad-hoc rather then pro-active. Likewise, waste awareness education is delivered to a variety of community groups (Women's Institute, scouts/guides) only when these groups approach SBC.

5.4 Moving up the waste hierarchy

While waste minimisation is one of the Freda the Frog project's objectives, it does not take priority and in reality the staff team find themselves concentrating more on the recycling and anti-litter messages. In school presentations, the main focus is on educating children about which materials can be recycled through local kerbside schemes – and why this should be done – as well as encouraging children to behave responsibly in terms of keeping their immediate environment free from litter. Such an emphasis represents a challenge to sustainable waste management, given that it concentrates on issues lower down the waste hierarchy. There is certainly the sense that the initiative needs to 'start with the basics' then build on these. Since the North East lags behind much of the country with regard to sustainable waste behaviour, there is a legitimacy for the project's concentration on recycling over reduction, while the scheme's positioning within SBC's overall environmental agenda rightly links waste with 'Care for your Area' initiatives. The challenge will be for the Freda the Frog scheme to increase its commitment to minimisation messages in the future.

5.5 Internet access beyond SBC

Developed as an initiative of SBC, the Freda the Frog education project is relatively selfcontained, not linking up specifically with national awareness campaigns (although the 'Recycle Now!' logo is included on publicity materials) or other local education initiatives. There has been some interest from neighbouring local authorities regarding 'buying in' the Freda the Frog character to utilise within their own waste education/awareness schemes. SBC are open to the idea of franchising the character, but - given that "Freda doesn't come cheap" - other authorities will have to find funding to make this happen. There is a danger that without joined up work across local authority boundaries, and between different awareness campaigns, some level of confusion among the public about waste issues could arise. Currently, the majority of Freda Fan Club members are SBC residents, although there are children who have joined up across the region, the country and even one in the USA! This highlights the unbounded nature of education through the internet, and it remains to be seen whether children in schools outside but local to the Stockton area will have the recycling message gained through the Freda website



Image courtesy of www.fredathefrog.co.uk

reaffirmed within their formal school education. This challenge is certainly highly complex in terms of thinking through how it may be addressed – certainly, SBC cannot be expected to take a proactive lead alone in considering taking the Freda initiative region-wide.

6 IMPLICATIONS FOR SUSTAINABLE WASTE MANAGEMENT

6.1 The importance of making waste education real

The Freda the Frog project clearly shows the benefits of an approach to waste education which is not simply a paper exercise, but within which the material nature of wastes produced are shown, sustainable ways of dealing with it are demonstrated, and people are physically engaged with the waste message through a 'live' character. Other schemes across the country similarly use embodied characters and waste materials to get the message of sustainability across – for example, Waste Watch have a 'cycler' robot which is made from recycled materials and demonstrates how recycling can be done, while the Bristol based Recycling Consortium have a character called 'Scrapzilla', a monster made out of waste which grows week by week and which threatens to take over the city unless waste is reduced.

Making waste real in these two senses – by creating an identifiable character which embodies good practice, and by physically demonstrating what happens to waste and what the potential is of new resources – is effective because it changes how people associate with waste, and can help to establish the new routines and practices which are needed to manage waste differently in the home. While waste awareness campaigns, like other environmental education initiatives, have sought to change *attitudes* towards waste, what is notable about these sorts of initiatives is that they are able to change *practices* by changing norms and routines, without necessarily needing to convert people wholeheartedly to the green message.

6.2 An integrated approach

As detailed above, SBC has managed to integrate waste education across different areas of the local authority, and different pots of funding, by thinking creatively about how Freda could be deployed. In order to develop this integrated approach to waste education further, such imagination and innovation will be needed in two critical areas.

First, how to widen the remit of the existing Freda project, retaining the focus on younger children, in order to increase the salience of the message and ensure that the agency of young children in shaping waste behaviours at home is supported. One means of doing this might be to proactively engage with community groups where both children and adults are present – sports clubs might be one case in point - rather than relying on one-off encounters with adults through public events alone. Second, as those children who have positively engaged with Freda move on into secondary school education it is important that the momentum achieved by the project is not lost through the absence of an education campaign targeting secondary school students. Some examples of existing initiatives in the UK have been given above. There may also be opportunities to join any education initiative with other work sparked by the Interreg project which seeks to develop local economies around recycling and re-use projects. For example, secondary school students could be involved in technology and science projects seeking to re-use/recycle materials locally in innovative ways. Clearly, such work will require energy and resources, but it is critical if the good work achieved by Freda is not to be lost as children move through the education system.

In addition to focusing on these areas of work, the critical issue of how to 'mainstream' waste education is central to the continued evolution of an integrated approach. To date, Freda has predominantly been funded by external grants, but if waste education is to maintain coherence and stability over the long term, funding from within the council's core budget will be needed. This is clearly difficult to achieve – given the pressure on both waste and education budgets. More difficult still is to ensure that, in the prevailing culture of targets and audit, the intangible benefits of waste education are recognised and valued. This will, in part, depend on central government clearly recognising the importance of such initiatives in their assessment of local authority performance.

6.3 Moving up the waste hierarchy

A critical part of developing a more integrated approach is the need to engage with the issues of waste reduction and re-use. The success of Freda the Frog puts SBC in a good position to increasingly address these issues The Freda character is now well established among the majority of Stockton's under 12s, and building on the recycling message to promote material re-use and encourage children to rethink their consumption habits will be far easier than starting such an endeavour from scratch. While it is important to continually reiterate the recycling message, continued political will and funding (core SBC budget and external grants) could be used to ensure that the broader issues of managing waste sustainably are effectively communicated, and to start to address the critical issue of decreasing (the rate of increase of) waste arisings in Stockton.

CONCLUSIONS

As stated in the introduction to this report, Freda the Frog was one of six initiatives researched for the project Governing Sustainable Waste Management. In conclusion, we list here the broader recommendations for managing waste sustainably that have emerged through the study in order to place this case-study within its wider context. While our comments are directed primarily to the local authority level, due to their central role in municipal waste management, we believe that they will also make relevant reading for central government, and the business and community sectors.

7.1 Enhancing the policy framework

- O Critical mass the effective delivery of MWP across any one local authority demands a certain number of people and level of resources – a 'critical mass' - to work effectively and proactively across the increasing range of responsibilities that MWP entails.
- O Institutional integration progress with the new waste agenda is easiest where waste management is integrated into the local authority; for example, links with active LA21 sections can integrate waste concerns into a broader environmental remit and enrol competencies, such as engagement with the public and voluntary sector, traditionally absent in many waste management sections.



mage courtesy of www.fredathefrog.co.uk

- Strategic priority specifically, a division of responsibilities needs to be
 established to free up dedicated staff time for strategic issues: identifying
 and pursuing funding stream; and establishing and maintaining contacts and
 networks across and beyond the authority. Clearly, any such 'division' needs to
 be done carefully to maintain suitable integration between strategy and operations.
- Political support committed officers can do much in an ambivalent political environ- ment, but with effective political support, progress can be faster and more far reaching.
- Active networking locally engaging relevant partners, nationally providing links to key gatekeepers, and internationally learning from other local authorities helps to provide critical resources.
- Embracing change a readiness to take on new challenges and 'think outside
 the box' can yield dividends; this demands the creation of a culture in which
 there is a willingness to experiment and to take appropriate risks in response to
 a dynamic policy environment.

7.2 Moving up the waste hierarchy

- O Process alongside progress activities such as partnership building, engaging with the public, and developing new channels of communication should be valued by local authorities as much as monitored outcomes, with the recognition that these processes lead to longer term sustainable waste management. It is also important that central government actively support authorities endeavouring to put such mechanisms in place.
- Rethinking monitoring the relevance of re-use and reduction need to be recognised within monitoring regimes, and the ways in which waste is 'measured' creatively re-imagined in order to make these behaviours 'count'. Unless re-use and reduction are brought within the 'target' sphere, there remains little incentive for North East authorities to seriously engage with or commit funding to them.
- The importance of the intangible re-considering the social and economic benefits of re-use and reduction will enable authorities and other bodies to bring waste issues into other areas of policy and practice, and address waste more coherently and effectively.
- O Moving beyond formal mechanisms recognising the informal networks and deliberative processes through which waste reduction and re-use occur at a day-to-day level, there is a need to enable the social space/climate for them to develop, and encompass informality and discursive engagement within waste management.
- Challenging waste 'norms' the image of waste as dirty, and secondhand as inferior, must be changed, if as a society we are to really engage with the waste debate, adopt sustainable attitudes towards waste management and alter waste habits. Such a paradigm shift in how waste is imagined may be aided by a move to considering 'materials' rather than 'waste' as the basis for policy interventions.

For further information about the research project and its findings, please follow the links from: http://www.dur.ac.uk/geography/research/researchprojects/

