

Carbon Conversations evaluation – analysis of questionnaires 2008 to early 2010. Simon Merrington – 22.8.10

General

I have attempted an analysis of the feedback questionnaires over roughly a two year period. The analysis is partly quantitative and partly qualitative, the latter involving an analysis of open-ended questions to draw out main themes rather than to give precise statistics.

One problem with the analysis is that the questionnaire was changed during 2008, so to simplify matters I did not analyse responses to questions which were taken out then. I also have some suggestions about changing the questionnaire to make future analysis easier and potentially more valuable. For instance it would be useful to know consistently the date/location of each group. It would also be useful to know how many people didn't complete questionnaires. The response rate affects how authoritative the findings can be.

The total number of questionnaires was 201 – a healthy sample size.

Question 1: Usefulness of the various types of activities

This section used closed questions so a statistical analysis is possible. Also the full sample can be used as the question didn't change in 2008. Usefulness was judged on a 5-point scale from very useful to not useful at all.

Table 1: Usefulness rating by type of activity (N=201)

	Group games/activities		Group discussions		Written materials		loan books and meters	
1 (very useful)	89	44%	131	65%	136	68%	89	44%
2	53	26%	56	28%	54	27%	66	33%
3	20	10%	12	6%	9	4%	25	12%
4	4	2%	1	-	1	-	8	4%
5 (not useful at all)	2	1%					3	1%
No response	33	17%	1	-	1	-	10	5%
<i>Total</i>	<i>201</i>	<i>100%</i>	<i>201</i>	<i>100%</i>	<i>201</i>	<i>100%</i>	<i>201</i>	<i>100%</i>

Overall, responses were favourable, with a very small percentage scoring 4 or 5. The most popular things were written materials (which I took to mean the course book), and group discussions. Then came the loan of books and meters, followed by group games and activities. But even the latter were rated 1 or 2 by 70% of respondents, which is pretty positive. There was no rating of formal teaching inputs but as these mostly came from the coursebook, I assume they were included under that heading.

Question 2: Any comments on the individual sessions?

This was interpreted in a very broad way. Some commented on the actual themed sessions (what is climate change, energy in the home, travel and transport, food and water, consumption and waste), while others commented on the different activities as analysed above. Although invited to comment on good and bad things, almost everyone chose to pick out the good ones. The sheer variety of responses was so great that it might be better to subdivide the question in future. The following analysis is ordered by the number of responses on each theme, starting with the most frequently mentioned ones.

1. Value of group discussions

The atmosphere of groups was friendly, welcoming and supportive. Meeting people with the same concerns was very encouraging, even inspiring. As one person put it:

It was good to hear other people's points of view on solutions, but also on problems they have faced. Talking with like-minded people also made me feel empowered to do more and made me aware of the solutions that I had already come up with. (Q78)

Several people commented that the groups were run in a non-prescriptive way, for example:

Very good group dynamics – listening, supporting, getting to know in pairs and small groups. All very inspiring in a human sort of way, not prescriptive, more self-discovery. (Q17)

The 'go-round' at the beginning and end of sessions also felt useful:

Liked the way we checked in on a personal level at the start and end of each session (Q120).

Several also commented on the inspiring diversity of participants with respect to background and motivation.

The importance of groups being non-judgmental was also valued by several people. (Q37, 93). One was relieved that *the sessions were a lot less guilt-inducing than I expected. I think it is very important to find ways to motivate ourselves and others in positive ways – scaring people won't work. (Q48).*

Some enjoyed it when the session was less structured. This applied particularly to the last session, which felt less managed but still followed the agenda with every participating in a natural way (Q12). Another said:

I would have liked more input from the group into the contents of each session rather than them all being determined before the start.(Q22)

To summarise, group discussions were a very useful way of talking issues through and exploring problems in a non-judgmental, supportive and positive atmosphere.

2. Games and activities

Although not rated as highly as other things in Question1, the games provoked a lot of comment. The following quotes are typical:

The games were the most interesting and fun way of understanding issues (Q134).

The games were an enjoyable variation and added interest (Q16).

Not all games were equally effective though:

The most inspiring were the group game activities like checking carbon footprints for food transport, calculating carbon footprint for everyday travelling etc (Q31).

Getting a sense of which moves would have most effect was interesting and motivating – the games which involved cards listing options and showing their varying effects were an excellent way of getting this across (Q5).

The food game was probably least informative (Q193).

I particularly liked the house game. I thought the transport game didn't quite work (Q7).

Most interesting was the game on the 1940s house (energy). Showed that everyone has differing ideas on improvements to be made (Q83).

And two people were less enthusiastic:

Did not find the games that inspiring – I wonder if we were strapped for time?(Q32)

Sometimes the games (e.g. travel) were less effective than group discussion drawing on what individuals already knew (Q2).

But overall, positive comments outweighed negative ones by a considerable margin.

3. The food session

This was commented on quite frequently – people found it thought provoking but more complicated:

Plainly some areas (e.g. food) are more complicated than others (e.g. home energy). That's just how things are – and it's important not to oversimplify or one loses credibility. But the more one can present information in a vivid, bite-sized way, the better (Q5).

I thought I would find transport most challenging but actually I found food harder (Q24).

But they found it valuable nevertheless:

I am well-informed on buildings and transport but got most from food and consumption (Q10).

Food and water – most helpful session from my perspective as it set out the likely carbon emissions arising from the processes associated with the food I buy on a regular basis and it has made me think a lot more about the choices I make (Q34).

Even people who were already informed found it useful:

I particularly enjoyed the food and waste weeks, though these are probably the areas I was already most low-carbon in (Q21).

But one or two didn't find it useful:

Least inspiring was probably the session on food – more practical solutions required (but perhaps I need to read the accompanying book in more detail) (Q32).

4. The transport session

This session was clearly important, but attracted relatively few comments:

Travel and Transport section was of particular interest and I will certainly be paying more attention to my travel in future (Q197).

Travel and home: these caused seismic changes in my attitude (Q147).

Cutting down on international travel will be very challenging (Q43).

There was one comment on the travel diary:

Most challenging thing was doing a travel diary – I gave up after a week! It was difficult to remember all the journeys (Q83).

5. Energy in the home session

This was seen as a very central session and of great practical value:

The course was good on practical CO2 reduction methods, especially heating the home (Q2).

Suggestions of practical things to do were most helpful – home energy, growing food (Q19).

Energy in the home – clearly laid out. Builds on existing housekeeping to formulate short, medium and long term plans (Q3).

Found the energy in the home session very informative including the game (although slightly annoying it made the point) (Q55).

Only one drawback was mentioned:

Energy in the home probably provided the most ideas for me ...However it is difficult to enact some of the suggestions while renting (Q133).

6. The 'What is climate change?' session

A significant minority had strong views on this:

The course was good on broader issues e.g. sessions 1 and 5 (Q2).

Looking ahead to a zero-carbon future, the first week was interesting, challenging, but ultimately hopeful and inspiring (Q21).

The biggest thing I've understood is that it needs top-level political action by Government to change things like public transport, ...housing policy, energy policy etc (Q4).

More information on understanding the politics at national/international level would be interesting. Can we trust politicians? What motivates them? Can we pressure them? (Q54).

Would have liked more explanation at the start as to the climate change problem and why we are where we are (Q32).

Would have liked more on this. Go over all the different consequences of climate change and what the experts predict – just so everyone is clear (Q49).

Early sessions were thought-provoking and changed my views on many things, mainly economic growth (Q97).

7. Consumption and waste session

This topic received few and mixed comments:

The consumption session seemed thinner, less discussion of practicalities: focus on turning the clock back to the 1950s. The feminist in me rebelled at that! (Q42)

Consumption session really compelling as one can get into politics, ethics, philosophy aspects of it a bit more (Q151).

8. Calculating carbon footprint

This ongoing activity in the coursebook was commented on by several people:

Recording and collecting data helped me link one session to the next (Q19).

Calculating my carbon footprint – horrifying! (Q75).

The most inspiring were ... calculating carbon footprint for everyday travelling etc (Q31)

But there could have been more discussion of the results of participants' measurement of their carbon footprints:

Personal carbon footprint seemed to be glossed over, again needed more discussion and explanation (Q32).

9. Coursebook

The coursebook provided the structure for the course and also the material for the formal teaching inputs:

Carbon Conversations book excellent (Q41) ... Written material was easy to understand (Q40).

The book is great – an amazing resource – looking forward to reading it all (Q120)

FAQ sections of the book informative, especially where they quote statistics e.g. embodied energy in a new car (Q1).

There was one comment, though, on the way the coursebook was used for teaching:

I thought that the teaching sessions were often less helpful because in most respects they repeated the material already present in the book. Perhaps developing extra curricula for the facilitators would be helpful. I tend to read ahead and so often found my mind wandering if the discussion followed the book too closely (Q90).

10. Library of books and meters

Several commented on the useful library.

Enjoyed being able to borrow books, monitors etc (Q60).

Good signposting of resources, reading etc (Q86).

Local references and resources incredibly valuable (Q134).

The loaned electricity consumption meters were much valued:

Borrowing the meter to monitor electric was really useful and led to us changing the remaining high energy bulbs (Q63).

The idea of taking a meter home to check electric usage and then monitor gas was quite an eye opener (Q198).

One person suggested some additions to bring the library up-to-date (Q2).

11. The facilitators

Some comments were included under 'group discussions' above. Further comments include:
Facilitators excellent (Q41).

Both the facilitators were very well prepared and able to answer a range of questions. And where they couldn't, would always follow up by email or at the following session (Q9).

12. Shortage of time

Several comments were made about sessions running out of time and feeling rushed:
All sessions were helpful, but some were too short so that they had to be a bit superficial. Maybe need additional sessions (Q18).

A few times the group would have easily moved towards very stimulating conversations, but had to be stopped due to time constraints ... I must admit I don't presently see a way to do this (Q6).

13. Other specific comments

Energy video (Yellow House?) not very good (Q83)

Found the 'what are the issues' brainstorming unhelpful (Q81)

The worst bit was irrelevant discussions like 'what my home means to me' (Q1).

I liked the Buddhist perspective, and discussions about the group's ethical responses to managing carbon emissions (Q52).

14. Overall comments

All the sessions were extremely informative. I learned an amazing amount of information in each of them (Q9).

I found the whole course very encouraging and we've been given positive ways of moving forward (Q14).

I found it enjoyable and informative, although I was pleased to find how comparatively well informed I already was. I would stress the enjoyable aspect and that we all have gaps in our knowledge (Q33).

All of them made me think about particular changes I might make in the different areas. Sometimes this was inspiring (home energy, food), sometimes depressingly challenging (travel) (Q79).

As mentioned at the start of this section, the variety of responses, many by only a few people, makes it impossible to summarise the conclusions.

Question 3a: Actions you were already taking before the course

Participants were asked to list items mentioned on pp 123-128 of the CC coursebook. This provoked a variety of responses varying from 'too many to list', through a few selected

actions, to a comprehensive list drawn from the coursebook. I tried to match the replies to the 6-page list in the coursebook. A further complication was that this question was only introduced to the most recent version of the questionnaire, so the sample size was only 34 and the results should be treated as illustrative rather than representative.

Table 2: Actions already taken before course (N=34)

<i>Section</i>	<i>Number of actions in whole section</i>	<i>Most common actions</i>	<i>Number of actions</i>
Home energy	147	Dry clothes outdoors Turn lights off when not in use Run washing machine cooler and only when full Fit low energy lightbulbs Take short showers instead of baths	15 13 12 11 10
Travel	46	Walk or cycle to work Work from home (1 or more days) Take public transport to work Holiday in UK No car/get rid of car	10 4 4 4 4
Food and water	37	Stop eating meat Compost food waste Vegetarian/Vegan	5 5 9
Consumption and waste	26	Recycle	5

The table suggests that most effort has gone into reducing home energy consumption, with relatively simple measures being taken. But even this finding should be treated with caution because it could be that people worked from the top of the list and ran out of space or enthusiasm before the end!

Question 3b: Actions begun since starting the course

I used the same analysis method as above. This time the question was answered by 129 people (out of the total sample of 201 people). The question was included in all versions of the questionnaire and about 60% chose to answer it. This makes the results more reliable but a preferred response rate would be 70% or more.

Table 3: Actions begun since starting the course (N=129)

<i>Section</i>	<i>Number of actions in whole section</i>	<i>Most common actions</i>	<i>Number of actions</i>
Home energy	190	Check meters monthly to monitor energy use Fit low energy lightbulbs Turn down room thermostat Turn appliances off standby Loft insulation Turn off lights when not in use Review when heating/hot water turned on/off	20 19 16 15 13 11 10
Travel	74	Use car less Cycle more Drive more economically	18 12 6
Food and water	89	Buy more local food Eat vegetarian at least twice a week Grow some of own fruit/veg	12 7 6
Consumption and waste	10	Buy less	5

Again, most actions are reported in relation to home energy, and they are all relatively easy options. The popularity of checking meters may well be a result of the course. Perhaps surprisingly, the number of actions per person (3) is less than during the pre-course period (8). This should be treated with caution because of the small number of people in the pre-course sample.

Question 3c: Actions planned during the next 12 months

This question was also asked in all versions of the questionnaire, but slightly fewer answered it – 121 out of 201. The same remarks on reliability apply as above.

Table 4: Actions planned during next 12 months (N=121)

<i>Section</i>	<i>Number of actions in whole section</i>	<i>Most common actions</i>	<i>Number of actions</i>
Home energy	105	Loft insulation Check meters monthly to monitor energy use Replace central heating boiler Put foil behind radiators Switch to green energy supplier	18 9 9 8 7
Travel	62	Reduce flights Use public transport instead of car Use car less Use train rather than fly	10 9 8 6
Food and water	80	Grow some of own fruit/veg Buy more local food Reduce food waste	17 14 7
Consumption and waste	26	Buy less	10
Moving on	4	Create personal energy reduction plan	4

Future plans spread the emphasis more evenly between home energy, food and travel. Many of the intended actions are straightforward ones, but there are some more major ones like replacing the boiler and reducing air travel.

Question 3d: Actions planned in the longer term

This question has only been introduced in the latest version of the questionnaire and so far there are only 30 replies. As with question 3a, the results should be considered as illustrative rather than representative of the whole sample.

Table 5: Actions planned in the longer term (N=30)

<i>Section</i>	<i>Number of actions in whole section</i>	<i>Most common actions</i>	<i>Number of actions</i>
Home energy	27	Replace central heating boiler Solar thermal panels	4 3
Travel	15	Reduce flights	5
Food and water	7	Grow more food	5
Consumption and waste	2		
Moving on	13	Campaign for sustainability Facilitate carbon conversation groups	4 3

As before, the main emphasis was on home energy, but this time ‘moving on’ was more important – especially spreading the message on sustainability.

Question 4: Any other comments?

This was asked in all versions of the questionnaire, so the sample was large – 201. However, the question was very open and the big range of replies covered very similar areas to question 2. I have done a briefer analysis, but in future the overlap between questions should be avoided if possible.

The course was encouraging, constructive and inspiring

This was the most frequent comment (14 people). Many people found it enjoyable, and also informative. Eight people found it excellent.

The group worked very well

Nine people said how enjoyable and effective the group was, with a good mix of people, supportive and useful to learn from each other. Only one person felt the group was too small (having three participants). Three people found themselves a bit overwhelmed or even intimidated by the expertise in the group.

Sessions a bit rushed

Four people found the sessions a bit rushed or that the course tried to cram too much in. Three wanted to have a couple more sessions. But one person found the length ideal.

Good facilitators

Five commented on how well led the course was, and on the quality of the facilitators.

Measuring one’s carbon footprint

Five people said how important it was to do this and identify one’s problem areas. One person said:

It would be good to have a more detailed footprint prior to the course. There should be additional focus on one’s ‘family footprint’. We should consider the group’s footprint to encourage each other’s progress and share tips (Q51).

Another regretted that they didn’t have access to carbon footprint software.

Valuable coursebook

Four people said the coursebook was excellent and one said the organisers should charge more for it.

More discussions

Three people preferred discussion as the way of learning:

The nature of the session means that it is probably better when more people are involved – more discussion, examples of personal experience (Q32)

The course was very stimulating, but I would prefer more time for discussion and less on formal inputs (Q2).

Broader political dimensions

One person enjoyed discussion of the wider issues: population and economic growth and achieving political change, but three people would have liked more exploration of these. One commented:

Struggling hugely with how to change policy, with people's drive to consume and the imperatives of economic growth (Q121).

Overall

The tone of almost all responses was positive and upbeat. As a typical person put it:

Excellent course with lots of useful information delivered in a variety of ways. Very relaxed atmosphere which I think encouraged people to be open and open-minded. Thank you! (Q197).

Conclusion

There is much encouragement to be taken from this analysis. The comments are all generally positive, even when suggestions are made about possible improvements. But there is a very wide range of comments, some made by only a few people. This makes the drawing of reliable conclusions difficult.

There are three possible changes to the format and administration of the questionnaire which might improve this and make analysis easier:

1. Review the key questions or areas that should be covered
2. Use a balance of closed and open questions to maximise the response rate *and* get the valuable detail that open questions can reveal
3. Administer the questionnaire as a part of the last session (time limit 5 mins?) to maximise response rate, and collect info about how many people don't complete one.

I attach an example of a possible revised questionnaire, which should be spaced out over not more than two sides.

