I'm a Scientist, Decipher My Data: Flu!

Information Sheet for Headteachers

We would like to invite your school to participate in this research project called "I'm a Scientist, Decipher my Data: Flu!"

Introduction
Decipher My Data is a science engagement project and research study rolled into one. Scientists from University College London want to see if school absence data can provide a good warning system for spotting flu outbreaks. At the same time we want to give school students the chance to do some real science. The project gives students the chance to collect and analyse real data, publish their findings, peer-review other schools' work and eventually have their work published in an academic journal.

What's this document for?
Decipher My Data isn't just an educational resource or science enrichment activity. It is also a genuine scientific study and as such we have certain formalities we need to follow. We need to ensure that your school management are very clear about what we are asking you to do and what will happen as a result of your participation. We then need to ask your Headteacher to sign a consent form to indicate that you have understood what we are doing.

> Title of Project: **I'm a Scientist, Decipher my Data: Flu!**
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> This study has been approved by the UCL Research Ethics Committee (Project ID Number): 3294/001
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Who's asking?
The study is being led by Dr Rob Aldridge of the UCL Centre for Infectious Disease Epidemiology. He is responsible for the study, the data collected and the final publication of results. Gallomanor Communications is a company specialising in science engagement and is running the project with the UCL team. The project is part science study, part science engagement.

So what's the study about?
We want to see if school absence data can be a good early warning of flu outbreaks in the wider population. Many people with flu don't see a doctor if they are unwell as it is often a mild self-limiting illness. However, some flu detection systems rely on people visiting their GPs. These systems are therefore less sensitive than detection systems that use other methods. Small pilot studies have shown that schools could be a useful early warning system. We ran the project last year to see if the project would work, however, levels of flu were the lowest seen in 25 years and as a result we weren't able answer this research question. We are therefore running the project again with some changes based upon the feedback from schools about how to improve the project.

What is in it for the school?

We've recognised that science teachers lack good resources to teach about data in science. Pupils realise that data from textbooks is not real and they do not engage with it particularly well. We also recognise that whilst in other lessons pupils are able to become writers and artists contributing their creativity to the world in science they are expected to learn what others have done. They are not given a chance to contribute to science. Decipher My Data will give them that chance. From start to finish they will go through the scientific process of obtaining your permission to run the experiment, of collecting and analysing data, of reporting their findings and having them peer-reviewed, before seeing the product of their collaboration submitted for publication in a respected academic journal.

What is involved?

We are looking for 40 or more schools across England to participate in the study. You'll be expected to provide the number of absences on a weekly basis broken down by year group for the whole school. The class will then be expected to input this data on the Decipher My Data website. This is the only mandatory data collection part of the project along with the standard registration data. Students and classes can then write up their findings on the Decipher My Data website for review by other schools and the UCL team. The public will also be able to review these reports.

What data are you collecting?

We need some standard, publicly available data about your school to help us carry out the study. This includes: the number of pupils broken down by year group; the percentage of pupils on Free School Meals; staff numbers; ethnic background of students; average age of buildings and the location. We will also collect weekly levels of illness absence by year group.

What's going to happen with school absence data?

School absence data will be made public at the level of school year group and no school names will be published alongside the data. The data will be used as part of this national study and the academic paper that will be written as a result. Your school will be credited as a co-author and you will have sight of the paper before it gets submitted for publication. You can ask for you school name to be removed at this stage. All data will be collected and stored in accordance with the Data Protection Act 1998.

What reports will be publicly available?

Lab logs are used by individual students to record their analyses of the data. The logs include individual students analysis of the data and include graphs and pictures of their work, which the scientist working on the project can reply to with comments, encouragement and further suggestions for analysis. The logs publically identify the user name of the person leaving the log, but we ask pupils not to use real names and specify that they don't identify a school at any time. All lab logs and replies to them are pre-moderated by our team before being published and therefore reviewed for appropriateness and to ensure no school or pupil names are included.

Project reports are written jointly by a whole class/school club taking part at some point during the project and are commented on by the scientists. We ask the teacher to not identify their school by name or by identifying features (e.g. a school of 1732 pupils in with 95% EAL intake on 2 sites.) They'll be asked to only refer to their region not town. These will also be pre-moderated by the project team to ensure no school or pupil names are included.

Can you guarantee the schools anonymity?

We cannot guarantee the school's anonymity. Making these data and reports publically available should not result in schools being identifiable. However, the website, data and reports will be online, and therefore it may be possible that students, teachers or the public are able to identify or recognise a school and then externally link to their lab logs or reports (which we cannot control). To counter this our team will monitor inbound links to the website and data, which will help maintain an individual school's anonymity, however, we cannot guarantee this.

Do the pupils need permission from their parents / carers to take part in a scientific experiment?

The study is part of the pupil's normal educational experience. We are collecting data on year groups and the school as a whole and not individual children, therefore no personal information is being submitted to us and as a result permission is not required. As good practice we would suggest sending an information sheet home to any child participating in the project and we have prepared one for this purpose. Doing this should avoid confusion as letting parents and carers know that the school is participating in a project like this can only help.

What should I do next?

Please discuss the information above with others if you wish, or ask us if there is anything that is not clear or if you would like more information.

If you decide to give your consent please keep this information sheet and sign the consent form. Your school's participation is voluntary and you are free to withdraw at any time without penalty.

Got more questions?

You can find more information about the project on our website: http://flu.deciphermydata.org.uk - you can also email the team: flu@deciphermydata.org.uk - or call them on 01225 326892.