

# Nappy Science Gang Evaluation report

## Executive Summary February 2016

Nappy Science Gang is a user-led citizen science project for parents who use reusable (cloth) nappies, funded by the **Wellcome Trust** and the **Royal Society for Chemistry**. The project ran from March 2015 to Feb 2016, mainly consisting of a Facebook group to discuss the science of cloth nappies, and to design and co-ordinate experiments to answer questions of interest to the group. At time of writing, **the Facebook group has 1,097 members**, with more joining every day. (Our target was 100 active members and 200 lurkers)

The group **planned and ran three large-scale experiments in that time** (into the best temperature to wash at, the best washing agent to use, and to investigate what causes a loss of performance in some nappies). These involved **85 volunteers** doing tests in their own homes.

They also had weekly online Q+A sessions with various relevant experts – from detergent and washing technology experts, to statisticians, to help with planning and researching the experiments, and also various experts of general parenting interest, like developmental psychologists.

The group also ran 10 different live events – including stalls at Makefest at MOSI, and at a number of baby fairs, workshops at 2 family-friendly festivals and get-togethers to unveil the experimental results in London and Manchester.

Alongside the Facebook group, they ran a website, which is now a repository of evidence-based nappy washing and parenting information. Along with the results of their experiments. This website has 57 posts in total, 37 Q+A write ups, and the rest other news and results. The site has had over 27,000 views in total. <https://nappysciencegang.wordpress.com/>

### **Project staff**

**Manager:** Sophia Collins

**Co-ordinators:** Dr Laura Hobbs, Greta Santagata, Ellen Young

### ***Rationale***

Users of cloth nappies have many questions about the best way to wash and care for them – balancing longevity and performance of the nappies against hygiene and thorough cleaning. And the internet is full of contradictory, non-evidence-based, but nonetheless trenchant advice on this topic. It's hard to know which to believe.

Nappy Science Gang aimed to work out what the key questions were, design some experiments to answer those questions, and then run the experiments, ourselves. We've consulted scientists and other experts. But the decisions have all been made by volunteers.

We've tried to introduce an evidence mindset into a sector often awash with hearsay and myths. And we've tried to empower our members and support them in engaging with science, on their own terms.

The project was centred around a Facebook group, where most of the discussion and co-ordination took place. 71% of online adults use Facebook, with most visiting it at least once a day. But there seem to be few public engagement with science projects using it as a venue (other than for one-way promotion).

# Key findings

- We engaged over 1,000 volunteers in the Facebook group, more via other nappy-related groups.
- Volunteers designed and ran three large experiments, involving 85 volunteers.
- Having designed and run the experiments themselves, the volunteers feel ownership of the results.
- 67% of volunteers surveyed (58 out of 87) have changed their washing routine as a result of things they learned in this project.
- By asking for evidence, we got the NHS to change their advice on washing powder for baby items.
- Volunteers now ask more questions, and nappy-world myths are more frequently challenged, in the many other cloth nappy groups too.
- Volunteers had fun.
- Experts who took part in chats would all take part again and recommend taking part to a colleague.
- Our expert Q+As have left an online resource of up-to-date, evidence-based parenting information.



"Both the Flint Water Study and the Nappy Science Gang are examples of what researchers at the University College London (UCL) Extreme Citizen Science (ExCiteS) program are calling Extreme Citizen Science."

Prof Andrew Maynard, Director,  
Risk Innovation Lab, Arizona State  
University,

in 'Can citizen science empower  
disenfranchised communities?'

'The Conversation', 27<sup>th</sup> Jan, 2016

<https://theconversation.com/can-citizen-science-empower-disenfranchised-communities-53625>