

## **1 Didactical material about the method of introducing Imagine and co-laboratories into local learning settings (EN, to be used by project partners).**

**By Secundino Correia (CNO-PT)**

### **Some notes about curricular articulation of exploratory platforms for collaborative learning**

#### **General aims for Pre-School Education level:**

- To contribute for the uniformity of opportunities in access to school and for the success of learning; to develop multiple languages expression and communications, as means of relationship, of information, of esthetical sensitisation and of understanding of the world; arouse curiosity and critical thought.

#### **General aims for Primary school level:**

- shall be offered to the students the achievement of active, meaningful, diverse, integrated and socializing learning, in a way to guarantee the schooling success for each student; shall be promote the discovering and development of their reasoning capacity, memory, critical spirit, moral sense and esthetical sensitisation, also promoting their individual fulfilment in harmony with the social solidarity values.

#### **Creative writing exploratorium:**

- To practice writing as a mean to develop the comprehension in reading;
- To promote the diffusion of writing as a way of enriching it and finding meaning for its production promoting the pleasure of writing;
- To improve the competence for writing, by using auto and hetero correction techniques;
- To use reading with diverse aims (pleasure and fun, source of information, of learning and enrichment of the Language)
- To use different expressive resources with a certain communicative intention (drama, cartoon, advertising posters)

We intend to create a microworld rich in materials, stimulation and situations that will appease creative writing.

In this microworld, children from 4 to 10 years old will become writing artisans, discovering the amazing enchantment of constructing and destructing the Text and the Word.

Children will be able to play with words, sentences, texts (narrative, poetry.)

There will be simple and easy to use text editing tools:

- Simple formatting tools (font, style, size and colour)
- Copy, paste and cut;
- Print in different shapes, with the preview of the final results in A4 sheets

The texts are organized in stories with scenes, with pre-defined buttons for navigation between them. These pages other than text may also content:

- Images and animations from a original library (to be produced)
- Definition of simple courses for the objects to move in the page, defined by example;
- Photographs and other images taken from digital photo machines and scanner;
- Objects or buttons containing sounds (wave) and music (midi) taken from the sound library or produced in the Music Editor.
- Sounds recorded by the user and associated to background scenes.

The stories can be saved for two different purposes:

- To be re-edited/read in the Editor;
- To be read in a Browser (Netscape or Internet Explorer).

### ***Mathematics***

- To develop reasoning capacity.
- To expand communication capacity.
- To gather simple data and organize it in a personal way, resorting to different kinds of representation;
- To develop capacity to solving daily problems, applying to arithmetic operations and basic notions of geometry, using algorithms and mental calculation techniques.

We intend to create a micro world rich in materials and learning situations that will appease the acquisition of basic concepts in mathematics.

In this editor, playing with numbers, calculations and operations is a challenging adventure.

Children can explore the world of numbers, through several kinds of graphic representation.

They will have the most diverse instruments for measuring, comparing and calculating: scales, chronometers, riddle machines.

Elements (pieces) will be offered, to construct mechanisms (systems) that will transform numbers (composition, decomposition and basic operations). These mechanisms can accept one or several entries, can process data and show results that can also be entries for new processes.

Learning of mathematic basic concepts happens either in the construction of mechanisms (systems) or in the interpretation of its functioning, either in the analysis and description of results in numeric or graphic way.

There will be also possible to describe and understand problematic situations, allowing its solution using manipulations, diagrams and equations.

### ***Visual, Plastic and Musical Expression***

- To promote the learning of essential elements of visual and musical expression, and of the rules of its organization;
- To develop expressive and creative capacities, enhancing voice exploitation, different instruments, auditive and sound acuity.

- To contribute for the development of aesthetical sensitisation
- To evolve expressive capacity through different materials (virtual) and techniques, enlarging the experience areas and the knowledge of expressive languages.
- To stimulate the practice of a new learning of the inter-connection between the individual and the environment, which will generate an individual and collective sense of responsibility in the solution of the existing environment problems and in the prevention of others;
- To transpose to the two dimensional space the result of their concrete experiences.

Is much more than a drawing and painting program and proposes several oriented activities and artistic creations, from an amusement experience.

Its underlying platform potential also allows to obtain esthetical pleasure with dots, lines, forms and colours, and with standards algorithms it is possible to transform them, move them, control them with visual variables.

These dynamic pieces of work of art can be followed by musicals created in the Music Editor. From the automatic algorithms, it is also possible to transform any image in a certain puzzle.

### **Music Editor**

This editor is a micro world for exploring the world of sounds and music in one hand, and, in another hand for listening, composing, editing music pieces.

This editor allows:

- To investigate, choose and combine sounds to produce rhythms and melodies;
- To communicate feelings and emotions, trough rhythms, melodies and compositions;
- To use the computer to save, organize and change musicals.
- To save their own compositions and communicate them, for instance in the Internet.
- To understand and develop musical ideas and structures;
- To compose, register and tape compositions through the use of musical notation;
- To adjust the created musicals in the other products of the integrated ser of programs.