



Supported by the Climate Challenge Fund

REPORT on CAT

for all staff, especially those new to teaching P7 in 2010 -11
and secondary maths & science teachers

Thursday 2nd September 2010

4pm – 5.15pm at Millburn Academy

Energy + Action = Change during 2010 -11, transition and Cfor E

1. Present : Autumn and Wendy (Raigmore PS), Brian (Inshes), Susan (Crown), Jean (Drakies), Martyn, Dave , Mhairi and one other (Millburn), Janis and Elanor.
Martyn welcomed everyone to the meeting.
2. **Messages from S1s** – their impressions of E + A = C when they were P7s and their hopes for it in S1. The young people confidently reported that:
 - The Smart meters had a great impact at home and at school. The meters got the message over very quickly and they were soon all keen to see what they could do to use less electricity.
 - They recorded data for 3 weeks. The figures were used in numeracy and will be revisited in the corresponding period this winter. Even though they weren't collecting data all the time they felt they did keep up their efforts to use less energy.
 - At Millburn they want to build on what they did in P7 – not repeat things
 - Energy had influenced other aspects of the curriculum in P7. They had made environment posters and displays, they had made solar cookers and wind turbine models; they had researched various types of renewable energy in groups and debated energy use, seeing other people's points of view.
3. **Learning lessons from last session's P7 teachers**

Inshes reported that the project started too late to fit in comfortably with preset themes so the energy work was a bit contrived as it did not really match with programmes. But for this session topics have been moved around to make a better fit so that youngsters can move from the personal to the general with monitoring and use of meters. Even so the data collected last year was used in Maths and Language and the data this year will be used a lot more across the curriculum areas as the attached brainstorming sheet shows (*could RME be added in too, with ethical questions on our use of the world's resources and with the question of our 'right' to energy, does this bring responsibilities ? Janis*)

The meters were a plus from the start – a constant – but they could be used for small, intermittent things too eg a homework to investigate what a toaster uses for example. The meters really brought the parents on board. They were great for home/school links eg parents sending notes about useful websites etc

Crown reported that they do a 4 week Energy block in P7. The meters met with a mixed reaction from parents. The class also used BT resources which were very good. They had a parents energy night and produced in groups posters on 'Cars for the Future', which were displayed at the P7 Parent's Night at Millburn.

Drakies sent home the letter about the Smart meters being part of a transition project. Only 17 out of 37 homes replied positively and of those some meters were not used. The school's energy supply was used as well to ensure everyone had some data. The youngsters were very keen, routinely visiting the school meter daily to keep records. This year the school's energy supply will be used *first* so that all children are familiar with how to use the meters before they are taken home. A lot of information handling work evolved from the data and climate change reached into many other areas of the curriculum – ICT, conservation, Language, Highland Council's energy team visited and so did Janis.

Raigmore reported that not all families responded to the letters about the Smart meters and the army children had no access to their meters. But data was shared so that everyone had some to use in class. Every week in assembly the schools meter readings for the week were read out and this was joined up with the Eco-Schools work.

The class completely embraced the issue of climate change and it underpinned literacy, data handling, ICT (leaflets were made) and Expressive Arts in the class. They researched fossil fuels and renewables in groups and did presentations. Each group assessed the class on how well they had learned from the presentations. Debates were held which encouraged the class to weigh up evidence and explore conflicting view points. They made miniature wind turbines. The HIE Energy Toolkit was also used. Janis ran a session. It all fitted well with Copenhagen which was much in the news.

4. Open dialogue - Plans for this school session

- Martyn commented on the psychology of behaviour change – that many parents had not behaved as expected. That the issues over reduction of consumption are very complex.
- It was agreed to streamline the outcomes for 2010 -2011:

P7s would concentrate on:

- *Renewables
- *Quantifying energy saving
- *What is climate change?
- *Carbon dioxide in terms of photosynthesis, greenhouse gases
- *Smart meters used

S1s would concentrate on:

- *more abstract concepts
- *quantifying carbon
- *Power rates
- * what is carbon dioxide? – air
- *heat the main energy user
- *Smart meters not used much

- It was suggested a parents' guide to the Smart meters be made, as the original letter was complex. Inshes had produced a more basic instruction sheet to familiarise the parents with the workings of the meter. Jean agreed to share her simplified letter with Martyn. It was suggested that the classes themselves could learn to use the meters in school and then write an instruction

sheet for their parents and wider community member (neighbours). To reach more of the community, it was suggested that Raigmore Community Centre for example be given a meter as the children spend a lot of time there.

- It was suggested that a joint P7 information evening be organised at Millburn (instead of at each school) in future years at which the meters could play a part. Parents would see that the project was very much a part of transition and this would encourage their commitment to it. It would also give them an early opportunity to see Millburn, and transition is a major concern for parents. Martyn to raise this with the Area Group. In the meantime Martyn agreed to attend Drakies P7 information evening with a Smart meter for demonstration. This would be effective community outreach.
- Thought was put into demonstrating to P7s what a kilo watt hour is. What does it mean?
- There was discussion about establishing a Blog to share information between the schools. A GLOW meet was talked about too but it was felt some schools were not ready for this. (Raigmore talked about their successful involvement in an LTS GLOW meet with Heather the Weather, who answered the class' questions.) In the meantime it was agreed to use an email grouping, with reply to all, to keep teachers abreast of developments in each school.
- Oxfam Climate Chaos materials were mentioned as very helpful (available on line)

5. Conclusions

- It was noted with interest how similarly the project had evolved in the primary schools over the course of last session. The children's planning through mind maps had led it in very similar directions. It was felt a lot of progress had been made.
- The Smart meters had proved very popular and effective.
- The project is now meshing well with schools' programmes and progression can be built in in the secondary school.
- There are opportunities to reach out to the parents and the wider community.
- Schools have received funding for the project and this can be used to buy resources, to pay for teacher time to produce materials or for time to adapt the topic grid themes and so on.
- This December when the S1s reuse the Smart meters to collect further weeks of energy data we will see a 3% reduction.