

Tools to Communicate and Collaborate With on the Web: an Overview

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The Issue

Most written works on the subject of the World Wide Web (WWW) begin by demonstrating its ubiquity. But nowadays, no one can seriously contest the fact that the Web and the Internet are increasingly used, even daily. If you're not convinced yet, then take a moment to examine some recent statistics concerning Web use among Quebecers:

- 63.5 % of Quebec adults have used the Internet (a steady progression since the year 2000);
- Canadian users aged 12-and-up are ranked 9th (68 %) in the world;
- Canadian adults are ranked 15th (63 %);
- On average, Quebec web users browse the web 4.9 hours per week;
- The majority of Quebecers (58.1 %) mainly visit francophone web sites;
- 42.3 % of the Quebec population has used Internet on the job;
- 25 % has used Internet to work from home;
- 56.2 % of adults have communicated using e-mail (their favorite activity);
- 29 % of Quebecers have sought employment via the Internet;
- 28.5 % of Quebecers are subscribed to at least one mailing list;
- 12.3 % of Quebec adults have consulted at least one blog;
- 10.5 % have attended one or more online courses.

Here is a fact that may surprise you, however. Did you know that e-mail was available even before the WWW came into being? Or, that e-mail was, and still is, an indispensable tool for the development of the WWW? From the pre-dawn of the Web, to this day, each user is identified by his or her e-mail address. As soon as someone is hired by a college, he or she is attributed an e-mail address. When filling administrative forms, it is often necessary to include it as your identifier. In some colleges, payroll deduction information is e-mailed. Given the frequency of use of e-mail addresses, they have therefore been simplified, in order to make them easier to remember (mnemonic), easier to infer (normalized), and less subject to change.

But, beyond e-mail, many impressive tools of communication and collaboration have emerged (sprung forth) from the development of the Internet. Innovations that never cease to amaze us, or at least surprise us, or, at the very least, raise interesting issues that compel us to question ourselves. Confronted with e-mail, mailing-lists, wikis, blogs, forums and RSS feeds, the teacher asks herself or himself :

- Which collaboration tools should I chose?
- Will they genuinely improve my teaching?
- Will they enrich the learning experience of my students?
- Will using these tools increase my workload?
- Will I be able to use these tools adequately?
- How will I remain up-to-date as time goes by?

On the other hand, using these communication/collaboration tools will allow teachers to :

- notify students when class is postponed or cancelled;
- share a document discussed in class;
- follow-up on a theme begun in class;
- receive students' work via a secure Internet connection;
- inform students of the grade they obtained in a scored activity;

- avoid wasting precious class-time on administrative details;
- orient one or more students at the very moment that they need it;
- interact with students who are too shy to fully express themselves in class;
- communicate with students who are apprenticing from a distance;
- lead, oversee and evaluate teamwork, in and beyond the classroom.

The above list is not exhaustive, but the examples provided are sufficient for you to see one or more ways how you can integrate computer-mediated communication and collaboration tools into your teaching practice. Certain Web tools focus on student co-construction of knowledge instead of a more teacher-led pedagogical strategy where the role of the students is quite passive, often limited to listening and taking notes. These tools empower students to work in teams, to collaboratively negotiate a shared frame-of-reference, to perform case-studies, to solve complex problems together, to accomplish multi-disciplinary projects, and so on. Isn't this, after all, the goal we are aiming for when we put approaches based on self-directed competence and capability-building into practice?

This article is a broad overview of the web tools that are currently available. It covers e-mail, mailing lists, chats, forums, blogs, wikis and RSS feeds. It also suggests several ways to integrate them in your pedagogical practice, without going into the nitty-gritty details that you don't need to know for now or perhaps ever. When you have in mind a concrete application and you are ready to pursue it, we invite you to contact the IT-respondant of your college. He or she will help you, and guide you towards the appropriate resources. For our part, we hope that this overview of currently available web tools will clarify your choices, support you during your first awkward steps, unleash your IT ideas and project plans, while lessening your legitimate apprehensions regarding the integration of these new technologies in your teaching practice.

Concretely, this article is divided into three (3) sections. The first section broadly describes the issues related to the pedagogical integration of information technologies, as well as the currently available tools. The next section, *In Practice*, expands upon the pedagogical potential and pitfalls of each type of tool using the following sub-sections: *Synonyms*, *Description*, *Uses*, *Advantages*, *Disadvantages*, and *Suggestions*. The third section, *Useful References*, concludes this overview, by guiding you towards samples and resources that will allow you to further explore the IT tools that have caught your eye.

Practical Applications

You have undoubtedly noticed that there are MANY computer-mediated communication and collaboration tools to choose from. There are so many of them, nowadays, that their sheer volume has become an obstacle to understanding, remaining up-to-date, and choosing one over another, etc. Some tools are more accessible, simpler to use, and more relevant than others – with respect to your own particular needs. It is advisable to have an accurate idea of what each tool allows, to know what one expects to accomplish (from a pedagogical perspective), and to be able to meet the requirements that your choices will necessitate in terms of time, knowledge, abilities, technological infrastructure, etc. before embarking on this adventure,

The next section of this overview presents various tools, from a pedagogical point of view. Once you have read this section, you will be able to make an informed decision about which tools will be effective for you. Do not hesitate to post comments to us, in the last section of this overview; or to contact the IT counselor of your college, for more information and help.

Electronic Mail

Synonyms

e-mail (en), *courriel (fr)*

Description

E-mail is a messaging system wherein messages are composed, posted, stored, and received via electronic communication systems; in local area networks (LAN), and, increasingly, via Internet protocols like SMTP and POP3. The sender composes his or her message, specifies its subject, and one or more recipient[s], and clicks on the « send » button. For this reason, and others, e-mail is clearly a means of communication that fosters not only interpersonal contacts, but group communication as well.

E-mail predates the Internet. It emerged in 1965 as a means of communication among computer users of large time-sharing systems, despite the earnest efforts of its designers to censor this unanticipated use of their time-sharing systems. They finally capitulated to the demands of users, and e-mail has become **instrumental** in the use and development of the Internet.

The scope of e-mail is not limited to interpersonal and collective communication. Among e-mail's features is the ability to attach one or more files. This modest form of file-transfer is a simple FTP program. Students can use e-mail to send, receive and forward files; among themselves, with their teachers, and with the outside world beyond the classroom. E-mail does not do everything file-sharing programs can do, but for modest needs, sometimes e-mail does the trick. E-mail attachments should only be opened if they are received from a trusted party, however, because these binary files can contain computer viruses. Prudence is a must!

E-mail refers to the Internet protocols used, as well as the messages exchanged. More often than not the content of the message is text, but increasingly e-mail messages can also contain graphics, sound and video. It is possible to spruce up the presentation of an e-mail by creating it as an HTML document, and therefore benefiting from all of the style and layout capabilities that HTML has to offer which include layers, embedded media, plug-ins, and executable programs. But caution is in order here, because: (1) these sophisticated features may pose a threat to your

system; (2) special/regional characters are not always translated accurately, often inadequately; and (3) HTML renders differently, according to which machine is running which OS, which version of which web-browser is being used, and so on. Moreover, users may have disabled features they consider too risky to allow: they may not have the plugins in question, their version of their web-browser may not support the feature if it's too cutting-edge, and, given the *W3C's Accessibility Guidelines*, one cannot be sure whether the recipient is using a graphic user interface or not (he or she may be using a Braille Printer, for instance).

Uses

To receive and read e-mail, each user must have an e-mail address that senders can post to, as well as an e-mail client program, like *MS Outlook* for example, or an account on a [secured] web site of a [free] e-mail host, such as YahooMail. All web-based search engines, and many others, offer such e-mail hosting at little or no cost.

To send an e-mail, you compose your message, specify its subject, and fill in the *To* field with the address[es] of the intended recipient[s]. A copy of this e-mail can also be sent to one or more recipient[s], by including their e-mail address[es] in the *CC* field. You should be aware, though, of the fact that address[es] included in the *To* and *CC* fields can be harvested by webbots whose sole purpose is to profile you, sell your profile to advertisers, who in turn will e-mail you some targeted *SPAM* (un-solicited junk mail). To send a message to one or more recipients who do not know each other and/or do not wish to have their address indirectly publicized by your e-mail, we urge you to use the *Blind Carbon Copy* field (*BCC*). Doing so will neutralize bots that would otherwise spam you and perhaps even infiltrate your system.

To ascertain whether your message has been received by your intended recipient[s], e-mail programs commonly offer an *acknowledgement of receipt* feature which allows the recipient[s] to confirm that they have received your message.

Guidelines and best practices, relating to the use of e-mail, and other Internet protocols too, are expressed in a document, commonly referred to as *Netiquette*, a contraction of Internet and etiquette, which Wikipedia defines as follows: *Netiquette is a catch-all term for the conventions of politeness recognized on Usenet, in mailing lists, and on other electronic forums*. These conventions address group phenomena, changes in personal behavior, refraining from commercial advertising, and so on. These voluntary codes of conduct vary from protocol to protocol, even by site. RFC-1855 provides a lengthy and comprehensive set of such conventions. Mainly they are about good manners, which most Internet users tacitly abide-by, without reading the netiquette document. On occasion, when someone « breaks the rules », he or she is urged to read the netiquette document and, subsequently, to modify their behavior accordingly. This is sufficient, in most cases. In extreme cases, incessant trouble-makers can be expelled.

On the other hand *netiquette* does not solve all of e-mail's difficulties, notably its awkwardness with regard to handling, organizing and archiving large volumes of e-mails, on a regular basis, while still maintaining order and effectiveness. Urge your students to be careful when specifying the subject of their e-mails. This will allow the sender and recipient[s] to group their e-mails, to organize them more effectively, and to preserve, as best they can, the thread of each discussion. For better tracking/threading of exchanged messages we suggest that you use a web forum instead of e-mail.

Advantages

- E-mail is everywhere.
- E-mail address is the user's universal identifier.
- E-mail addresses are often standardized, and so are easier to remember, to infer, etc. The e-mail client program and/or a web browser you are using now will suffice.
- E-mail is asynchronous, so you can read and reply-to e-mails whenever convenient.
- You can organize your e-mails thematically, according to their subject, content, etc.
- The thread of exchanges is preserved when the new subject accurately reflects its content, or when a reply to an existing e-mail maintains the existing subject heading.
- E-mail allows users to take their time to read, re-read, reflect upon, and react to an e-mail, which is particularly beneficial for students who are too shy to express themselves in a live class situation.

Inconveniences

- All e-mails end up in the user's [only] mailbox, making his or her's task of organizing them an arduous time-consuming one.
- Users who aren't methodical may lose control of their e-mails due to their sheer volume.
- Users may not be able to respond in a timely fashion if they are overloaded.
- Students and colleagues may contact a teacher during his or her off-hours.
- Some loss of privacy is inevitable, notably with regard to SPAM.
- When users specify the recipient[s] of an e-mail, by **replying** to an e-mail, they may not remember to change the duplicated subject field. Consequently, the e-mail's subject may have little or nothing to do with its content ; and, in these cases, it is difficult to preserve the thread of the discussion (particularly as time goes by).
- Subjects previously discussed re-surface again and again, especially when new members subsequently join an existing group, because these newbies have no idea what was discussed, nor which conclusions were drawn, and how negotiable these issues remain. Consequently, existing members are compelled to waste time repeating themselves, the progress of the group is slowed, impatience creeps in, and the members' goodwill deteriorates. If the facts, conclusions and decisions of the group aren't publicly expressed in some other place/tool, they will tend to dissipate as memory fades.

Suggestions

- Given its ubiquity, e-mail is your principal means of communication.
- Launch a mailing-list that groups together all of your students.
- Launch a mailing-list for each sub-group of your class, e.g. teamwork.
- You can also invite external collaborators to be members of your mailing list[s].
- Given e-mail's international scope, it can be used to correspond, nationally and abroad, with students and others who share one or more interests with your students.
- Designate one or more mailing-list moderators, in order to respond systematically and punctually to all e-mails posted to the group, to censor un-constructive messages, etc.
- Establish a clear policy, beforehand, regarding your availability (in person and online).
- Do not use your personal e-mail account. Get a separate e-mail account for each class you teach. Multiple e-mailboxes can easily be configured to automatically and discretely redirect all of your messages to one e-mailbox, e.g. the one you use daily.
- Avoid publishing your e-mail address in your e-mails, particularly those you post to public mailing lists, for in this case all e-mails are indexed, and this « content » is shared

- with popular search engines (such as Google, for example). Furthermore, there are web bots whose sole purpose is to harvest e-mail addresses wherever they can find them, and then sell this information to advertisers.
- Given e-mail's ability to transport messages and attached files to one or more recipients, it can be used to implement a modest WorkFlow. The meaning of this term varies a lot but it essentially amounts to automatically forwarding resources to the relevant nodes of a network of people. Each message follows a programmed trajectory (flow), according to a [hierarchical] diagram, a set of rules, the role of each person, the status of the resource being exchanged or any other criterion. E-mail can accomplish this when your workflow needs are modest, but, on the other hand, if your needs increase beyond a certain threshold, it is far better to use other tools, ones better suited to implementing workflows on a broader scale.

Mailing Lists

Synonyms

listserve (en) , liste de distribution (fr) , messagerie (fr)

Description

As we have seen, a mailing list is a specific application of e-mail. When a message is posted to a public mailing list, it is in fact posted to each member of the mailing list, without revealing or needing to know the addresses of each member. It's quicker, it's safer, it's more systematic, and it complements interpersonal communication with collective discussion. Your mailing lists can be open to the public, or they can be limited to your students and invited guests. Public mailing lists are the best places to get support for your IT needs. Private ones shield students from external nuisances that may not be appropriate.

Uses

In general, all messages that are posted to the mailing list will be distributed to each member that is subscribed to the list unless the designated moderator censors the message or, in extreme cases, temporarily (a.k.a. « a cooling-off period ») or permanently bans the user from posting, To avoid the many pitfalls of un-moderated lists, we therefore strongly urge you to designate at least one moderator, who will manage the following policies :

- whether the mailing list is public or private ;
- whether or not new members need to be approved ;
- whether messages will be moderated or not.

In the case of moderated lists, all of the messages are directed towards the moderator, who in turn reads each new message, evaluates it according to the group's agreed-upon editorial policy, and either accepts it or rejects it. If the message is accepted, then it is forwarded to all the members of the mailing list. When in doubt and/or out-of-respect, the moderator can contact the sender, in order to suggest modifications to the message to make it acceptable. Some mailing list servers can also perform actions based on the content of the messages, which is particularly useful when filtering spam.

Mailing lists empower users to work together on countless subjects, and allow users to publish their facts and points of view on any subject with unprecedented ease and scope. There is one major drawback to this, however; there is now an **over**-abundance of so-called « information ». To deal with this glut, users can subscribe to a mailing list in Digest mode, e.g. the messages are

no longer received one-by-one, as they are sent; instead, they are received all-at-once, on a periodic basis (once a day, for example). It's a choice each user makes for himself, depending on the degree of involvement that he wishes.

Advantages

- One-click broadcast of e-mail to all of the members of a mailing list.
- Conceals the e-mail addresses of the members of the mailing list.
- Persistent asynchronous dialog with all of the list's members at once.

Inconveniences

- It is difficult to maintain the thread of an in-depth discussion.
- Subjects of little or no interest clutter e-mailboxes.
- E-mails are not automatically stored, nor systematically organized, unless the user invests a lot of time and effort to manage their e-mailbox.
- E-mail archives, particularly when no care has been taken to specify the subject header, are not very useful because they are too context-insensitive.
- Search engines, such as Google, index the e-mails exchanged in public mailing lists and, therefore, e-mails can be browsed out-of-context by any user of a search engine.

Suggestions

- Participate in public mailing lists, especially for IT support.
- Mailing lists that you create for your classes should be **private**.
- Examine each message posted to the group; only forward acceptable ones.
- Designate one or more moderators to enforce the guidelines of the mailing list.
- Don't post attached-files to public mailing lists. It is frequently prohibited.
- Do not accept attached-files from strangers. Configure your listserv accordingly.
- Avoid using HTML markup in your e-mails. Set your browser preferences to filter them.
- Do not publish your e-mail address in your e-mail posts to public mailing lists, or in any other web-mediated tool for that matter. It will be harvested, sold to un-scrupulous opportunists, and you will be spammed.

Chat

Synonyms

Instant Messaging (en) , *IM (en) messagerie instantanée (fr)* , *causette (fr)* , *clavardage (fr)*

Description

The term *chat* and the abbreviation IM are often used to designate instant messaging. In Quebec, the *Office de la langue française* has successfully proposed the term *clavardage* : a contraction of *clavier* and *bavardage*. The Petit Larousse dictionary adopted this terme in <st1:metricconverter w:st="on" ProductID="2004. In">2004. In</st1:metricconverter> France, the *Commission générale de terminologie et de néologie* adopted *causette*, defining it as follows: Instant informal communication between several Internet users, characterized by the exchange of short messages in real-time. Instant messaging does indeed allow several networked computer users to synchronously chat together. Unlike e-mail, which is asynchnous, Instant Messaging is nearly instantaneous. IM has become popular everywhere. In 2002, the number of IM users was estimated at 360 million!

Uses

Special software is required to connect to an Instant Messaging server. IM is unlike e-mail because the former is synchronous (immediate), while the latter is asynchronous (delayed). This 'small' difference is a radical one, though. The IM subculture has its own language, culture, and mannerisms. Because all IM discussions are immediate and fast-paced, users tend to make extensive use of shortcuts; as well as some ASCII art, that in some cases transforms itself into smiley graphics. IM users can express their state of mind, what they are feeling, how available they are for chatting, etc. These shortcuts and *emoticons* are efficient, even playful, but if your aim is to improve your students' writing skills, you should probably use tools other than IM (use synchronous ones instead); unless, of course, you insist that they take the time to write as well as they can, and your IM system is configured to store the exchanges.

In older IM systems, each character typed appears immediately on the recipient's screen, even when the sender was correcting a typo (by erasing letters and re-typing). In more recent IM systems, the recipients only see the sender's statement when the latter has completely typed his current statement and validated it (by pressing on return or enter).

Most recent IM systems have a *notification of presence* feature, which indicates how many users are online, which ones, their availability, their state of mind, etc. The status of the message can also be specified, e.g. whether it is urgent, important, and so on.

Many IM systems increasingly support multimedia capabilities, such as voice, video, and many types of applications (whiteboard, text editing, etc.), for collaboration, messaging, notifications, and so on.

Advantages

- Instant Messaging integrates well into a game-based learning strategy.
- Instant Messaging puts your students' interpersonal skills into practice.
- Given IM's scope, it is possible to chat with foreign students who share interest[s].
- It's an excellent form of interaction for support, troubleshooting problems, etc.
- It enables the teacher to get involved in live student dialogs when appropriate.

Inconveniences

- The same inconveniences as e-mail (loss of context, dissipation of consensus, etc.).
- It is more difficult to grasp the point-of-view of a student, or a group of students, with IM than it is with e-mail, because there are far more messages exchanged, in a shorter interval of time, and IM does not thread these instant messages.
- It is more difficult to understand the statements of a student, or a group of students, in an IM, because they express themselves by using abbreviated statements, in no particular order, and frequently encode their thoughts and state-of-mind with insider shortcuts. Use of these abbreviations and shortcuts is so omnipresent and abusive, that it obscures what was expressed from anyone who is not an insider.
- Given the need for speed, grammar is often sacrificed, as well as vocabulary. · Consequently, IM is not likely to improve your students' writing skills.
- Several participants express themselves simultaneously, in no particular order.
- Statements are not organized, nor are they stored in most cases.
- There are too many IM systems which are closed, private, fragmented and incompatible.

Suggestions

- Design a game where the players interact in real-time.
- Establish and enforce some guidelines regarding the abuse of shortcuts.
- It is prudent to have, and to enforce, a charter regarding ethics, good manners, etc.
- Use Jabber, an immensely-popular free open-source platform, whose main advantage is that it will give you access to most currently-available IM networks and standards.

Forum

Synonyms

Electronic discussion forum (en) , *Bulletin Board (en)*

Description

An *electronic discussion forum*, or just *forum* for short, is a virtual place, accessed with a networked computer, where one can discuss one or more themes. Many forums can be accessed with a web browser; some of them require special client software program. Forums preserve the thread of the discussion better than any other tool currently does. Forum discussions generally can be limited to members of your private group or be open to all Internet users if the forum is public. Most forums are organized hierarchically and/or chronologically and/or according by thread (e.g. an indented list of who responded to whom).

Uses

Variety of forums

There is a large variety of electronic discussion forums. The more primitive ones merely offer text, but more evolved ones also offer audio, and sometimes video:

- public forums where any web user can participate;
- private forums available to members only;
- forums featured in specific web sites;
- forums integrated into e-learning platforms;
- forums integrated into collaboration platforms.

Capabilities of forums

The capabilities offered by various forums vary tremendously: bibliographical citations, display of title, layout, indentation of messages, managing access rights, moderation policies, etc. Some forums only allow their users to respond to messages in their entirety, while others also allow a user to react to any part of a message.

Respecting each other, and adhering to mutually-agreed-upon guidelines (*netiquette*), is as essential for the smooth operation of forums, as it is for any team working tool. We suggest that you draft and enforce a charter which clearly delineates what is deemed acceptable as well as what is not. Furthermore, you and your group should designate one or more moderators whose responsibility it will be: 1) to ensure that the members know the charter, understand it, consent to it, and adhere to it; 2) to arbitrate mis-interpretations and other problems; 3) to mediate the conflicts that may arise among members. As a last resort, moderators sometimes accomplish this by censoring the offending portions of a disruptive message or, in extreme cases, by temporarily or permanently banning the offending member.

Importance of leadership

One of the key features of forums is their interactivity. Its interactivity is related to the number of individuals who participate in the forum, of course, but also to those who read the messages without necessarily reacting to them. Designating a moderator is always a good practice, even when discussions are held face-to-face, but it is especially important in the case of forums, because in this virtual case we don't have the usual behavioral cues that clarify confusing statements which, if left un-checked, could develop into a full-fledged conflict. Therefore, we earnestly recommend that you designate at least one moderator, to stimulate discussion when it slows to a crawl, and to calm it down when it becomes too enflamed.

Quickly reaching a critical mass

Many people lose interest in a forum when the number and variety of messages is insufficient. This perceived lack of participation will discourage further participation, thus becoming a self-fulfilling prophecy of doom. One of the key factors of a successful forum is, therefore, the ability of the forum to quickly and reliably reach a critical threshold of activity producing a sufficient flow of rich, diversified, open-ended messages that will stimulate minds, defend values, constructively stir-up controversies, and so on. This is the best way for forums to succeed because the odds that someone will find something worthwhile increase significantly. Moreover, participants of a stimulating forum will generate some word-of-mouth publicity which, in some cases, can become a source of new members.

Advantages

- Messages are organized, according to several factors (date, subject / theme, etc.).
- At least one option organizes messages according to the thread of the discussion.
- As a general rule, forums clearly specify the object /subject of their discussion, especially when compared to the informality of the other means of teamwork discussed here.
- Multiple points-of-view, and digressions, can be handled gracefully, and only need to be attended to when one is interested in the sidebar.

Inconveniences

- Forums frequently make the object/subject of their discussion too specific. This leaves too little to say, to question, to argue about, or to wonder about; and the resulting forum will be disappointing because very little will be contributed.
- Because multiple points-of-view, and digressions, are handled by creating a new forum, users can be faced with the challenging socio-cognitive problem of coping with too many forums at once.
- When too many secondary forums are spawned, it becomes challenging to maintain an overall understanding of all of the themes at once, e.g. the big picture.
- Requires one or more moderators, in order to inform new members of the rules and the current ideology of the community, to arbitrate irreconcilable differences, to stimulate discussion when it becomes too calm, etc.

Suggestions

- Organize a computer-mediated debate, on one or more subjects.
- Continue a debate or a reflection begun in class.
- Play a role-game (the anonymity of computer-mediated role-playing makes it easier).
- Launch a forum when you have a critical-mass of interest and debate.

- Do not be **too** specific when determining the themes of the forum.
- For lasting discussions, debate questions with no easy answers.
- For more depth and autonomy, guide your students with strategies and clues.
- Stimulate discussion if/when no one has contributed anything for some time.
- Mutual respect is essential. Insist on good manners, ethical behavior, etc.
- Prepare a netiquette document, and see that it's applied rigorously and fairly.
- Designate a moderator whose role is to enforce the charter, intervene when conflicts arise, attempt to settle them amiably, etc.
- Designate a moderator who will welcome new members, orient them, and so on.
- Reward those who contribute what is required, or more, to the forum.
- Don't use this tool for the sole purpose of transmitting or correcting students' work.

Blog

Synonyms

weblog (en) , *webjournal (en)* *blogue (fr)* , *cybercarnet (fr)* *carnet (fr)* , *carnet web (fr)* , *carnet de bord (fr)* , *carnet de bord web (fr)**journal (fr)* , *journal web (fr)* , *journal extime (fr)*

Description

The first *weblogs*, or just *blogs* for short, were merely web logs containing the web pages that the author of the blog deemed interesting, with or without some additional comments. Over time, blogs have had many roles: [anonymous] personal journal, political platform for dis-enfranchised critics, literary works [in perpetual recomposition], travel logs with pictures, or as a quick-and-dirty way to craft a pretty web site without any prior knowledge of web standards like HTML, etc. And, unlike plain web sites, blog-sites benefit from a pre-existing editorial structure, akin to the ones we are accustomed to with news and print publishing.

More generally, a blog is a site where one or more authors express themselves freely, on a periodic basis or as they see fit. Whether periodic or not, all posts to the blog are ordered chronologically. In proximity to each post, there are links that allow users to link to this post (backlinks), to comment about it, and to comment about its comments (rss).

While it is true that many blogs have been used, and are still being used, as an egocentric means of self-expression, the blog concept is still vague enough to allow all kinds of diverse uses. Media, journalists, politicians, political activists, philosophers, and so on, are increasingly blogging their views in these new public/private virtual places. There are even polemical debates about the political motives of bloggers, particularly those that upset the socio-political status-quo.

Expressing oneself with a blog is becoming fashionable, or rather has already been so for some time. Due to their popularity, and their polemics, blogs are increasingly quoted, on air, in news broadcasts. Some of them are popular as soon as they're launched, while others remain obscure for a long time, or indefinitely.

Uses

Given that anyone can send an e-mail with an attached file, blogs leverage this ability to allow someone to be featured in a web site of their own, without requiring a deep understanding, or even any prior knowledge, of the operation of the Internet. Not all blogs are hosted by just one person. Some blogs are hosted by groups which post to a shared blog, thus allowing them to publicly share information, via a web site, without an expert, nor any web expertise.

The attached files can be images, video, or any files of any type. These will be attached to your blog post and, therefore, will be available to your audience (as downloads), as well as the short descriptions which are often attached to blog posts. Comments regarding the blog post are also attached to the blog post, if a member of your audience comments. They can also add a hyperlink to a blog post, so that it links back to their related blog posts. And last, but not least, interested audience members can subscribe to the blog post's RSS feed which will tell them about changes to a blog post, new comments, new hyperlinks, etc. These feeds contact their subscribers either by sending them an e-mail, or by remotely interacting with software on their computer. RSS client programs typically display updated data in real-time. Moreover, there are client programs, other than e-mail, that can update your blog for you, because, typically, blogs can be updated with any program that supports *Remote Procedure Calls* (RPC).

Almost all blogs feature some kind of multimedia integration. At a minimum, there are images; but quite often blogs also feature sound, video, and other multimedia functions. It makes these blogs more complex to handle, but it also makes them prettier, more interactive, and, therefore, more appealing to youths. As a matter of fact, Skyblog recently estimated the number of teen-initiated blogs in their systems at 4.5 million! There is even talk about a growing *digital divide* between adolescents and their elders, because the latter do not wish to play with the web in this manner; albeit there are a rapidly growing number of young adults (20-35 yrs old), and some of their elders, who are launching blogs for professional reasons.

Another trend observed in the blogosphere: there is a growing competition between bloggers, and the mass-media's news bulletins and polls. In some blogs, strong charismatic opinions, sometimes spiced-up with a bit of demagoguery, express themselves with force, sometimes in the manner of a poll, and thereby decisively influence public opinion; as evidenced by the recent presidential elections in the U.S.A., and by the recent referendum on the constitution of the European common-market.

Advantages

- Blogs are very popular among young users.
- Use of a blog challenges students to improve their writing skills.
- Regular use of a blog motivates students to write more frequently, with care.
- Students' pride will encourage them to write properly, because blogs are public.
- Authors are automatically notified of comments added to their blog posts.
- *Social Software* platforms add a social dimension to blogs (community).
- Blogs are a means of affecting public opinion.

Inconveniences

- Blogs often amount to little more than a personal journal.
- Blogs are still egocentric, for the most part.
- Blogs do not allow users to co-construct knowledge as well as wikis do.
- Diversity and complexity of blogs hinders their interaction.
- The comments of public blogs are increasingly being spammed.

Suggestions

- Students can use a blog as an intimate journal of his learning experience.
- Students can use a blog to chronicle their progress (portfolio, experience, etc.).

- Each group of students could use a blog to manage their teamwork.
- Publish RSS feeds to keep subscribers or interested parties up to date.
- Syndicate RSS feeds of your class, so that various groups can share their findings.
- Establish and enforce an editorial policy that prohibits libel, slander, harassment, etc.
- Limit access to your blogs and/or their comments, to avoid being spammed.

Wiki

Description

The *wiki* concept was invented by Ward Cunningham, back in 1995. His idea was inspired by *HyperCard*, an easy-to-use authoring system, marketed by Apple Inc. that empowered its users to rapidly prototype simple [narrow] vertical-market applications. Ward's wiki implementation of the HyperCard ideal bears little resemblance to the software in question, yet remains true to its spirit of simplicity, openness, and sharing. A wiki looks and feels like a web site, but its defining characteristic is that users can **edit** the site while browsing it, by simply clicking on a link that toggles the page into *edit* mode. Users perform their changes, as they would with any text editor, they save their changes (or not), and they're effortlessly returned to *browse* mode. Users are thus editing the original document, versus just appending an existing read-only document, and their changes immediately take place. Wiki's are, therefore, the best tool (so far) for teachers wishing to explore [socio-] constructivist approaches to learning.

The term *wiki* is of Hawaiian origin, and in that language it means quickly and informally. Wiki has become a category of software because many wikis followed Ward Cunningham's lead. Wiki is a category focused on the group construction of open-ended knowledge bases without any prior knowledge of how the Internet works. Wikis are typically not as pretty as blogs, but this was a deliberate choice with the aim of making wikis far simpler to contribute to than any other existing web-based collaboration tool. It's the only one where the users co-author a shared web site. Any page can be edited by any member of the group; or anyone on the Web, if you so choose. At first glance the openness of wikis might seem like an open invitation to spam, and sometimes it is, but, given that you can rollback any page to its previous versions, wikis are somewhat impervious to harm and vandalism. The best strategy is to leave the wiki open, with regard to browsing (read-only), and request a password from any user wishing to modify a protected page.

In pedagogical terms, a wiki could empower your students to create, structure, re-structure, and correct information they are building together as a class project. Because it is a web site the current status of their combined knowledge as a group can be evaluated by browsing it. Moreover, the teacher can examine *Recent Changes*, as well as the *History* of each page, to evaluate a group's progress. In some wikis, the teacher can also subscribe to the RSS feed of the *Recent Changes* of the wikis.

Because it is a wiki, the teacher can also contribute to the on-going work of their wiki groups, **and** do so **in context**. The result is a persistent, interactive hypertext, with most of the bells-and-whistles typically associated with multimedia web sites and blogs, but none of their complications. In a handful of wikis, it is possible to export the completed wiki as a form of XML that can be adapted to other needs, including reports, printing, Semantic Web, etc.

In sum, the pedagogical characteristics of *wikis* are :

- Interactive, multimedia web site : hypertexte, images, audiovisuel, etc.
- Appearance is lower-priority than simplicity of use, ease of contributions, etc.
- Easy to learn, and easy to use, particularly with regard to the editing of the pages.
- Radical openness that empowers users to co-construct knowledge in real-time.
- Peer review and modifications.
- Organization, accumulation, and transformation of shared knowledge.

Uses

Wikis will allow your students to continuously improve the quality of their written work, as well test their openness to in-process peer review. As soon as some information is changed, everyone has access to it AND anyone can change it. Wiki netiquette generally urges wiki users to add to the existing information, instead of replacing it, but this is only a voluntary guideline that you may or may not want to impose upon your students.

One of the consequences of the radical openness of wikis is that it blurs the traditional divide between the producer and the consumer of information. It seems paradoxical, especially to web users who are very concerned about security, but from a pedagogical point of view, this openness is just what the doctor ordered. It can add an interesting dimension to your teaching, and it can empower your students in their goal of becoming autonomous knowledge workers who work as a team.

Advantages

- Easy to learn.
- Easy to use [once the initial learning has taken place].
- Easy to contribute-to
- Changes take place immediately, in real-time.
- No intermediates needed for day-to-day use, not even a webmaster.
- Wikis are genuinely collaborative because all users co-construct everything.

Inconveniences

- For a layout as pretty as we are accustomed-to with web sites and blogs, wikis typically require some coding tricks; which are simple, when taken one-by-one, but nonetheless complex to remember given their numbers on the whole, and a bit intimidating when they gang-up on you in lengthy complex pages.
- Wikis users may require some training to make them comfortable with the coding tricks.
- Learners don't necessarily have the social or cognitive strategies or abilities to make them into IT-savvy knowledge engineers that communicate and cooperate effectively.
- The teacher must encourage students to plan and coordinate their co-construction effort, instead of chaotically forging ahead with no plan at all, because re-structuring wikis is a challenging labor-intensive task.
- If the students lack social and cognitive abilities and strategies, the results of their wiki will probably be disappointing (lack of organization, lack of cohesiveness, etc).

Suggestions

- Use a wiki as a virtual location to store and share documents.

- Use a wiki to manage students (private as well as public spaces).
- Collectively author an electronic encyclopedia such as *Wikipedia*.
- Launch a wiki-based pedagogical community of practice (for coordination, support, to hook-up with special-interest groups, and so on).
- Launch a multi-disciplinary project of some kind.
- Ask your students to contribute to a wiki **before** classroom period (current knowledge, first impressions, etc.).
- Ask your students to contribute to a wiki **after** classroom period (follow-up, updated knowledge, lasting impressions, etc.).
- Use a wiki as a dynamic model of what you are currently teaching, what they understand so far, etc.
- Use a wiki as a student portfolio, during the current session, and possibly beyond this.

RSS feeds

Synonyms

feeds (en) , news feeds (en) , channels (en) flux (fr) , flux RSS (fr) , fil de nouvelles (fr)

Description

RSS stands for *Really Simple Syndication*; in some cases referred to as, *Rich Site Summaries*. It is a syndication format for web content, particularly perishable time-based information whose relevance fades quickly and/or evolves over time: news, for instance. The term *syndicate* is in fact borrowed from journalism, wherein many news services are fed syndicated news (feeds), thus avoiding the need to gather new information themselves. In the case of RSS, the aim is to broadcast all kinds of information, notifications of events, alerts, updates, etc. Blogs have, in particular, made extensive use of RSS; to notify authors and other interested parties when new comments are added to a blog post, for example. But RSS feeds are not limited to website-like tools, such as blogs, wikis, and others. There are many software programs that support RSS and, therefore, can equally take advantage of RSS features. Many of these are used to display news, sports, stock-quotes, and so on, in a designated area of the user's screen.

Several main-stream portals have extensively catalogued the countless number of RSS feeds that are increasingly offered by a growing number of web sites and tools. You can subscribe to any RSS feed you wish, by adding its address (URL) to your RSS/RDF browser and/or aggregator. In so doing, you will be up-to-date on what is going-on in your field.

Uses

Broadcasting alerts, syndicating news, publishing lists, and so on, are deemed mission-critical by many professionals, and have been popularized by bloggers of all kinds. This standard is particularly well-suited to broadcasting web-related news. Internet users can tune-in to what is hot to stay abreast of what is going-on, to display a targeted subset of the news in their thematic web site or portal, to coordinate with colleagues and fellow team mates, and so on.

These RSS feeds can be interpreted by any software or online service that support RSS, and are generally used to display news, sports, stock-quotes, and so on, in a designated area of the user's screen. Most recent web browsers support it, such as Microsoft's Explorer, Mozilla's Firefox, and Apple's Safari. Newsflash: Microsoft Inc. is rumoured to be integrating RSS feeds into many of the applications of its next version of its operating system, far beyond merely the web (*MSIE*) and e-mail (*Outlook*).

Given the growing popularity of RSS feeds, in Microsoft products, and throughout the web, it is likely that they will play a strategic role in terms of fact-finding, information-gathering, and coordinating with colleagues, from many many disciplines. It is also clear that, sooner or later, we are likely to be overwhelmed by their volume. This is why there is a growing trend towards RSS-compliant programs that can further process, and perhaps even visually model, feeds; whereas now, most RSS-readers are mainly or solely text-based.

Advantages

- Pro-active notification of events,
- Better coordination of teamwork.
- Perpetually up to date on what others are doing.
- Informs others about the work one is accomplishing, as soon as it is performed.
- Automatically organizes gathered information, generates reports.

Inconveniences

- The number of RSS feeds is nearly-overwhelming, and it's inexorably rising.
- The complexity of RSS feeds.
- The over-abundance of RSS-feed standards and versions.
- Most RSS-readers don't scale-up because they are too text-centric.

Suggestions

- Use RSS feeds to stay abreast of all developments in one's field of interest.
- Use RSS feeds to manage other web-based collaboration tools (blogs, wikis, etc.).
- Use RSS feeds to coordinate teamwork.
- Use RSS feeds to implement workflows.
- Use RSS feeds that are abundantly offered in *Social Software* systems. With *Elgg Learning Space*, for example, you can subscribe to all of a user's blog posts, to all the posts and events related to a given subject, and so on.

Conclusion

Nowadays, no one can ignore that the Internet, the Web and e-mail. They are increasingly a part of our daily lives. Students make use of information technologies as unconsciously as they breathe: at home, to entertain themselves during their free time at school and to qualify themselves in the job market, once their formal studies are completed. Because these tools are increasingly present in **all** occupations -- on the job, as well as life-long continuing education to upgrade their skills, learn new ones, and therefore gracefully adapt to new circumstances as they arise in the future.

As a matter of fact, developing schools' and students' capabilities, in terms of working effectively with information technologies, has been a high-priority target of the MELS reform, because it aligns several convergent purposes at once : to impart knowledge to students, to mentor them, to refine their social skills, and to qualify them for the workplace. We all agree that information technologies are not a panacea, that they won't cure all of the ills of our educational system, and that more research is needed to empirically assess their effectiveness in a pedagogical context, but hopefully we can also agree that these IT tools can be very useful to you, and your students, as

long as they are used competently, and aligned with a clear pedagogical aim and a coherent strategy.

Given that your e-mail address is your online identity in most cases, using e-mail is unavoidable. E-mail has always been, and still is, the Internet's most popular form of computer-mediated communication. But, now that we have presented an overview of the defining characteristics, advantages and disadvantages of the other means of Internet-mediated communication and collaboration, we hope that it will encourage you to use and explore them in your classes, or in other contexts that suit your pedagogical strategies. Are you convinced? Are you ready? Are you planning-on using some of the tools mentioned in this overview? :-))

Before you leap, here are a few more suggestions to consider :

- Be aware of the characteristics of each tool; factor them into your plans.
- Start with what you know; evolve towards increasing complexity.
- Integrate these tools into your teaching practice gradually.
- Explore and experiment-with the tools **before** using them with your students.
- Make sure that you have the approval and support of your school.
- Don't worry about loss of control; your leadership role is as important as ever.
- Don't presume that your students have the skills or strategies to work autonomously.
- Designate at least one moderator for optimal results (constructive as well as preventive).
- Create and enforce a charter (netiquette document) that clearly delineates acceptable versus unacceptable behavior in the group. For optimal results, the members of the group should define it and enforce it, themselves, without any external interference.

You should now be informed enough to explore one or more web-based collaboration tools, in terms of your particular needs, in your particular context. Don't worry - it's not rocket-science!

For our part, we hope that this overview has informed you, that it will allow you to make pedagogically sound decisions regarding the integration of IT into your teaching practice, that it will stimulate pedagogical ideas, and projects, among the practionners who are on the front-lines, that it will support you during your *first* I.T. steps, or your *latest* ones if you are already using I.T., while concurrently diminishing your legitimate apprehensions about being able to cope with the minor difficulties that will undoubtedly arise while using these emerging technologies.

Useful References

There are countless sites which describe, and provide, the tools discussed in this overview. The references suggested here are the ones that the author deemed most relevant, or most illustrative, of the category of web collaboration tool in question. Feel free to browse the Web, for deeper, more extensive coverage of the tools that have piqued your interest.

Electronic mail

- [Yahoo Groups](#) – free e-mail accounts, file-sharing, shared-calendar, etc.
- [arobase](#) – for everything you could ever want to know about e-mail.

Mailing lists

- [Gmane](#) – aggregated archive of a large number of mailing lists.
- [Archiving service for your e-mails.](#)
- [Launch a forum from archives of a mailing list](#)
- [Find mailing lists to subscribe to](#)

Chats

- [IRC](#)
- [Jabber](#)
- [ICQ](#)

Forums

- [phpBB-fr](#) – homepage of the Web's most popular forum software.
- [Index of the forums](#) of the phpBB.Biz web site.
- [Templates to customize your phpBB-hosted forum.](#)
- [Le site du forum libre!](#) - collaborative learning of forums.
- [Knowledge Forum](#), platform that spearheaded *communities of practice*.
- [How-to guide](#) aimed at learning how to use *Web Knowledge Forum 4*.

Blogs

- [Blogger](#) – blog publishing service.
- [Over-blog.com](#) – free platform to create and manage blogs ; no advertising.
- [Vidéoblogs](#) – category of blogs used to share video clips.
- [PointWiki](#) – collaborative francophone blog, dedicated to news about wikis.
- [La république des livres](#) – literary blog of Pierre Assouline.
- [Standcybercarnet](#) – Tristan Nitot's [web] standards blog.
- [Le cybercarnet de Loic Le Meur](#) - another example.

Wikis

- [Wikipedia](#) - online virtual encyclopedia maintained by its users.
- [Wiktionnaire](#) – free no-cost universal dictionary.
- [GeneaWiki](#) – genealogical encyclopedia.
- [WikiIndex](#) – the wiki of wikis.
- [leswikis.com](#) - wiki with information about wikis.
- [WikiPoll](#) - wiki-based polls.
- [Wikisource](#) – online library featuring copyright-free texts (many classics).
- [Wikipen](#) – free and cooperative writing workshop.
- [CommunityWiki](#) – community issues : management, conflicts, mediation, etc.
- <http://www.c2.com/> : Ward Cunningham's wiki (inventor of wiki concept).
- [Pantehnicon](#) : community of practice of the author of this overview (programmers).
- [Wiki of l'Esace virtuel du Réseau des répondant\(e\)s TIC du collégial.](#)
- [Wiki of Récit national mathématiques, sciences et technologies.](#)
- Compare wikis - [tools to generate wiki comparison tables.](#)
- [List of thematic wikis](#)
- [List of available wiki programs.](#)

RSS feeds

- [Pedagogical bookmarks \(RSS\)](#) - tool that references RSS feeds of various sites.
- [Really Simple Syndication](#) - Francophone site to understand RSS feeds.
- [Portail DMOZ](#) - Portal of RSS feeds.
- [RSS - Comment ça marche ?](#) - How RSS works
- [RSS et syndication](#) - Patrick Abati's site about RSS and syndication.
- [List of RSS readers and aggregators](#)
- [Google Reader](#)
- Article published February 27, 2006, in *Animaweb - Les fils RSS : une solution à la veille pédagogique sur Internet?* Browse Animaweb's archive of articles, located in [Profweb's](#) web site, to access this article.