

# Flies can make a buzz in schools

October 14 2015

---

Researchers from The University of Manchester have developed a new way of teaching which could improve the way biology is taught at schools.

Professor Andreas Prokop and colleague Sanjai Patel say the fruit fly - or *Drosophila* - can be used as a modern teaching tool to explain many biological concepts used in the school curriculum.

In a UK first, the scientists based at the University's Manchester Fly Facility have launched *droso4schools* - a website with sample lessons and teaching resources for schools.

Professor Prokop said: "Fruit [flies](#) are a fantastic resource for schools as *Drosophila* is the conceptually best understood animal there is.

"It is used by over ten thousand scientists worldwide for cutting edge research, and it is easy to keep in schools for captivating, exciting experiments which bring life into the classroom."

According to the researchers, the flies are easy and cheap to breed; the equivalent of London's population can be kept on a handful of laboratory trays.

The project website contains supporting documents and additional information to engage students who want to know more about *Drosophila* and help teachers who want to use flies in their lessons.

"Currently we have resources for teaching classical genetics, statistical analysis of experiments, concepts of nervous system function, the gene to protein concept, principles of enzyme function, genetic variation and Darwinian evolution. All with flies," he explained

He has even created a computer game where flies develop from eggs and spawn against time and parasites. To play the game visit

<https://scratch.mit.edu/projects/74443210>

To adapt resources to teachers' needs, Prokop and Sanjai supervised two PhD students, funded by the Biotechnology and Biological Sciences Research Council, who worked as teaching assistants in two Manchester schools

The students then developed biology sample lessons in close collaboration with the teachers which can be downloaded from the [droso4schools](http://droso4schools.com) website

The lessons continue to be used in the two schools: Loretto college and Trinity Church of England High school.

Professor Prokop added: "Flies have all the ingredients to convey conceptual understanding of biology as well as the thrill and relevance of science as a subject and future career perspective."

Surita Lawes, Head of Faculty at Loreto Sixth Form College, who is also a biology teacher, said: "By studying mutations in *Drosophila*, our students have been exploring how alcohol and human culture affects our genetic make-up. It's an excellent way for teachers to meet the challenge of revising many areas of the new linear syllabus using a topic designed to spark an interest."

Tof Apampa, a student at Trinity Church of England High School said: "

"It was great having the PhD student working with us. We learnt about what we can study at university and how fruit flies can help scientists explain how the human body works.

"Having the flies in the classroom was good fun. It was so clear to see how the old flies were less mobile than the young ones.

"We then learnt how this can help us understand aging in humans. It also showed in a really clear way how using a large sample size is important when we are looking for patterns in scientific data."

**More information:** If you want to know how and why fruit flies became so important for biology research, Prokop and Patel have even created two very entertaining educational YouTube videos.

For more information visit

[www.flyfacility.ls.manchester.ac.uk/forthepublic/](http://www.flyfacility.ls.manchester.ac.uk/forthepublic/)

To download the teaching packs and support information for teachers, visit the droso4schools website: [droso4schools.wordpress.com](http://droso4schools.wordpress.com)

All school- resources including computer game and YouTube videos are explained and summarised on this blog:

[poppi62.wordpress.com/2015/08/28/school-flies](http://poppi62.wordpress.com/2015/08/28/school-flies)

Provided by University of Manchester

Citation: Flies can make a buzz in schools (2015, October 14) retrieved 5 July 2024 from <https://phys.org/news/2015-10-flies-schools.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private

study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.