# Building an scenario of open apps for education, based on teachers' collaboration

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#### Public Education in Catalonia

- About 3.000 public schools
- About 10<sup>5</sup> teachers, 10<sup>6</sup> students
- Two official languages: Spanish and Catalan
- New Education Law (2006), focused on the work on key competences
- Main challenges: multicultural integration, improvement of academic results

#### ICT in Education in Catalonia

- Official program started in 1986
- XTEC: Public Telematic Educational Network, offering Internet services since 1995 to all Catalan teachers and schools.
- Creation and sharing of educational materials by teachers, stimulated by inservice teacher training
- Heterogeneous systems and models of use
- Promotion of free software and collaborative projects

## Some Open Source projects promoted by the ICT in Education Unit





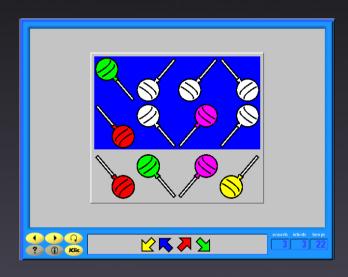


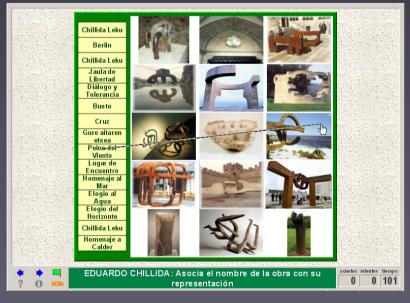


#### **JClic**









#### **JClic**

- Open platform for activities in varied modes (relationship, putting in order, identification, classification, and so on)
- Made with Java
  - Multiplatform (Linux, Windows, OS X, Solaris...)
  - Same application, several delivery formats: Applet, Stand-alone frame, Java WebStart application

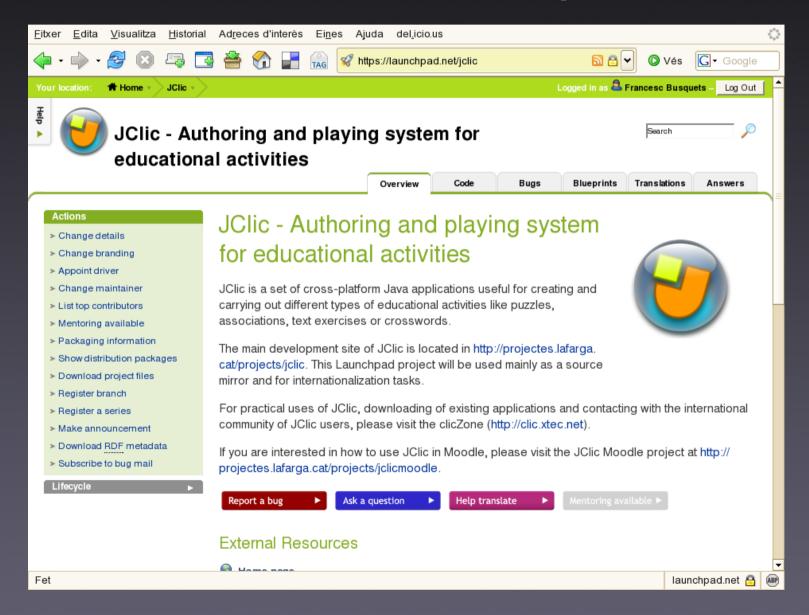
#### **JClic**

- Evolution of Clic 3.0 (1992-2000)
- Free software, distributed under GPL
  - http://projectes.lafarga.cat/projects/jclic

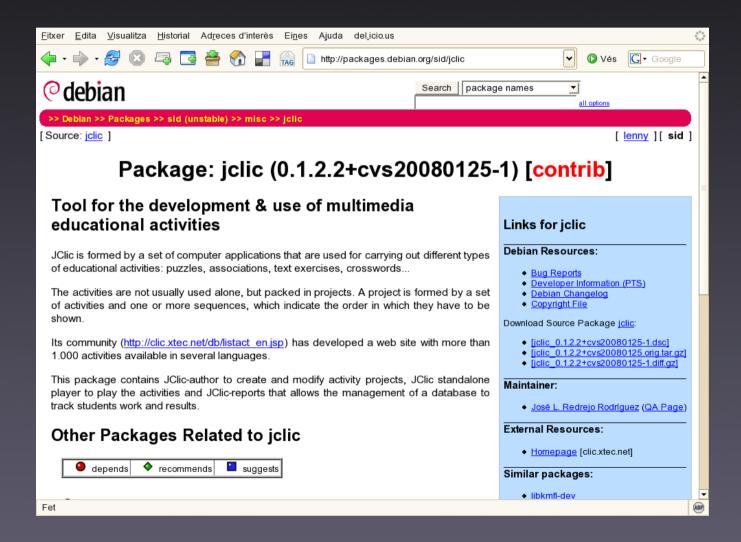


- Available in several languages:
  - Catalan, Spanish, English, Galician, Basque,
     French, German, Portuguese (pt and br), Italian,
     Greek, Turkish... and more coming

#### JClic in Launchpad



#### JClic and Linux







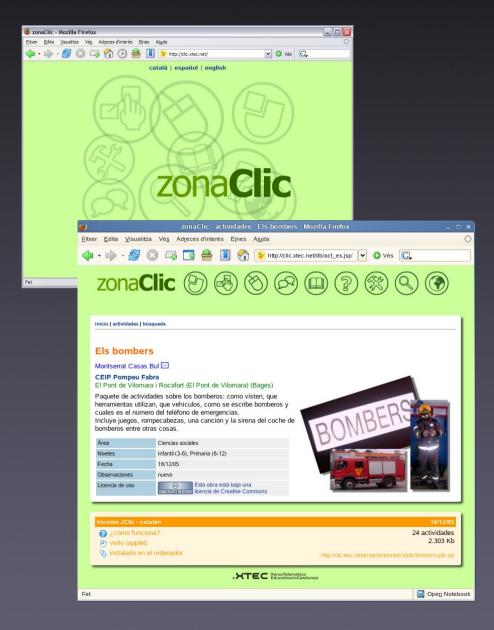






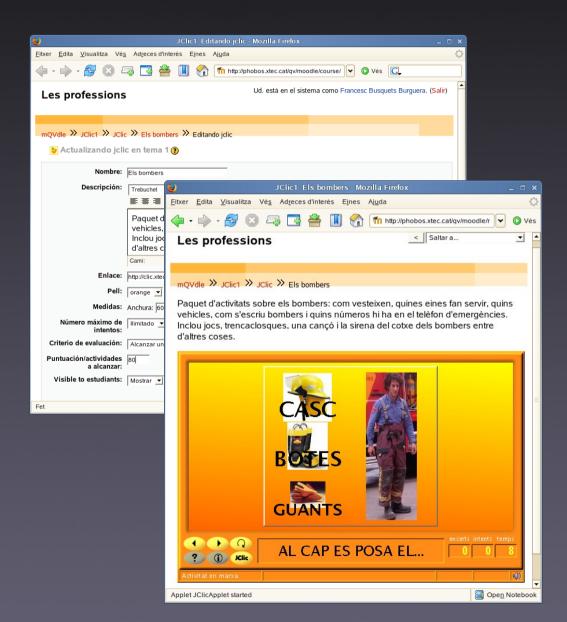


### JClic, collaborative project



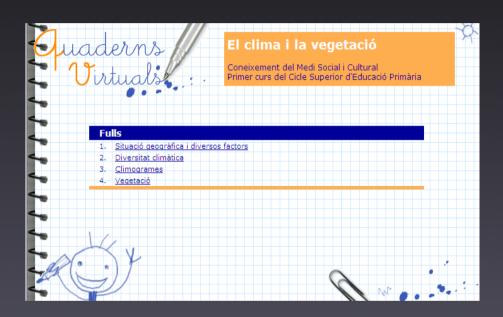
- ClicZone: open space for collaboration and exchange of learning objects between educators
  - http://clic.xtec.net
- Library with more than 1.000 projects and 120.000 activities, in different languages

#### Jclic-Moodle integration



- Embedding of JClic activities in Moodle courses
- Collection of the student's results
- Integration with the grades system of Moodle

#### Virtual Notebooks



Generalitat de Catalunya
Departament d'Educació

Living in London

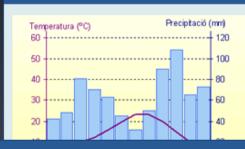
Fulls

1. Looking for a flat
2. A flat in London
3. Irregular verbs
4. Listening to a song
5. Telephone conversation
6. Going shopping

- Implementation of the IMS QTI standard
- Authoring tool for teachers
- Control of play conditions and student's answers
- Integrated in Moodle http://clic.xtec.net/qv
- Library of notebooks created by teachers

#### Virtual Notebooks

#### Observa el climograma i respon a les preguntes sele

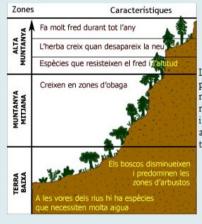


#### Place these phrases in the correct order

- L: 666-123-123, Mrs. Walsh speaking.
- E: Hello, I'm Eva, the girl who came this morning to see the flat
- L: Ah! Yes! What do you think of it?
- E: Though it's small, it has everything I need... I like the district and the flatmates also.
- L: Yes, they're very friendly. So, have you decided to take it?
- E: Yes, I want to rent the room
- L: Well, I am glad. When will you come to sign the lease and to make the first payment?
- E: Tomorrow morning
- L: Perfect
- E: I would like to drop off my things tomorrow if you don't mind.
- L: Of course! Tomorrow you can settle into your room as soon as you have signed the lease.
- E: Fine. See you tomorrow
- L: Bye



puntuació:



Les plantes necessiten unes condicions especifiques per créixer segons l'espècie a la que pertanyen. Algunes requereixen molta aigua mentre que altres són molts resistents a la sequera. Unes resisteixen molt bé el fred i altres necessiten temperatures més càlides. És per això que la vegetació varia segons el relleu, el clima, el tipus de sòl i la influència del ésser humà.

Ordena les imatges segons l'alçada de la muntanya en la que es troben: la primera la que et trobaries més a baix (en la falda de la muntanya) i la última la que et trobaries més a dalt en la muntanya.







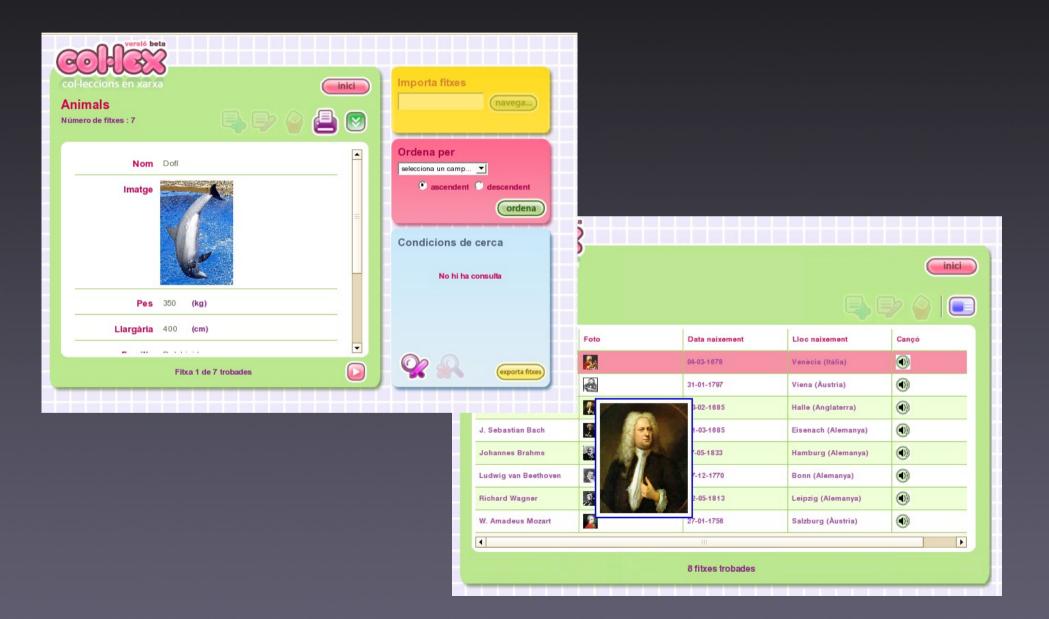


#### Col·lex



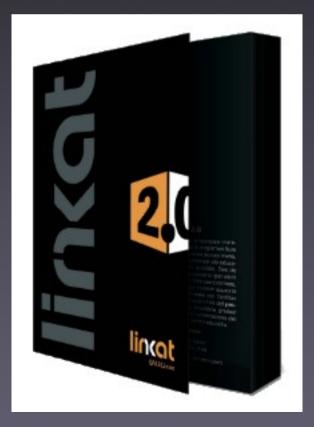
- On-line database system for primary school students
- Free definition of the data structure
- Textual, numéric, boolean, date and multimedia field types
- Search, filtering and ordering criteria
- Allows collaborative work on a single database
- http://www.edu365.cat/colex
- https://projectes.lafarga.cat/projects/colex

#### Col·lex



#### Linkat





- Full operational environment made with free software
- A pack of free software selected by its educational value
- A service offered to all the schools of our community, and to all its users

#### Linkat



- GNU/Linux distribution oriented to the Catalan educational system, based on OpenSuse
- Wide software library and online update service
- Linkat portal: http://linkat.xtec.cat
- Technical support to schools
- In-service teacher training activities and materials

## Thank you!