



## MAMBO Programme Data

### 1. Overview

Me & My Body (MAMBO) is a science education initiative for children aged 8-12 years old. This innovative programme combines and understanding of the human body with “hand-on” scientific investigation, teacher resource material and highly graphical web content.

Evaluation has been conducted at every stage of the project. A variety of methods had been used but this summary report was collated from data gained using focus groups. Focus groups allow the evaluator to adapt to huge variety in the stage of children’s level of development and give the flexibility to extend on questions and to specify answers. But most importantly issues that were unexpected can be discussed in depths. As it does not require any writing, children’s literacy skills will not influence their answers, and children do not have the association with a pen and paper test. Finally, children are more comfortable and safe to be with their peers.

The participants for focus groups were 55 students from 7 Dublin schools in different socio-economic areas (17 students in 3<sup>rd</sup>, 20 students in 4<sup>th</sup>, 15 students in 5<sup>th</sup> and 3 students in 6<sup>th</sup> class) that were interviewed between 2 to 8 months after the students participated in the programme. Furthermore, interviews with 10 teachers and 5 BDI outreach staff were held.

### 2. Programme Outputs

- Over 15,000 students and their teachers participated in the MAMBO programme
- An overview paper on the MAMBO programme appeared in The Science Education review – [Scalzo, C., Killard, F., Fryar, J., O’Brien, E. & O’Kennedy, R. (2008) Me & My Body – (MAMBO): An interactive science education programme for primary schools. Science Education Review, 7 (2), 41-47. (December)]

### 3. Impact

#### 3.1 Knowledge and Understanding.

The recall of facts and activities was very detailed many months after the event took place. The participating children related many facts and activities that they encountered in the workshop to themselves and their lives. New words related to the workshop had entered their vocabulary. The hands-on activities anchored the recall of facts (e.g. the shapes of the blood model was associated with the different functions of blood components).



### 3.2 Values and Attitudes.

**Experience:** MAMBO in school provided a highlight for the students. The children remembered MAMBO fondly as a positive, interesting and fun experience. Many of the students said that their regular science classes do not include any or only very few hands-on activities and they enjoyed the possibility to be active. The participants would have liked to have more science workshops like MAMBO.

**Self-Image/confidence:** The possibility to get active in science lessons during the MAMBO programme helped children to understand themselves as little scientists and investigators. Especially working together with adults changed the perception of science as a passive experience and seemed to improve children's self-confidence in science.

**Views on science:** Children's ideas about science often broadened from the narrow prevailing view of a TV science entailing only potions and explosions. The boundaries between science in school and science in the 'real world' became more permeable, and children were able to connect the two.

**Career horizon:** Being a scientist has become more interesting as well as more accessible. Interacting with a scientist (the workshop facilitator) helped children to see that working as a scientist is a 'normal' profession for 'normal' people, and that a career in science might involve other routes than working as a lab scientist mixing potions. Concurrently, universities became more accessible as a place of learning or working.

### 3.3 Activity, Behaviour and Progression.

The influence of MAMBO did not stop at the school gates. In later encounters, for example in family outings to museums, knowledge from MAMBO was often used to make sense of the new experience.

Some of the artefacts (e.g. blood model, or pulse charts) remain in the classroom and continue to reinforce the learning and experience that took place.

**Resources:** MAMBO provides not only teachers with new ideas how to teach scientific concepts and a resource CD, but also some of the participants teach MAMBO activities and facts to parents, siblings and friends.

### 3.4 Enjoyment, Inspiration and Creativity.

Children found the programme very enjoyable, and remember the experience as fun. They remembered jokes and cartoons on presentations slides, as well as the fun they had in working with each other and the facilitator.