

# Learning Math with interactive books



**‘Math Inspirations Interactive Big Books’  
developed for Oxford University Press**

Oxford University Press (OUP) is a department of the University of Oxford. It furthers the University's objective of excellence in research, scholarship, and education by publishing worldwide. It is the world's largest university press. It publishes more than 4,500 new books a year, has a presence in over fifty countries, and employs some 3,700 people worldwide. It has become familiar to millions through a diverse publishing program that includes scholarly works in all academic disciplines, religion, music, school and college textbooks, children's books, materials for teaching English as a foreign language, business books, dictionaries and reference books, and journals.

## THE NEED FOR INTERACTIVE BOOKS

The ‘Math Inspirations Interactive Big Books,’ an Oxford University Press publication, was aimed towards Mathematics teachers, teaching students belonging to Reception, Year 1 (Y1), and Year 2 (Y2) of Key Stage 1. There were nine books, three each for Reception, Y1, and Y2. The ‘Maths Inspirations Interactive Big Books’ program had the following objectives:

- The teachers were to use the electronic version as a teaching aid in their classes. Hence the program needed to have functionalities or ‘editing tools’ like a pen marker, eraser, and other such functionalities, which the teacher could use to focus on the main teaching points.
- The program had to help the teachers in motivating the students of Reception, Year1, and Year2 to improve their understanding of concepts like counting, addition, subtraction, patterns, sequence, comparing lengths, shapes and so on; thereby enhancing their Math skills.
- The program’s visual design had to be interesting enough to keep the three- to six-year-old children engaged, and retain their attention in the classroom.

## Teacher Tools & Teaching Aids

### PUBLISHERS

- It had to look similar to the printed versions of Reception, Year 1, and Year 2 in terms of color and font. This was to ensure consistency so that children who may have read the print version could easily adapt to the electronic version.
- The program had to enable the users to navigate easily through the contents in a structured manner.

### HOW OUR SOLUTION HELPED

Tata Interactive Systems designed a unique solution for OUP. The program had the following features:

- The display panel was divided into four areas—Title panel, Page, Tools panel, and Navigation panel. The user had the option of viewing a single page or two pages together.



**The electronic books developed for OUP successfully grabbed and sustained the attention of young learners, and also made teaching easier and much more fun.**

- The teachers could make some changes in the ‘page’ area—for example, marking an area or writing directly over the ‘page.’ These changes were not permanent and were lost after the session was over. The next time a user started the program, the page would once again display the same content as in the book.

The functionalities incorporated in the electronic books included:

#### ■ Pen Marker

The users had to click the toolbar to activate the pen, and then move the mouse to where they wanted to start drawing and click again. As long as the mouse button was held down, the pen drew on the screen.

#### ■ Help

A help button was always present. This provided general guidance on how to use the software.

#### ■ Math keypad

A keypad appeared as a pop-up containing the numbers and operators: +, -, ÷, x, and =. Clicking one of the keys inserted that character. This keypad could be moved around the screen, but could not be used for actual calculation.

#### ■ Opening PCM, Planning Grid files in two file formats

The users were able to open the ‘planning grid’ files (PCM) in Word or PDF formats. If the user clicked on a PCM then a small pop-up window appeared asking the users to choose the format of the file that they wanted to open.

#### ■ Adding notes in page footers

Each screen of the big book had some blank space where the user could key in notes. These notes were available until the end of the user’s session.

The key element in making content engaging to children was to present it in a vibrant and attention-grabbing format. The visual design used colors perceived as ‘warm and friendly.’ The text font used was large and reader-friendly. All functional elements were available on every screen for immediate single-click access.

### TECHNOLOGY USED

The training program was designed using Macromedia Flash.

### SOME SAMPLE SCREENSHOTS

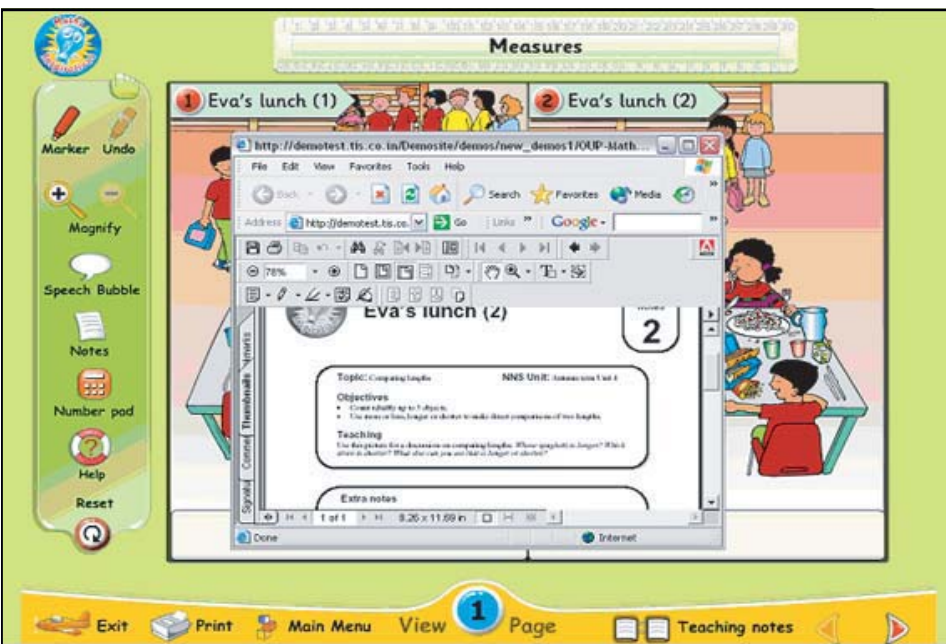
The screenshots offer a brief glimpse of the ‘Math Inspirations Interactive Big Books’ developed for OUP. To experience some of our products at work, you may view our demos by registering online at [www.tatainteractive.com](http://www.tatainteractive.com).



The screenshot depicting the menu from where Pictures and Teaching Notes could be accessed simultaneously.

A ‘teach’ screen showing the number pad functionality.





Notes could be accessed in Word or PDF format.

The learners could use the Marker to highlight the pictures.

