



## Future of FLOSSE: Interview with Alan Levine

Wednesday 23 February 2005 - Teemu Arina

*"The sweet spot of technology is not in the way it does things more efficiently but where it gives you opportunities that weren't there before"*

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I had the pleasure to interview Alan Levine through Skype for our interview series of future of FLOSS in education. I have created a future event analysis based on the interview, available in the end of this post.

The future events will be used in the Comenius 2.1 Contact Seminar Open Source workshop sessions as a basis for discussion. I will post more of these interviews in the following days.

Alan Levine is an Instructional technologist at Maricopa Community College System which is a 10 college system serving in the metropolitan Phoenix area. Their institution is by most counts largest such system in the USA: 240 000 students pass every year which is an equivalent to 90 000 full time students.

His institution has good reputation for being innovative and providing technology to students and computers in the faculty hands.

His main job is in experimenting with new technology in the central office called Maricopa Center for Learning and Instruction by trying new technologies and communicating their potential value to their people.

That means messing around with Wikis, Blogs, RSS, cool web services and spam prevention and trying to find out how these technologies could support education.

Alan talks about the last 1,5 years he has been working with these emerging technologies. Especially he focuses on weblogs, RSS and wikis and their importance in education, especially what new opportunities these tools provide for educators.

He is also a bit sceptical about the adoption rate of Open Source tools in large institutions like his. The key events that have to be overcome are related to support and staff. Decision-makers are concerned if they are able to support the number of students they have. Only the largest universities like MIT are able to use their own staff to invest in in-house Open Source projects. Support for Open Source software in education is still sparse and expensive.

He perceives that big monopolies in software, music, university training and publishing industry have to change their offering if they are about to survive.

Some questions asked in the interview:

- Who are you?
- Visionary leadership?
- Small pieces loosely joined?
- What is a weblog, wiki and RSS and why are these technologies important?
- Are teachers going to use RSS in teaching?
- What is Feed2JS?
- Are easy and simple tools [like Feed2JS] going to popularize emerging technologies?
- Rip, Mix and Learn?
- What about devices?
- Is FLOSS going to affect the methods of teaching and learning?
- Are the support issues [of FLOSS software] going to be solved?
- Open Content in education?
- How does year 2010 look like?
- Who are the losers and who are the winners?

*"The future is not the dim one where we are solidary droids in front of our computers alone – the connectiveness and ability to tap into shared expertise is also one of the sweet spots for us"*

"Read more" to see the extracted future events and analysis.

## **Future events**

Here is a list of fictional future events extracted from the interview with Alan Levine. If you want to comment or have additional future events to present based on the interview, please do so.

*Disclaimer: The future events were constructed from the ideas presented in the interview and do not represent the ideas of the interviewee. No crystal ball or time machines were used in the construction of these events. Bear in mind, it's the future and everything is possible.*

### **Year: 2006**

#### **Monolithic tool environments used in most large educational institutions**

Large educational institutions have acquired several monolithic tool environments for learning. The largest have three or four different commercial CMS/LCMS/LMS systems which all come bundled with a set of tightly-joined tools. Only pockets of educators are using alternative FLOSS or otherwise freely available tools in a bottom-up manner.

#### **Firefox first browser to format XML content automatically**

Open Source Firefox and its even lighter successor, the XHTML-only browser called Fiedog are among the first browsers to format XML content automatically. It all started from the innocent looking RSS button which displayed raw XML code to people who didn't understand how to use them. People demanded for a readable version as well and Open Source developers were fast in respond.

### **FLOSS based LMS systems not in heavy production use**

While educational institutions renew their yearly contracts on WebCT and BlackBoard they are still looking for people to do more than experiments with FLOSS tools like Moodle. The decision-makers are in sleeping mode, waiting for someone in the neighbourhood municipality to take the first major step towards Open Source.

### **Adoption of collaborative document writing tools grow slowly**

Reportage and hype surrounded by Wikipedia and other Wikimedia services gain momentum in global press as Google enters in the game as a major supporter of the world's biggest encyclopaedia of free content. Wiki becomes the de-facto tool for creating open content and it reaches new dimensions in its creative use. Users become familiar with the concept of creating their own navigation. Most widely used Wikis are Open Source software. A good wiki experience is still required as people have hard time understanding what is so special with a page that anyone can edit.

## **Year: 2007**

### **Open Source based web aggregators become popular among teachers**

After a free popular web-based aggregator service called Bloglines.com became a service based on monthly fees, Open Source based web aggregators started to replace the previous leader in aggregation market. Teachers who previously had built quickly outdated static lists of web resources are now building lists by collecting RSS feeds in their Open Source collaborative aggregators – concept which is often associated with the fact that their students are able to help them out in the process.

### **Less move towards FLOSS in education as hoped**

Only the largest educational institutions like MIT have been able to move completely into FLOSS applications. Smaller institutions lack the staff or resources to pay for the maintenance and customization of these applications and rely on cheaper proprietary LCMS mass-products. Especially there is fear of their ability to support the number of students they have. Cheap commercial support models for FLOSS applications are available only regionally.

### **Educators discover one-click publishing**

In contrary to large and rigid content management systems, educators and students have noticed easy personal publishing on a wide scale. One weblog related to education is created every second according to statistics provided by Technorati. Google has

launched a specially branded service called EduBlogger™ based on their popular Blogger™ service.

### **Students install Open Source tools for their teachers**

Social software tools have gained great interest by students among the 20-30 age group. Some early adopters are using blogs as an alternative learning diary and a wiki for drafting out school projects with their peers. Teachers are given access to these resources. Some teachers have become interested in the capabilities these new tools are able to offer compared to LMS systems their institutions provide. The students are helping their teachers to setup blogs and wikis for their classes.

### **Software customization prospers**

FLOSS tools enable easy customization. Service businesses focused on customization and delivery of FLOSS tools are a common place. World's most successful weblog software company, SixApart popularized the requirement for easy software customization among personal publishing tools. LMS providers are pressured to include easier customization in their packages as institutions notice how they have been able to create better targeted solutions based on customizable FLOSS software. Even some web services enable customization of their interface by introducing versatile web service interfaces in foot-steps of Amazon and Flickr APIs.

### **Rip, Mix and Learn is the new metaphor for constructing learning objects**

iTunes and several other music stores enabled people to buy only a single song and mix their own album for listening. The now famous Apple add campaign, Rip – Mix – Burn started everything. There is a popular parody of this: "Rip, Mix, ????, Profit". Among educational circles there is Rip, Mix and Learn, which allows teachers to mix various learning resources in dynamic RSS feeds to deliver to their students.

### **Proprietary software vendors have partly opened source code**

Movable Type was a semi-free software tool but became popular in its own user segment because the code was available for modification. A similar trend is visible in many other software user segments as users are demanding proprietary software companies to open their code for customization. Some move to an Open Source business model, others satisfy their customers by offering them easier means for developing custom extensions and making modifications while still retaining their control on the core package.

### **Software becomes a commodity**

As more efficient and easier to use software services come out people are overwhelmed of the possibilities they have with all of the new technology. New businesses start to bloom, investors offload their money and we are in the middle of the next IT bubble. Thanks to Open Source, software has become a commodity which is available to everyone from enterprise software to simple personal tools. Most importantly, people are thrilled of the new opportunities that weren't there before.

## **Pull beats push**

The spam problem becomes even worse as over 80% of incoming email is spam, scam or viruses. Another popular push technology among social software tools called TrackBack fails as spammers have rendered the technology useless in the public internet. Based on this development users are forced to look for other alternatives to receive the information they need. Syndication technologies like RSS and Atom come for rescue as all major browsers now include a built-in aggregator.

## **Creative Commons starts to promote open content exchange standards**

After being successful in creating a concept for people to remix culture and distribute open content based on CC licensing scheme, Creative Commons starts to promote open standards for content exchange. Many analysts believe that this is the key for the future of content exchange in general, especially in the realm of mobile devices. Imagine a music player which is able to exchange content between other music players in the area for letting others to tune in. Content licenses follow content.

## **A fair amount of teachers have dropped text books all together**

A handful of teachers all around the world have given up text books and try to build very well thought out concepts online. A survey among students reveals that 85% find the new approach to content more beneficial to their learning experiences. This is possible because teachers are now more easily able to join forces with other teachers all around the world to build quality content together based on peer-production and Open Content licenses. Even students help in writing new content.

## **Year: 2008**

### **Open Content moves faster in education than Open Source software**

Open Content in education takes a big leap as educational institutions find better ways to deploy that content. Previously deploying Open Content was a problem as schools required students still to buy text books and there were also unnecessary copyright misunderstandings about printing and distributing certain Open Content. Also as Wikimedia started to publish their cheap encyclopaedias based on open content in printed form, some educators have started to use them instead.

### **The gap between digital-illiterate and literate gets wider**

People use more and more time online. Some who do not have the equipment or never joined the digital world have hard time understanding what people are talking about – a similar experience as for those who gave up watching television. This affects education as many universities start to offer certain courses only in online form. Also, early adopters of new technology jump to new waves sooner than the mainstream is able to pick up the latest cool technology. It becomes increasingly important for early adopters to help less tech-savvy people along with the changes.

### **RSS is the new information publishing system**

People are tired to go for a website for the information they need. It's a lot faster for them to receive the content on topics they are interested in through services that semantically filter a wide variety of information resources and provide personalized feeds. Content publishers take an advantage of this by focusing on RSS as a publishing platform. Some revolutionary websites are published only as an XML based feed.

### **Email based mailing lists become less popular**

Because email mostly failed as a system for tapping into conversations, the use of mailing lists has reduced by half. The traffic on mailing lists becomes harder to differentiate of spam. The small fraction of user feedback compared to volume of received posts forces people first to jump into read-only mode through their aggregators. As a side-product of this, an XML based feedback channel is built into content aggregators. Users are able to answer to posts directly from their aggregators. The comments are authenticated and injected back to the feed based mailing lists.

### **More and more knowledge assets move to collaborative document spaces**

Previously email was the storage medium for most of the knowledge assets in an organization. After the revolution of freely available small software pieces, a fourth generation wiki tool is a common place in many organizations. Knowledge assets are stored in a central place where anyone from the organization can add, edit and link to them. A recent study found that writing a new document together is about twice as fast with a Wiki compared to swapping ancient Word Documents.

### **Travel expenses decrease as remote collaboration increases**

Many prominent institutions have reduced their travel expenses by 45% through a policy which requires their workers to prefer remote collaboration tools to connect together in virtual meeting rooms. Even inside organizations meeting time is reduced as collaborative working methods transform many face-to-face meetings unnecessary. Internet replaces the elevator as organizations are able to decentralize their operations.

## **Year: 2009**

### **Digital convergence happens in two dimensions**

New mobile devices become like swiss-army knives with all kinds of functionality from IM, blogging to context sensitive learning applications. In the other hand, web services, FLOSS and open standards enable small pieces on a larger scale as many different kind of simple tools are able to connect together through common APIs. "Sometimes there is a need for a simple blade that is able to cut you some cheese but it's also able to connect to knife-rests with other blades" comments a well-known educational veteran blogger. There is demand for both complexity and simplicity.

### **Educational institutions locked into old toolsets**

Many educational institutions look from the side as new and better tools for educational purposes appear. Unfortunately based on their long-term politics in acquiring software,

multi-year contracts of old LMS/CMS/LCMS systems eat most of the available IT budget. Some have fought out through the court, some are using FLOSS software in parallel and others just wait for the contracts to end as there are no resources or staff to start using FLOSS in-house.

### **Main argument used against non-open content: Is it useful in 5 years?**

The so called lifespan of information shrinks all the time. Content produced today is considered old in less than two years. Educational content and books that are incrementally updated by educators, academics and pro-amateurs in a consistent manner on the web under an Open Content license is able to survive during the next 5 years. Publishers still counting on their old business model have hard time to find profitable ways to counter this act.

### **Universities are repositioning their selves**

The myth of a college student who goes to a university, moves to campus and finishes his studies in four years is no longer true. People are working on many things and they rapidly change careers among many other issues. These changes drive universities to reposition their selves and their offering.

### **Year: 2010**

#### **Changes coming from the outside drive changes in education**

As more and more people do teleworking and spend their time on the internet and see the changes coming, they start to expect the education to change as well. Students no longer look for a place where they go for studying but look for a more rich experience in learning where they can mix work, gadgets, peers, teachers, offline and online in a consistent manner that fits their needs.

#### **Microsoft is no longer the dominant player in software industry**

People were not able to put up with very large software products that harshly work. Microsoft fought this by introducing software security services, spyware prevention, virus prevention and several other products. Sooner or later people noticed that they are creating a new monopoly based on a problem they personally invented. Finally FLOSS makes a breakthrough. Microsoft's fortunes drain in their counter attack measures. Every single continent in the world has sued Microsoft for monopoly issues.

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