

## Free software development communities as a pedagogic model

By Francesca Antonacci

Free software development communities consist of programmers and users, who contribute to the development of software products<sup>1</sup> using Internet in order to communicate and co-operate. Their work, given freely and in co-operation, has the objective of producing software, which thanks to a unique license<sup>2</sup> is then distributed freely through Internet without the usual copyright restrictions. The software is then called “free” as it is released with its source code allowing anyone to read and modify it. The pedagogic interest arising from the emergence of these communities is twofold.

Firstly, in their production practices these communities set out formative processes (training of users and documentation) as well as educational ones (training in the culture and practices of the community and in its organisational methodology). These practices characterise these communities and are not accessory, to the point that without them the communities could not survive. The involvement of a large number of users, as well as the development and growth of the knowledge that each contributes to the project and to the product, are key factors to the understanding of the success of the free software phenomenon.

Secondly, these communities are interesting as they make up a particularly rich epistemological model for the understanding of formative, educational and didactical themes. Having embraced the hacker culture, these communities promote and create

---

1 One of the best known free software is GNU Linux.

2 The GNU GPL (General Public License) created by Richard Stallman.

an incentive to the free circulation of knowledge<sup>3</sup> without protectionist barriers. The free circulation of knowledge model is an intrinsic component of the academic and scientific worlds because of the inherent communicability of knowledge and man's aptitude to education. However, freedom of knowledge alone is not enough, both in the educational and productive fields, unless it is introduced in an organisational model promoting the participation and engagement of the individuals. The communities of free software development are a particularly interesting organisational model because their structure, based on co-operation and solidarity and opposing centralisation, promote the participation of programmers and users all over the world. The credit given to the work of each individual is fundamental to the understanding of the motivation to take part in various activities. Thanks to this kind of organisation, which owes much to a model of delegating leadership, authoritative but not authoritarian, charismatic but not idealised (because always proportionate to the competence demonstrated), these communities are putting together a very large number of work groups. These are geographically, methodologically and culturally non-homogeneous groups, which despite all predictions create highly competitive products of high quality.

Pedagogy and organisational sciences can find through the study of this model meaningful lines of research and development.

---

<sup>3</sup> Even the one contained in the software (which is a product made up of information/knowledge) by releasing its source code.