

Scottish Environment Protection Agency

Engaging Schools in AQ through an EU- Wide Citizen Science Programme Our Plan with Scottish Schools

Colin Gillespie

Graham Applegate

Citizen Science... Working in partnership

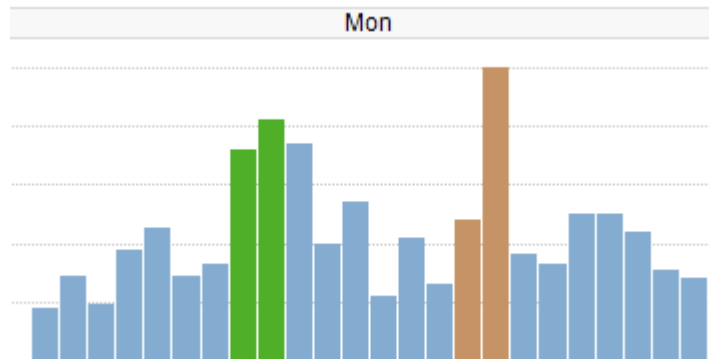


- Helps to deliver the same message
- Utilising existing and shared resources
- Delivering multiple benefits
- Communicating message to key groups
- Linking with wider air quality duties

Capturing the younger audience...

Change the communication method

- National education package for schools
- Taking good ideas, presenting information in a different format – to educate and engage
- Provide hands-on interactive material
- Inform and promote benefits
- Allow them to drive change
- Promote the work they have done



LearnAboutAir.com



Teaching Material

- Led by Teachers and Education Scotland
- Meets 'Experiences and Outcomes' in Curriculum for Excellence
- Encourages progression of skills from upper primary to secondary schools
- Created in areas of deprivation where the language of science is not typically spoken in the home
- Challenges learners to relate findings to their everyday experiences and the choices they make
- Engaging and enjoyable to use with extension materials to challenge learners

Air Quality Sensors...

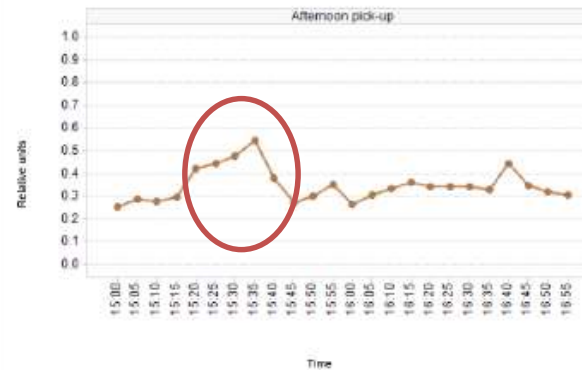
- Children collect their own data
- Accuracy not an issues, trend and messaging more important
- Children/school encouraged to develop their own strategy



Nitrogen dioxide five minute averages (Mon-Fri)



Nitrogen dioxide five minute averages (Mon-Fri)



Amazing young ambassadors...

Kids promote change

- More than 30 schools have used the AQ sensors
- Over 150 monthly users of the site
- Hands on with monitoring air pollution around their school
- Presented their findings in a fun and informative way
- Direct action includes cycling/walking to school or parents encouraged not to park near the school
- Educational and informative
- Runner-up National AQ Awards



Expanding the material...

Kids creating their own message

- Clean Air Day - Scotland
- Banner competition across Edinburgh
- Schools promoting local issues
- Creating pride in local environment
- Promoting cycling/walking
- Adopted in Teaching Material

Thanks to...



European Environment Agency Citizen Science Project ...

Focus in on schools – Driven by kids
across more than 10 countries

- Aim is to deliver behavioural change towards improving AQ
- Linking with other LA initiatives and other campaigns



European
Environment
Agency



Healthier
Scotland
Scottish
Government



European Environment Agency Citizen Science Project ...

Partnership Working...

- Living Streets – recording behavioural change electronic classroom tracker
- Cycling Scotland – Promoting active travel
- Joint-up delivery of active campaigns...



European
Environment
Agency



Cycling Scotland



European Environment Agency Citizen Science Project ...

Year 1...

- Recruiting local authorities and interested schools...



European
Environment
Agency



Cycling Scotland

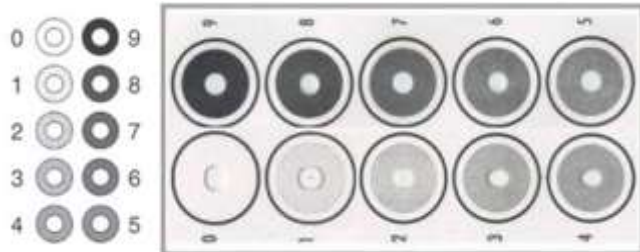


Aberdeenshire
COUNCIL



What's planned next...

- Replacing our original low-cost sensors with EDTs
- Expanding the use of the teaching package to link with wider council and school activities
- Build your own monitor using some off-the-shelf technologies - linking with wider secondary subjects such as computing
- Capturing the interest of P7 by getting their hands dirty with black carbon (soot) monitoring around the school and playground using simple filter paper devices.



Don't get lost in the quality of the data, getting the kids interested and driving the ambition for change is more important...

“There are sources of air pollution all around us in our everyday lives...”

“The air we breathe is something that we all take for granted, as we cannot actually see it...”

Key message's from the kids...

“Air pollution has an impact on our health and wellbeing...”

“In our local area unnecessary short car journeys is something we could stop...”

**If you want to get involved please
contact us...**

colin.gillespie@sepa.org.uk
graham.applegate@sepa.org.uk

Thanks...