LIBREOFFICE & eTWINNING
LibreLogo in schools and teacher training programs
INTRODUCTION
What is LibreLogo?

- Logo programming language
- Turtle vector graphics in Writer
- For graphic design and education.
A Writer Toolbar
Logo Toolbar Icons

FORWARD 10
BACK 10
LEFT 15°
RIGHT 15°
Start Logo program
Stop Logo program
HOME
CLEARSCREEN
Set Layout, pretty format & translate
See “LibreLogo” in LibreOffice’s Help (shortcut: Press F1 in the text box of the Logo toolbar), or https://help.libreoffice.org/Writer/LibreLogo_Toolbar

Home page: http://www.librelogo.org

Resources: http://librelogo.org/resources/
Click on Start in an empty document to get a localized demo program.

Modify it, and check the result by a new run. It’s fun!

FONTCOLOR “GREEN"
LABEL “LIBRE”
PENUP
BACK 30
PICTURE [
  FILLCOLOR ANY
  CIRCLE 40
  FONTCOLOR “BLACK”
  LABEL “LOGO”
  LEFT 180
  FORWARD 20
  PENDOWN
  PENCOLOR ANY
  PENSIZE 1
  FORWARD 40
  REPEAT 20 [
    FORWARD REPCOUNT*2
    RIGHT 90
  ]
]}
PENUP POSITION ANY PENDOWN
IMPROVEMENTS
Better I10n, bug fixes

Ubuntu’s LibreOffice has got localized Logo commands from Ubuntu 17.10 or 18.04 (LO 5.4.4, this is also fix for other Linux distributions with I10n problems...)

Fixing broken work on some versions of macOS, related to the path of the localization

Fixing regression of recent development code: drawing shorter line than the turtle path, caused by code clean up in LibreOffice’s graphics support.
EDUCATION
In Brazil

Teacher training program at SENID lead by Gilvan Vilarim
In Portuguese

Manual by Gilvan Vilarim
In Germany

Upcoming grade 5/6 exercise book

With LibreLogo worksheet templates

by Mirek Hancl, Cornelsen Publishing
In Hungary

In elementary & middle schools

Worksheet template: immutable background image → Insert it as a GDI metafile, wrap it in the background, protect its position and size (graph paper idea by Péter Kecskeméti)
In Italy

University textbook by Andreas Formiconi

Why Logo? “Low floor and a high ceiling...”
IT teacher training program using LibreLogo
Research with 250+34 university students
https://groups.etwinning.net/30442/pages/page/393155

Result: A step back into the future by A. Formiconi and F. Mancini, 2017
https://groups.etwinning.net/files/collabspace/2/42/442/30442/files/becbce91.pdf
“Paradoxically, Scratch may be frustrating because everything seems so easy but soon it might get much harder. Because coding it’s hard. Like math. Making life much easier is not always a good idea. A number of studies revealed that a Scratch introduction to programming does not necessarily facilitate the transition to conventional coding languages (Lewis, 2010; Lewis, Esper, Bhattacharyya, Fa-Kaji, Dominguez & Schlesinger 2014; Weintrop & Wilensky, 2015).” – Andreas Formiconi & F. Mancini, A step back into the future, draft, 2017
“LibreLogo is a very clever implementation of Logo.”

“...most interestingly, those that mixed the mathematical control in drawing figures with a kind of aesthetics research, looking, at the very end, for the most pleasant results: kind of STEM to STEAM path.”

[STE(A)M: Science, Technology, Engineering, (Art) and Mathematics]
eTwinning: platform of 600 thousand registered teachers and 200 thousand registered schools

23–25 May, LibreLogo in European Workshop for teacher training institutes involved in eTwinning activities, presented by Andreas Formiconi

17, 28 September, Online LibreLogo eTwinning curse by Andreas Formiconi with more than 230 teachers:
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