

How to turn all parents and teachers into active supporters of Free digital standards, software and culture: the Family Guide to Digital Freedom

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Abstract

In this modern world, all ordinary citizens need to become more informed, in order to defend their civil rights, about the real impacts of digital technologies on political life, culture and good, fair employment. Families are the first place where the younger generations can receive correct education and information about these issues. All responsible parents are up to this challenge and have no reason to feel intimidated by technology: they just need the right basic information, in a format readily usable and relevant for this task of theirs.

While this is a very general issue, the Catholic Church and all Catholic groups from single Parishes, schools and international organizations can do a lot, with relatively little effort, to help the whole society in this area, by applying the official Catholic Doctrine and explicitly supporting already existing tools and practices.

After explaining these points, the author describes his personal methods and initiatives to work in this field, what he has achieved and learned so far and concludes with a few suggestions to help all Catholic educators to pursue the same goals.

1. Why correct, widespread information about digital technologies is an urgent, necessary and good thing

Today digital technologies, that is software and electronic devices of all sorts, are used to produce and publish educational material and many types of other creative works. They have also become essential for preservation of official documents or efficient delivery of education, professional training, telecommunications and public services. Truly open digital technologies have the lowest overall costs, provide top quality education in the large majority of practical cases from primary schools to Universities, and guarantee equal opportunities in the workplace and other fields of life.

Even if it is quite difficult for the average citizen to realize it, the way in which all digital technologies and activities are regulated or deployed already has a great influence also on how much people can actually practice freedom of speech or other basic civil rights.

In other words, the quality of our lives and our civil rights *depend every year more on which software and electronic devices are used around us and on how they are used*. It is in the interest of every citizen, even those who don't own nor use any computer yet, to make sure that such usage, especially in Public Administrations and schools, doesn't hurt their interests, those of their family and the Common Good.

Widespread usage of digital technologies in a way more open, efficient, conscious and responsible than it normally happens today, both in developed and developing countries, could facilitate a more active participation of all citizens to public life and sensibly reduce public expenses at several levels, freeing resources for more critical tasks. It would help to create small businesses and hi-tech jobs which are still rewarding but less vulnerable to offshoring at the first financial hiccup.

Correct usage of digital technologies would also reduce pollution, that is fight both the related diseases and all the money wasted to fix environmental damage: a recent study¹ by McKinsey & Co. suggests that data centers could surpass the airline industry as a greenhouse gas polluter by 2020, and software has a not negligible influence on how much power a microprocessor actually dissipates.

Unfortunately, the current way to regulate, produce, deploy and use digital technologies is not the fairest and most efficient one. Bloggers worldwide love to talk about how the Internet has empowered the masses, but the truth is that billions of people don't have affordable and reliable Internet access yet, that the Internet is just one of many critical, interlinked digital technologies which are still used to control communication and knowledge.

I am convinced that real, positive change in all these areas will only happen on a scale large enough to make an actual difference in a reasonable time if there is direct involvement of a number of non-technical citizens orders of magnitude bigger than the current population of Free Software, Free Culture and Digital Rights activists.

Groups like the Free SW Foundation (FSF) started in the 1980's to discuss and promote alternative, more open ways to develop and use software, that omnipresent glue of most digital technologies. When I first encountered the world of Free as in Freedom software (FS), around 1995, I was greatly fascinated both by its flexibility and by the underlying philosophy and thought it definitely should play a role in making the world a better place.

After a few years, however, I started to grow more and more dissatisfied. The FS ideals still looked (and still do) fully valid to me, but the default attitude and communication strategy to promote them started to seem more and more elitist (de-facto, of course, not as a conscious attitude), sometimes even limited to protect software coding for the sake of software coding, not because it is necessary for a fairer society. Software is just a tool and programming, no matter how gratifying it can be, should never become an idol, but sometimes I found myself wondering if this wasn't just the case with the FS advocate I was talking with that day. At a more pragmatic level, the more or less implicit expectation by many FS supporters that every computer user could also be a competent and willing contributor to the software he or she uses may have made sense in the 1980's, but simply has no basis in reality today.

All this became even more serious when I started to realize that, while people who actively use or support FS are often the first to denounce real, serious problems related to digital technologies, quite often the license of the involved software is either irrelevant or a really secondary issue. There are cases where making the software Free as in Freedom, while obviously a good thing, doesn't make the slightest difference in terms of actual freedom and advantages for the people impacted by that software: there are also cases where Free Software may be a necessary prerequisite, but doesn't guarantee at all that the problem will be actually solved for the Common Good.

One example may be energy efficiency: badly written Free Software can dissipate as much or

¹“Data centers are becoming big polluters”, <http://bits.blogs.nytimes.com/2008/05/01/data-centers-are-becoming-big-polluters-study-finds/>

more electric power as proprietary software. Sure, anybody could rewrite it, but users who cannot afford a heavy electricity bill and aren't good programmers cannot even afford to pay a good programmer who could make that software more energy-efficient. Many first world FS volunteers, however, simply ignore the issue because they can (still) easily afford high energy bills. It takes much more than software licenses to actually solve problems like this.

Another, even better example is e-voting. If voting must happen electronically, then there is no doubt that it should be done with Free as in Freedom software that everybody can audit and improve, but *does e-voting make any sense in the first place?*¹ Or is it just a solution looking for a problem²? I found troubling to see so many FS activists claiming e-voting must happen with FS without answering **those** questions first.

What about Net Neutrality? This term indicates (in a nutshell) the prohibition to artificially slow down the traffic of online businesses and service providers. Without Net Neutrality the companies who manage the physical Internet infrastructure and all its access points could favour *their* own version of the same services, or those of their commercial partners, even if they are more expensive or technically inferior. Attacks to Net Neutrality are bad and greatly upset FS advocates, but mandating the exclusive usage of FS would do nothing to protect it.

Freedom of speech? Surely the Internet works great thanks to FS, and Linux can make blogging possible even to people who can't afford expensive software and computers, but does that really matter when laws try to limit news reporting only to authorized professionals? One last example is Public Administrations. Of course they should always use, if not Free Software, at least Free as in Freedom file formats and protocols. But how good does it make to average citizens that their Ministries use Free software and formats to award contracts, if no law mandates that all public budgets, tenders and contracts aren't entirely published online in a format which does make as quick and easy as possible to spot and denounce any anomaly? I prefer to increase the number of citizens who can and actually use a computer to perform such activities before of the number of citizens who run Linux.

2. The family as the first place of digital education

Most parents today feel outcast or helpless as digital educators, because they often mistake the easiness with which their children program a DVD recorder, play computer games or use any function of a cell phone as a sign that children already know much more than them. The truth, instead, is that parents can and should do a lot of good as digital activists at several levels, from their household to their children's schools and the voting booth. Parents just need the right information, in a format immediately accessible and relevant to them.

If you look again for a moment to the examples in the previous paragraph, you'll note a couple of important points. First, all the situation I've mentioned, and there are many similar ones, create problems to all citizens, no matter if and how they personally use computers. The second recurring characteristic is that understanding the basic nature of each problem, its concrete negative impacts on single citizens or whole communities and the *nature* of the solutions does **not** require any engineering skills.

What we are talking about here is not technology or becoming technologists: we are simply

1 Cfr "Is e-voting a solution? To which problem?", <http://digifreedom.net/node/52>

2 Cfr www.electronic-voting.org or, for a detailed analysis of the intrinsic problem with e-voting (note: this is NOT an endorsement of the solution (ClearVoting) proposed in that same site)

saying that things like common sense, social responsibility, participation, the importance of being fair and helping others continue to be necessary and important even when the subject is “*what can computers do to improve our life?*” These values are not taught in technical schools, nor they should. The first and most natural place where to teach and learn such “skills” is the family. The second are local schools, Parishes and youth groups.

I am convinced that it is time for all parents to start acting as parents, that is primary educators, also in this field. I suggest that doing so is their duty and responsibility, just as it is to be informed on topics like school programs and menus or toy safety. Above all, I am convinced that this is a really easy thing to do. There is no need to become a software professional, or even to own a computer, to do so. A parent must just learn to ask the right questions, to recognize valid answers, and demand from his or her delegates, from teachers to elected officials, that they act properly.

3. Catholics and Digital Freedoms

The basic concepts and general proposals presented so far are complete and relevant as they are for all human beings. At the same time, they can be certainly enriched and promoted in a Catholic context. The official Catholic Social Doctrine and Social Communication Doctrine contain many elements which should stimulate Catholics to be more active on the issues mentioned at the beginning of this paper¹, in an open way that would only have positive consequences not just for Catholics, but for everybody: Catholics just need to acknowledge the links and act accordingly. Of course, doing so would not mean in any way that certain concepts and practices “belong” in any way to Catholics, or that all those who believe in, say, the Free Software ideals carried on by the FSF should also be or become Catholics.

Catholics only have *additional reasons, from their own Doctrine*, to care about digital technologies and to apply certain concepts or follow certain practices. As silly as it sounds, the accusation that “Catholics want to steal Free Software” was the most frequent reaction to my first papers on these themes or the launch of “Eleutheros – A Catholic Approach to Information Technology”², so it is a point that I have to repeat often, explicitly and clearly, and suggest every Catholic active in this field to do the same.

Here is my first suggestion to any Catholic School or other Institution considering public activities in this sector of education: how much of the promotional/educational material which should be produced within such projects could be “packaged” in two separate parts? Namely, is it possible to organize as much as possible of that material in a form which is complete, self-consistent and, above all, also usable as-is and relevant for all people of the target “category” (parents, students, teachers, whatever)? If yes, please evaluate if it wouldn't be better to “re-package and release”, to use terms from the software world, that material separately by any specifically Catholic motivation to use it, because this would be a good thing for at least two reasons.

The first is that in such a format all that knowledge (which may be unacceptable and ignored if “hidden” inside a Catholic container) would be immediately useful to many more people, with beneficial consequences for the whole society, Catholics included. The second, more

1 “Free Software's surprising sympathy with Catholic doctrine”, www.linux.com/feature/49533

2 www.eleutheros.it/documenti/manifesto

subtle reason is that doing so is also an effective way to generate good will and more interest toward Catholics even by individuals and circles which normally refuse point blank any dialogue with any religious person. I have personally verified this myself several times, when talking about Eleutheros in the FS community.

4. How to turn all parents and teachers into digital activist? What I've done so far, plans and suggestions for the future

As I mentioned earlier, I am convinced that it is time for all parents to start acting as parents, that is primary educators and protectors of their children's interest, also when digital issues are concerned. I'd also like to do my best to help all parents worldwide, to gather and understand all the information they need to accomplish this task.

My actions towards these goals in these days may be roughly classified in two categories, that is “inside” and “outside” the FS community. In the first case, my activity basically consists of presenting with a constructive spirit, either in talks at FS events or in online forums, the same critics to the conventional way to promote FS published in the “Opinions”¹ section of Digifreedom.net. The goal here is to stimulate as many FS local groups as possible to make the first step, that is to contact unusual “targets” like local Churches, Parent's Associations and so on, to discuss with them how to fight abuses of digital technologies².

The second, maybe more innovative part of my activity is to try to reach directly, through the Internet and on-demand publishing, as many parents and teachers as possible.

First of all, I have written a Family Guide to Digital Freedom³ which describes without requiring any technical knowledge from the reader, in an absolutely laical manner, the Fifty most important Things that all parents and educators should know about copyright and digital technologies.

Each chapter is very short (2 to 5 pages) and can be read independently from the others. The Fifty Things are grouped into four sections: the first explains what is really at stake and why the average person should care at all about it. The second lists the Digital Dangers families face by ignoring how digital technologies are used around them, covering all the issues I mentioned in this paper and many more. The two last sections explain the origins of the Digital Dangers and how to fight them through civic action and proper education. At the moment only an English version is available, a Spanish one will come as soon as possible.

Why a book? In no little part, for psychological reasons. I'm trying to convince people who don't use the Internet and trust it much less than “real”, professionally bound books anyway. The Digifreedom.net website, however, completes the book with forums where all parents and teachers may share experiences or ask for advice on how to fight the Digital Dangers and also hosts several parallel initiatives and resources. The ones already present are:

- *A Database of Digitally Free Schools*:⁴ a directory of schools of any level worldwide

1 <http://digifreedom.net/taxonomy/term/2>

2 In 2007 the FSF did start a campaign to reach social activists which may seem close to what I'm proposing here, but there are some significant differences I discussed in “Help Everybody Love Free standards and Free Software” at http://www.ukuug.org/newsletter/16.3/#help_marco

3 <http://digifreedom.net/node/84> . The complete Table of Contents is at <http://digifreedom.net/node/71>

4 <http://digifreedom.net/node/55>

which grant to all their students the essential Digital Freedoms, that is schools which officially use and teach non proprietary formats and software. Go to that page to see or show to skeptics how others are doing it. Submissions are welcome in any moment.

- A *Directory of parents and teachers who fight the Digital Dangers*: ¹ unlike the first database, here you'll find absolutely average *individuals* who fight the Digital Dangers. Even here, submissions are always welcome.

Other resources which I hope to add to the website as soon as possible include:

- *Directory of Bad Public Websites* which are not accessible to all citizens
- *Examples of Bad ICT information*, to help parents recognise incompetent reporting in mainstream press by linking to articles which give misleading or plain wrong information about FOSS, P2P and so on, briefly explaining what's wrong with them. An article titled "Hackers violated government servers", for example, would earn a caption explaining the difference between hackers and crackers and why all parents should encourage their children to become hackers². One boasting that "File sharing is illegal", instead, would get a "only if the file license forbids it" note attached.
- *"The Fridge copyright violation cheatsheet"*: a temporary title for short interviews, one for each country, where a local FOSS activist what local copyright laws forbid and where to complain. Example:
 - Q: Can I make a backup copy of my own legally purchased Cds?
 - A: Not in this country, if the law proposal number XYZ is passed
 - Q: If I don't like the law, how can I stop it from being approved?
 - A: Write to your Parliament Representative or sign the petition at...
- **Very short tutorials (1 or 2 pages maximum) on several arguments.** The first of those tutorial will probably be "How to try Free Software and migrate to it without pain"

In all these cases, the purpose of these initiatives and of my whole activity is the same: to help people to finally see what is happening and make informed decisions about it.

When it comes to customization and enrichment of all this activity for the Catholic Church, I try to do as much as possible of it within the Eleutheros Project, which I co-founded in 2006 with a few other people who contacted me after my "Surprising Sympathy" article. In this context, it is our wish to add as soon as possible a complete Spanish section and mailing list to Eleutheros, thus greatly extending its potential reach among Catholics. Offers to translate Eleutheros pages in any language are welcome at any time.

Two proposals I've made within Eleutheros for the near future are the preparation of a checklist for all Catholic webmasters and publication of a directory of Catholic websites which comply with that checklist. This checklist would only be technical, of course. It would not deal at all with the *contents* of a website, only with the overall compliance of some technical and legal implementation criteria with some guidelines of Catholic Social documents and the suggestions at the end of the "Surprising Sympathy" article. Such suggestions may include, but are not limited to: full accessibility of all the content with any software; exclusive usage of non proprietary formats for all the documents (including

1 <http://digifreedom.net/node/100>

2 <http://digifreedom.net/node/49>

attachments) published on the Web server; usage of a Creative Commons license whenever possible. The “Website Done Right” page at Digifreedom.net¹ gives a general idea of what such a checklist may look like.

The directory of compliant websites would then become a symbolic reward for all webmasters of Catholic websites who strive to follow the guidelines suggested in the Eleutheros Manifesto and provide all others with a series of examples to imitate, complete with the contact info of other webmasters who may help them. We may also run a poll at some time among webmasters of Catholic websites, to know and report what they think of such an initiative.

5. How I suggest to talk about Free as in Freedom software, culture etc...

The following is a list of practical tips and suggestions, coming from my own experience, on how to talk effectively about Digital Freedoms among non-ICT professionals. Some of these tips are described with more details and examples in my online article titled "How to turn into Free Software supporters people who couldn't care less"².

First of all, when I said that *“there are cases where making the software Free as in Freedom, while obviously a good thing, doesn't make the slightest difference in terms of actual freedom for the people impacted by that software”*, I certainly didn't mean that using FS in such cases would be a bad thing or that some people don't deserve FS. I only mean that we live in a complex world, a world where presence or absence of Digital Freedom results from the mix of many apparently unrelated but still interconnected things (from copyright legislation to e-waste passing through Rfid, computers in or out of classrooms and what not). Software is only one of those things, often the least important one and likely the one more obscure to most people. Never forget that if something is actually bad, almost always is bad for some other concrete reason, not just because it is done using non-Free software. Always highlight those other problems and their solutions first, because in that way many more people (starting from parents and teachers) will be much more likely to listen and step in.

Whenever you promote or advocate Free Software and digital standards, remember **why** it is important that as many non-professionals as possible become “digital activists”. Always start from whatever variation of “your own civil rights, your tax money and the quality of your life heavily depend on how software is used around you” matches more closely the real world needs and interests of your current audience: then make very clear that it is in **their** interest to demand as soon as possible laws that forbid some practices or allow, in certain contexts, only free digital formats and software. Stick to such arguments as much as possible and advocate FS only when it is really necessary to solve a problem, not just because you love it or because programming is beautiful.

Language is important too. Speaking of his best-seller “A Brief History of Time”, famous astrophysicist Stephen Hawking said: “Someone told me that each equation I included in the book would halve the sales”. The same is true with advocacy of Free Software and digital activism. Every time you quote “forbidden” slogans like “access to source code”, “freedom to

1 <http://digifreedom.net/node/70>

2 <http://digifreedom.net/node/103>

modify your software" or "software license" you lose half your audience, if the attendees aren't professionals. This may be depressing for somebody (but why? Isn't it good that people have so many different interests and skills?), but it's a fact of life nevertheless. Many FS activists like the slogan "I want to live in a world where software doesn't suck"¹, but reality is that everybody else wants to live in a world where they can ignore what software is.

So, always focus on making people support Free Software (that is, to *vote* for it, in the booth and in the stores), rather than using it personally. The main exception, of course, is teaching of computer programming where, even ignoring the ethical aspects (sharing, cooperation, etc...) the concrete didactical value of looking inside industrial strength software and thinking with it is too great to be ignored.

In all other cases, it is much more important and effective to be strict about formats, that is "how your computer choices or lack thereof create problems to *others*". The trick is to distinguish between "strictly personal" computer habits and using computers to communicate with others, or in Public Administrations. If this is about Free as in Freedom Software, what Joe or Jane do with their own computer on their own files is only their business. Politely complain, instead, whenever you receive proprietary attachments via email.

The standard FS propaganda makes a great deal of stressing how secure and stable Free Software can be. That's all true and essential for a professional. But I am in contact with missionaries in Asia and Africa who prefer not to use email because they don't have electricity for their computer and everything else in the village more than a few hours a day. In some western countries instead, laptops, that is computers which by definition spend most of their time turned off and traveling, have outsold desktops. In both cases, what does it matter if Linux can run years without glitches? Security and stability, in and by themselves, convert very few non-professional users to Free Software.

I'll close this section of practical tips with one specifically addressed to FS developers and advocates who want to work for/inside the Catholic world. After discovering the Eleutheros Manifesto, several Catholics programmers independently asked me what I'd think of some "Catholic Linux distribution" or "which FS should I write for Catholics, which may convince them to abandon proprietary software?"

Personally, not only I am not interested in projects of this kind, I also openly try to discourage people from such developments². There is no doubt that all such proposals are in good faith, but I see in them a serious risk to create a dangerous, absolutely unnecessary barrier between Catholics and all others. Like it or not, a "Catholic Linux distribution" or a "Catholic OpenOffice" give the message that the standard versions aren't good enough for Catholics, or that Catholic programmers prefer to reinvent the wheel rather than getting too close to those heathens out there. A package of "Catholic screensavers and wallpapers", of course, would be a completely different thing.

The truth is that, technically speaking, Catholics have the same ICT needs than any other human being: there is no reason to create fractures or duplicate efforts. The exception here could be single programs for very specific tasks. If a Parish management software must

¹ By Eric S. Raymond, Open Source Software advocate, <http://lwn.net/1999/0304/a/panel.html>

²

implement guidelines from the national Episcopal Conference, for example, yes, a Linux-compatible version should be made. Beyond that, however, Catholics don't need "Catholic Free Software" any more than they need "Catholic toothbrushes" or anything of the sort: they simply need to know **why** they should use the excellent Free Software which already exists.

Problems I've encountered

Convincing average people in the street that it is in their interest to understand some basic concepts of digital technologies and to apply to them the same value system they already use daily as voters or parents is a slow and sometimes frustrating process. Sadly, this is also true with people who, due to their professional or volunteer roles, are supposed to care more about certain issues.

A first, practical problem is the simple fact that many of these groups not only have little familiarity with computers, they have no online presence, or at least they haven't one which is recognizable or even active. Sometimes it's a chicken-and-egg problem. You can't reach parents associations to suggest them that parents should become digital activists just because many such associations do not feel they need to be active online, as they only use computers to print the meetings calendar once a year. Very often I also find groups who just jumped on the Internet bandwagon because it's trendy. They do have a website and email, but messages to it invariably bounce back because that address was discontinued as inactive two years ago or it exceeded its mailbox quota (that is nobody ever bothered to read any message) even earlier. I always welcome any working email address with any parent associations worldwide.

Another, much more serious issue, which I must confess I find quite frustrating, is the refusal to acknowledge that these are ethical and educational issues, not technical ones.

Many parents still shut their brains before I even start to talk, because they dismissed long time ago all these topics as merely "technical" issues reserved to specialists. This is bad, but never as bad as when the same thing happens with the managers of schools or educational youth organizations. Some months ago I wrote to a Catholic magazine through their web form, to ask what the magazine (that is, its **editors**) thought of the Eleutheros Manifesto. I only got an answer from the magazine ICT manager who, after a short email exchange, more or less said "I don't care, I'll use whatever software which I already know and just works". With several laical parenting and family magazines, instead, I got no answer whatsoever.

In another couple of cases, as soon as the managers of a religious organization realized that what I was talking about was "computer stuff", they simply stopped the conversation saying, with some relief, that in that case listening to me was a task for their ICT manager. Sorry but no, gentlemen, that's the very central point: taking position on these issues *is not a technical decision at all but it's part of your job description*. This is the one basic point which is still the most difficult to communicate, even if the tricks I mentioned earlier greatly increase the probabilities of success. Once that first point comes through, all the rest is easier.

Be prepared to be very patient, though, because such a frame of mind is a general, basic cultural issue of our age which will take a great focused effort to shift enough to make a difference. On the other hand, I have no doubts that spreading awareness of Digital Dangers among parents is a useful and important project, so I have all the intentions to continue. Your cooperation and comments are very welcome!

Resume of the Author

Marco Fioretti is a full time freelance writer, trainer and volunteer activist based in Rome, promoting of Free as in Freedom digital formats and software for open education and active digital citizenship. Marco is also active in the same field inside the Catholic community. Marco graduated in Electronic Engineering in Univ. La Sapienza, Rome, in 1992, worked from 1993 to 2008 as designer of custom integrated circuits (ASICs and FPGAs) for a multinational manufacturer of telecom equipments, is a regular contributor of several ICT magazines and the author of the Family Guide to Digital Freedom (<http://digifreedom.net>). Marco is also a cofounder of the following groups:

- 2007: Digistan, a group promoting growth in the global economy through open digital standards (www.digistan.org)
- 2006: Eleutheros - A Catholic Approach to Information Technology (www.eleutheros.it)
- 2004: OpenDocument Fellowship (www.opendocumentfellowship.com/MarcoFioretti)
- 2002: the RULE (Run Up to date Linux Everywhere) Project (www.rule-project.org)