



Last update: July 2012






The aim of this program is to stimulate the children to research and make discoveries using the last technologies of computing. The students must be at least able to produce his own learning material and publish it to teach others. They usually have 2h per week or more to complete this program.

## Training materials and courses

Topics	Details	Softwares
Basic computing	Operating systems and menus controllers manipulation , keyboard and mouse Typing and dictionaries Calculator and basic text editing	Linux Ubuntu
First Research project	Internet and web browser Downloads and local directories Document editing and text formatting Document publishing	Firefox OpenOffice
Art and Painting	Brush and colors images formats and file types Collections and libraries	MyPaint Agave
Applied sciences	Math and calculations Spatial geography	Marble Celestia
Programming	Interactive screen Controllers and operators Application testing and debugging	Scratch
Animation	Objects and medias talking characters animated background Story telling	Scratch
Tests and challenges	Create a A4 science report presentation Create a collection of paintings Create an interactive animation	
Graphic Design	Visit card	Gimp

	Color poster Colorfull banner	Agave
3d rendering	Virtual model drawing Basic object modelling Shaders and lighting Camera and rendering	MyPaint Blender
Film making	Storyboarding Shooting Editing Mastering	Blender Gimp
Tests and challenges	Create and render a virtual object Create a visual presentation Create one shot video film	Blender Gimp
Web programming	Basic html codes and css templates Javascript programming	Aptana Gedit Bluefish
Databases	Local and web servers MySQL tables and fields php coding with data loading Content management softwares	Phpmyadmin Aptana Gedit
3D animation	3d solar system School building walkthru Scene of your choice	Blender Gimp
Conclusion	Benefit	

### Legend

	Up to 5 <sup>th</sup> standard *9/10 years old
	Up to 8 <sup>th</sup> standard *13/14 years old
	Up to 10 <sup>th</sup> standard *16 years old
	Up to 12 <sup>th</sup> standard *18 years old
	Profile validation

A children has 1h per week until the 6<sup>th</sup> standard, then 2/3h until 8<sup>th</sup> standard, then 3/4h until 12<sup>th</sup> standard !  
20h / 40/50h / 60/80h