GUERRILLA-WARFARE for GYAAN

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Why is free software, that is both *muft* and *mukt*, not being adopted so widely and rapidly in schools and colleges across India? Please do a google-search for the phrase 'project shiksha and linux'. You will discover a fascinating saga of what is actually happening in thousands of schools across the sub-continent. Go ahead, do it.

Hope that google-search explains why this document is titled 'Guerrilla-warfare for Gyaan.' In Hindi, 'Gyaan' means 'Knowledge' but the word has roots in sanskrit, where it also is the root for both knowledge and meditative-awareness. Interestingly the same sanskrit word travelled to Japan, some believe in the days of Bodhidharma, and became the word 'Zen'.

As I write this, 52% of Indians are in the age-group of 15 to 25, while 33.7% of the population is under the age of 15. The country has a population of 1.03 billion people. Only 50% of the children in India enter schools. 4.1% of GDP is the country's public expenditure on education. Of this, 39.4% is spent on pre-primary and primary education, 40.5% on secondary, and 20.1% on tertiary education. Less than 5% schools have access to PCs.

Against this backdrop, you have the search results from google for the above phrase.

All is not lost. Some sparks show what sheer personal conviction can achieve in the age of the individual. Check out http://www.knowledgeinitiatives.org/saraswati/node/view/55 and explore how schools in the state of Goa migrated successfully to GnuLinux. The central state of Madhya Pradesh dramatically switched over 2,000 schools to GnuLinux as well. Govt. Schools in the Kannur district of Kerala too have tasted freedom. More success stories can be found at www.schoolforge.net. Look for links on case-studies or other resources.

Prescribed text books, in one example, do not teach 'wordprocessing' but actually 'MSWord' in the syllabus. Teachers feel helpless and refer to the pressure from parents and students who wish to acquire skills they think are used by the majority of people. Few realize that understanding the fundamental principles of wordprocessing for instance, can be used to master any wordprocessor. Again, volunteers from the community are working hard to fine-tune the prescribed courses by lobbying with educationists and the powers that be. However, do not depend on the government and the education ministry to create a pro FLOSS policy immediately, though you may hope for it.

Which is sad, because muft and mukt software can create a revolution in education today. It significantly lowers the entry-level price, thereby bridging the huge digital divide in India. IT students can learn how software truly works, as they have the freedom to study its source. A growing collection of muft and mukt software is available for all disciplines of education, at all levels. This helps further knowledge without penalizing educators and students. Most importantly, FLOSS in education ushers in a new value system in society: of building communities, creating and sharing wealth and knowledge. Indeed, FLOSS brings freedom to knowledge.

You can do something. can create the gestalt change. Here are simple steps that any ordinary person like you and me can do. Today.

Next time your school or college asks you for a donation, say for a new swimming pool, or a new library building, ask the authorities if the institution uses proprietory software. Ask them to audit their costs for running proprietory software first; evaluate where they can use FLOSS; and with the funds freed, request them to invest these in their new project rather than asking you for a donation.

Attend the Parent-Teacher Association (PTA) meeting of your child's school. Urge the school authorities to convert every PC that has a proprietory OS installed on it to a dual-boot PC, with Gnu/Linux, if not to a complete migration.

Contact the local India Linux User Group (LUG), or Gnu/Linux User Group (GLUG) in your area. Request volunteers, speakers, to deliver free talks, free seminars, and give free demos to the local schools and colleges on various technologies for education and even end-users, under GnuLinux. It is amazing how effective this is in bringing change.

Donate discarded PCs to a school. This is better than a garbage-pile that may harm the environment, and also helps increase PC penetration beyond the 5% in schools. But only donate on one condition: It is either used as a GnuLinux workstation, or as a 'dumb terminal' (ltsp.org)

connected to a GnuLinux server. Incidentally, according to the EULA, or the End User License Agreement of most proprietory software, you cannot transfer or resell software licensed to you, when you resell or donate your PC with the software still installed on the built-in hard disk. The new owner must get a fresh license. Therefore, you must reformat a PC before discarding it.

Teachers
can learn GnuLinux software and technologies for free. Every ILUG or GLUG will have volunteers on their list who can offer to train teachers on the basics of using GnuLinux. You don't necessarily need multi-million dollar deals to train teachers on proprietory software. [cough]. Encourage the teachers in school to be part of the local user group.

ILUGs
and GLUGS in every city could set up a special page on their website. I'd call this the 'Academia Scoreboard' page. Every school and college in that area gets listed, with its state of GnuLinux deployment tacked. For instance, total number of computers, how many of these have GnuLinux installed, Library system, copyleft course material, MP3 and music-sharing clubs, software sharing, GNUNIFY type events, and other initiatives.

Specialised
institutions, such as Mathematics societies, must organize special events, inviting representatives from across the country, in orientation workshops on free softrware in their area of specialization. For example, the Bhaskarcharya Pratishthna in Pune organized a workshop on TeX the mathematics typesetting language, as well as on free Maths software, with hands-on orientation of GnuLinux, at their campus. This was a major success. Find out more at bprim.org. Similar initiatives can be created for Physics, Biology, Biotech, Literature, Language, Geography, Chemistry, and every discipline in academia.

If
your school or college has a stubborn attitude towards not using FLOSS in education at all, do something pragmatic. Augment your education by joining a private institution, or an IT coaching centre, and learn the technologies. If you have a PC at home, contact the local ILUG or GLUG to help you with learning how to use FLOSS. Consider changing your institution if you can.

Learn
from Symbiosis. This impressive college in Pune, Maharashtra, organizes an annual festival around muft and mukt software, called 'Gnunify' (http://gnunify.sicsr.ac.in/). Organize similar one-day to two-day festivals in your academic institution.

Books
and references in the library must have books on GnuLinux. I am appalled at how few books on GnuLinux grace libraries, if at all they are there. These are usually out-of-date as well. More important, urge the authorities to prescribe books that are under a copyleft license, from creativecommons.org, or have a similar license. For example, the

south Delhi campus of the Delhi University prescribes books from lightandmatter.com. Hundreds of books and references are available under similar licenses.

Are you into music, arts, painting, or any other creative art? Foster a culture among your peers to publish their works freely under a creativecommons.org license, or a suitable license that is unrestricted.

MP3 music-swapping is the defiant stance of the new generation. Encourage it even more. Set up clubs in your institution that swap MP3 music and files, but make sure these are only artists and works that allow you to share and swap files. You can find thousands of artists and albums on creativecommons.org, on free radio stations and more.

College Radio, or even a simple network streamer in your hostel, that plays internet radio is great fun. Just stream music and audio from the growing sites devoted to free music, using free software.

Share software. Encourage others to share software with their neighbours and friends. Just share free software like the latest GnuLinux releases, GPL-ed games, live Cds, and more. A small band of friends could happily burn such cds for others for a small token fee or a return favour. Put up notices on your school noticeboards.

Protest against too much commercialism and branding in your school by IT companies. Question tie-ins to one particular brand of goods and services.

Question the endeavours of your teachers to teach you specific commercial products rather than technologies. For example, you should be learning 'wordprocessing' and not MSWord. You can learn wordprocessing by using several wordprocessors, such as openoffice.

Show you're cool. Wear GnuLinux tee-shirts and merchandise when possible. Augment or replace vendor-specific branding exercises in your institution with similar posters and displays of the Gnu and Penguin mascots.

Build a super-computer at your institution. Every school and college in India must have a super-computer. Students in the higher classes could learn to use these as a matter of routine in their work. You could build one using just two commodity, off-the-shelf desktop Pcs, connect them, and its done. Find out more at linuxsupercomputing.org

Inter-Connect with other schools and colleges that have supercomputers. Organize an annual supercomputers meet to discuss and share issues.

Urge your teachers and peers to join schoolforge.net and other similar communities, where they can connect with people worldwide.

Invite your local politicians and VIPs and Chief Guests to inaugurate your computer labs which have GnuLinux installed. This so they become more aware of GnuLinux.

Slum-dwelling children near your school and college could benefit from GnuLinux, without any licensing-burdens for you. Invite these children to explore computers during free, after-school hours. Sign up with an NGO and encourage them to use your faciliites for this purpose.

Extranets, Intranets, learning portals are great fun. Find out dozens of these to deploy for free at your institution at the various software repositories such as savannah.gnu.org, sourceforge.net, freshmeat.net, and others.

Resist the initiatives of proprietory software companies and vendors to use your institution's name for directly or indirectly endorsing their products on their websites as a case-study or other similar marketing gimmicks.

Lobby with your local politicians to foster the adoption of GnuLinux in your constituency. Study the existing case-studies in India for precedents, or better yet, make your own.

Opppose any training or tie-ins handed out to your teachers and educationists that unfortunately lock them in with proprietory-based vendors. Oppose this strongly, and should there be a big push, sound out the media and press.

Library Systems are going digital. Ensure each and every component of this is based on free software.

Open standards and fileformats are always welcome. Create policies towards adoption of only such fileformats and standards, such as XML, PDF, SVG, TXT, RTF, and more.

Lobby hard with the educationists in your area to push the local authorities to change their courses to free software, in computers.

Show this document to your institution's authorities. Post it on your noticeboards. Photocopy and distribute among the students and teachers. Share it with other schools and colleges. Add your ideas to this document.

Does your school have old Pcs that are being discarded? Convert them all to thin clients running under GnuLinux, without floppies, CDROMS, or even hard disks. Run the latest applications at breathtaking speed off a centralised desktop to these terminals. Find out more at ltsp.org.

Encourage children to go home and demo and install GnuLinux on their family Pcs or dual-boot their parents' laptops for them.

Any software project developed at your institution must be under a free license. These couldl be software developed by the students, or even software developed for other aspects of the institution. It is important to draw a distinction between free software, and merely open-source software.

Start a small grassroots movement in your institution. Give a live CD or installation CDs of any GnuLinux distribution to a fellow student free-of-cost, but ask him or her to make atleast two copies and give to others with the same condition. You will be amazed at how rapidly Cds proliferate through to other schools and institutions.

Smell something fishy in your school or college when it comes to deals and agreements with vendors related to IT. Sound out the local press, and get in touch with the Free Software Foundation of India, at fsf-india.org, as well as with FLOSS-friendly NGOs in your area.

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