

OPEN

NGO-IN-A-BOX OPEN PUBLISHING EDITION
"HOW TO" GUIDE

HOW TO MAKE A POSTER



HOW TO MAKE A BLOG



HOW TO MAKE CD/DVD BOOKLETS
AND COVERS



HOW TO MAKE AN ELECTRONIC
NEWSLETTER



HOW TO MAKE A PODCAST



HOW TO MAKE TAG WEBPAGES
WITH CC LICENSES

NGO-IN-A-BOX 

HOW TO MAKE A POSTER

WHAT YOU'LL NEED

THE FOLLOWING TOOLS FROM THE BOX:

- OpenOffice, NeoOffice or AbiWord
- Scribus or Inkscape
- GIMP or GIMPShop

REFER TO THE FOLLOWING RESOURCES IN THE BOX:

- Copyright, Open Content, the Commons and the Public Domain
- Creative Commons
- Licensing tools
- Participatory Media

ADDITIONALLY

make dots :)

- * Visual elements—graphics, photos, pictures etc.
- * Copy giving the details that you would like to advertise.
- * Logos, if necessary.

WHERE TO START?

1. THINK ABOUT YOUR AUDIENCE

- Always think of who your target audience is. Try to create a profile of the person you would like to have reading the poster. Are you targeting tech savvy free culture makers in a wealthy, western country or a small community opposing a damn in India? The pitch, tone, and visual imagery used for these two contrasting groups of people will be very different.

2. CLARIFY THE MESSAGE

- No matter who your target audience is, always be clear about the message you want to communicate. This will ensure that your audience is attracted to view the poster more closely.
- Posters that are too text heavy can drive the viewer away. Remember that a poster communicates information to people on the move, as opposed to newspaper or magazine adverts or brochures, which are designed for the times when people have a moment to sit and study the information.
- So try to keep the text short and punchy, giving the most information in the least amount of words. Also, try to communicate information visually, through images and photos.

3. FIND AN INSPIRATIONAL STARTING POINT

- Get the creative juices flowing by finding an element that you find inspirational—a photograph, font or a play on words.
- When making a poster the most important idea to keep in mind is, will this piece of paper stand out on a wall covered in other posters? Within the short space of 3 seconds your audience will decide whether to stay and

take a closer look at your poster.

- A good way of making your audience stick around is to find an arresting picture, a different font, or a clever, amusing or thought-provoking play on words to capture a passer-by's attention.

4. GATHER ALL YOUR CONTENT

- Gathering all the content you'll need before you start the layout process means that you can produce a holistically designed poster—rather than randomly including odds and ends when you receive them.
- If you have sponsors for the event you are advertising, be sure to ask them for their logos in a high quality format.

5. PLAN AHEAD

- If you are not printing the poster yourself be sure to check with the printers about their requirements before starting the design. Check that the size of the paper you want is available, check which file format they accept, which colour format they print, and how you can send the finished version to them.

USE THIS CHECKLIST BEFORE YOU START:

- Font (s)
- Logo (s)
- Copy
- Visual element (s)
- Requirements from Printer:
 - * Paper size – A0, A1, A2, A3 or A4?
 - * Bring it in on CD, USB stick, DVD, or bring in a hard copy or send it by email?
 - * File Format – PDF, JPEG, SVG?
 - * Colour Format – Spot colour or process?

WHERE DO I FIND CONTENT?

FOR PHOTOGRAPHS:

- The best way of avoiding the legal questions involved in using other people's photographs would be to take your own!
- If this is not possible, the quickest and most effective way of finding photographs you can legally use is by doing a Creative Commons search on Flickr, <flickr.com/creativecommons>.
- For a different take on your Flickr search do a Creative Commons search at Flickr Storm, <zoo-m.com/flickr-storm>.

FOR GRAPHICS:

- Open Clip Art Library, <openclipart.org> is a good resource for graphics that are CC licensed.

FOR FONTS:

- 1001 Free Fonts, <1001freefonts.com> is a great database of fonts that you can download for free (for PC and MAC users).

Check out the 'Copyright, Open Content, the Commons and the Public Domain' section for more information on what open content is all about.

HINTS AND TIPS FOR GOOD POSTER DESIGN

1. KEEP IT SIMPLE

- Don't use too many fonts or pictures, don't complicate the design, simplicity can often be more visually effective.
- Effective posters have well-balanced areas of 'white space' (white space shouldn't be interpreted literally, but rather indicates space which does not have text or photos, areas which are free of 'content'). White space makes it easier for the audience to follow the ideas presented in the poster—so don't be tempted to fill every square inch with information, patterns or pictures.
- Ornate fonts are difficult to read. When choosing fonts, the simpler and bolder the better!

2. COLOUR

- Colour is an important part of designing posters. Colour can be used to create mood and atmosphere, can be used to attract attention, or can be symbolic and can be associated with different feelings.
- When using colours in your posters, think of your audience.
- Try not to use too many colours in one poster. Colour can be used to create order and continuity, and by including a rainbow assortment of colours this ideal will not be achieved.
- While colours can be used to attract attention, avoid colours that are too bright, especially luminous greens, yellows and pinks. These are not easy to read from a distance.
- A very striking and powerful element of design is the use of white letters/pictures/graphics on a black background (WOB). This will certainly attract the attention of passers-by.

3. PHOTOGRAPHS

- Always crop your photographs to eliminate any unnecessary information. This will also focus the viewer on any significant details you would like to emphasise.
- Take care when enlarging your photographs—be sure not to use photos which are pixilated. Graphics should be clear and sharp, so always try to find a high-quality image.

ELEMENTS AND PRINCIPLES OF DESIGN

Elements and principles of design are the basic tenets of layout. It is good to keep these more theoretical ideas in mind when producing your poster, as these are tried and tested principles which have proven to be visually effective. The information in this section was sourced from the 'Other Guides on the Web' section below. This is a brief summary, so for more in-depth information on this topic, follow the links in that section.

1. ELEMENTS OF DESIGN

- LINE
Line is considered in two ways—the actual linear mark from one point to another or the creation of an edge when two shapes meet.
- COLOUR
Colour is discussed briefly in the 'Hints and Tips' section.
- TEXTURE
The surface quality of a shape, and can be assessed either visually or physically.

- **SHAPE**

The existence of a shape implies an area of 'content-free space'—this is called 'white space' and is explained above.

- **DIRECTION**

Horizontal lines are associated with calmness and stability; vertical lines with balance and formality; and oblique lines suggest movement and activity.

- **VALUE**

The elements of design are considered the building blocks used to create visual material. How these elements are arranged and implemented are the principles of design, and the successful use of the principles of design result in a well-structured and effective poster.

2. PRINCIPLES OF DESIGN

There are varied opinions as to what the list of principles should strictly include—the following list of principles are the ones we thought most important when designing a poster:

- **BALANCE**

Balance refers to the weight of the composition, comparing the left to the right-hand side. Picture an imaginary vertical line through the middle of your composition. When the balance is symmetrical, the composition looks more stiff and formal. Asymmetrical balance creates a more spontaneous and informal design. Keep this in mind when creating your composition and the kind of image (formal or informal) you would like to create, depending on your audience's tastes.

- **MOVEMENT**

Believe it or not, movement can be created on a piece of paper by cleverly using different elements of design. As mentioned previously, a diagonal line creates vibrancy and movement. Remember that a line can also be created by how you align shapes too.

Another way of creating movement is through the gradation, or blending of colour—from dark to light or vice versa. The grading of different colours in this spectrum creates perspective, and causes the eye to move along a shape. Be conservative and subtle with this tool, as the gradation of all the colours of the rainbow in one go, can tend to look tacky.

POINTS OF VISUAL INTEREST

Movement is also aided by the effective use of points of visual interest. Points of visual interest are created by the effective use of emphasis—by making some parts of the composition bigger and bolder than others, depending on their importance. Careful placement of the points of visual interest, will lead the eye of the viewer around the poster, creating movement and aiding the reception of the message you would like to impart.

Contrast is the pairing of opposing elements, for example different colours on the colour wheel, different directions or tones and values. The contrasting elements should be placed at the centre of visual interest. The centre of visual interest is found slightly above, to the right of the actual centre of the page. This tends to be the natural placement of visual focus. Once again, don't use too many contrasting elements in one composition, as this creates a feeling of chaos.

UNITY

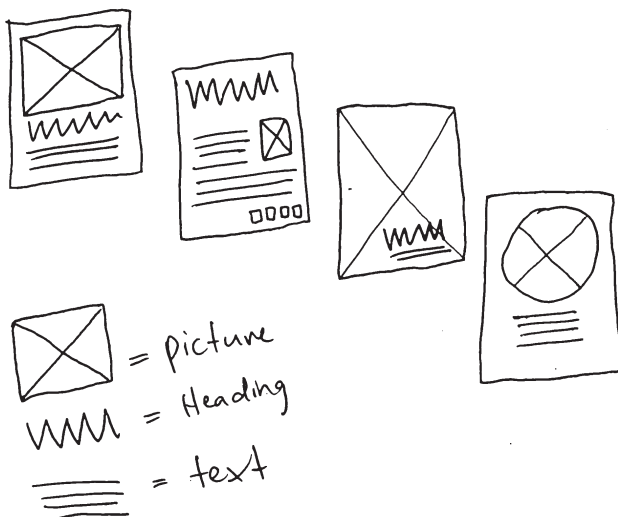
While points of visual interest and contrast make the poster exciting to look at, take care to also consider that your poster should 'hold together' in order to create a sense of unity. A disorganised, chaotic poster will not achieve the goal of communicating your chosen message.

Ways to create unity are to associate like concepts with certain colours, to overlap and group the elements that belong together, or to visually carry through your chosen theme through the poster.

These sites illustrate well such principles similar to <johnlovett.com/test.htm> and maybe, <goshen.edu/art/ed/Compose.htm>.

PRACTICAL ADVICE

- Always start by setting the guides and margins on the page.
- Lock the guides, so that when moving pictures around the page you don't accidentally move the guides and margins.
- Before you complete your poster: check that your photos, headings, texts and other visual elements are aligned. Taking care of these types of details will leave you with a well-rounded and neat poster.
- Always print out a copy of the poster to check for any unforeseen errors. It is especially important to check the quality of the colours you have used. Remember that the colour on your computer screen very rarely looks the same on paper.
- Once you have finished the poster, package all the fonts, pictures and any other content you have used into one folder. This will be easier for the printer to track and install all the fonts, as well as for your own records.



EXAMPLES OF EFFECTIVE POSTERS

- The poster advertising the Creative Commons Salon, organised by Creative Commons Korea, <commons.org/2006/08/04/musiccommons-what-the-hell-is-it/>.
- Some fantastic examples here: <bj2design.com/web-graphic-design/poster-examples.html>.

OTHER GUIDES ON THE WEB

'HOW TO MAKE A GREAT POSTER' BY DINA F. MANDOLI

While this resource was created for cut and paste posters, there are some useful tips on font size, use of colour and the quality of photographs.

License: All Rights Reserved.

Level: Entry

<aspb.org/education/poster.cfm>

'LESSON PLAN FOR LESSON PLAN, EIGHT GRADE: POSTER DESIGN FOR PEACE' BY JUDY DECKER

Despite the fact that this lesson plan has been designed for eighth graders, this is a handy introduction to the elements and principles of design, with some practical hints and tips.

License: All Rights Reserved

Level: Entry

<princetonol.com/groups/iad/lessons/middle/Lessons/8Poster.htm>

'THE PRINCIPLES OF DESIGN' BY JOSHUA DAVID MCCLURG-GENEVESE

This article appears on the 'Digital Web Magazine' site, but McClurg-Genevese believes that the basis of any good design, whether print or electronic, can be found in strong principles. This provides an excellent explanation of the principles of design, with pictures to illustrate them too.

Be sure to scroll down to the end, where the author has provided a host of further links on this topic.

License: All Rights Reserved

Level: Medium

<digital-web.com/articles/principles_of_design>

DESIGN AND COLOUR BY JOHN LOVETT

While this is written for artists, Lovett's description of the elements and principles of design are relevant to poster design too.

License: All Rights Reserved

Level: Entry

<johnlovett.com/test.htm>

'COMPOSITION AND DESIGN ELEMENTS, PRINCIPLES, AND VISUAL EFFECTS' BY MARVIN BARTEL

Written as a teaching aid for young children, this is still a good resource with much information on the topic.

License: All Rights Reserved

Level: Entry

<goshen.edu/art/ed/Compose.htm>

JO'S TOOLKIT DESIGN LINKS

This website provides resources for student and grassroots journalists, with

links and tips on various forms of media, including design and layout. Follow the links on this page for more in-depth blogs and websites dealing with design and layout.

License: CC BY-NC-SA 2.0 South Africa

Level: Links provided on this page range from medium to high.

<jostoolkit.ru.ac.za/?cat=35>

HOW TO MAKE A BLOG

WHAT YOU'LL NEED

The following tools from the Box:

- Word processing: while you can write posts in the blogging application itself, many people choose to write their blogs in a word processing programme first, so that they can spell and grammar check it, and then paste the copy into their blogs. Additionally, when writing in the blogging application, you can easily lose your work—due to a broken connection for instance. It is much easier to save your work in a word processor when working offline.
- Image editing software such as GIMP or GIMPShop (if you want to make a photoblog or insert images into your stories).
- Audio editing software such as Audacity (not included) if you want to make a podcast.

Refer to the following resources in the Box:

- Open Content
- Licensing Tools

HOW TO START

1. FIND YOUR AUDIENCE

The first step you need to take is to decide what you want your blog to be about. Is it a personal space where you will write about things that are important to you? Is it work-related—a way for you to tell subscribers, clients, a mailing list or regular visitors what your NGO is up to? Is it going to be more of a resource centre, where you will post articles, columns, event notifications and other content that is pertinent to your NGO, organisation or publication? Once you know what your blog is about, it will be easier to decide on the layout of the blog, as well as what topics, links and other content to include.

2. CHOOSE YOUR TOOLS

Once you've decided on the subject and audience of your blog, you need to choose a content management system, also known as a blogging tool. There are a wide range of blogging tools out there, some are open source, some are not, some are very complicated to use, others are much easier. A good blogging tool for beginners is WordPress—it's free and open source, relatively easy to use, and has lots of plugins that allow you to change the look and functionality of your blog. In the 'Blogs' section of the Box you will find blogging tools that need to be installed on a server. If you do not have access to your own server, you can still start a blog by using one of many freely available online services. There might even be one in your country—if not, many people have their blogs on sites like wordpress.com (started by people who made the WordPress blogging tool), typepad.com or blogger.com.

3. GET THE LOOK

Once you've set up your blog, you can change the themes, colours and fonts to make the blog look the way you want it.

4. ADD FEATURES

You can add the following, simple features to your blog to make it more user-friendly:

- A Blogroll - a list of other blogs and sites you like and want to point your readers to.
- An RSS feed - this allows people to subscribe to your blog and check for any updates without actually having to go to the blog first.
- Trackbacks - these are links within your copy that allow readers to go to visit other sites and articles that may be relevant.

5. LICENSE IT PROPERLY

Once your blog is all set up, you're ready to start writing. Don't forget to decide how you want to license the content of your blog, and add the appropriate licenses and logos.

WHERE DO I FIND CONTENT?

- The best content is, of course, what you can produce yourself. It's always better to write about something that is appropriate to your blog, than just reproduce the original work. You can always [trackback](#) to the original source.

- Other content can be found by doing Creative Commons search for images, video and audio. Always remember to reference the content and its source, even if you're unsure of the licensing of the content.

PRACTICAL ADVICE

- Keep your blogs interesting. Nobody wants to read big chunks of text - it can be very boring. Rather break your copy up with sub-headings, images and video if you can.
- Keep your entries a good length - too long and people might not finish reading them. Entries that are too short often don't tell the full story. You'll need to find a good balance.
- Update your blog regularly. People will soon get bored and stop visiting your blog if you don't update it often.

EXAMPLES OF EFFECTIVE BLOGS

The blog for the iCommons community <commons.org> is a good example of a blog designed for an organisation, which is updated regularly by multiple posters.

Lawrence Lessig, the founder of Creative Commons' personal blog <lessig.org/blog>. This is a good example of a blog that belongs to one person, but deals with many different subjects and issues.

Boing Boing is more of a news blog, a collection of stories and features that have been collected in one place <boingboing.net>.

FURTHER RESOURCES

EFF Legal Guide for Bloggers: eff.org/bloggers/lg

RSF: rsf.org/rubrique.php?id_rubrique=542

Global Voices: globalvoicesonline.org/wiki/article/How_to_Blog

TechSoup: techsoup.org/learningcenter/internet/page4780.cfm

Dynamic Objects: dynamicobjects.com/d2r/archives/002399.html

On Cory Doctorow: henryjenkins.org/2006/09/cory_doctorow_as_exemplar.html

HOW TO CREATE AN ELECTRONIC NEWSLETTER

WHAT YOU'LL NEED

- The following tools from the Box:
 - OpenOffice, NeoOffice or AbiWord for word processing
 - Wikis—if you want to edit and produce the newsletter collectively—especially if your editing team is dispersed and does not have the opportunity to meet face to face, wikis are the best tool for this. Better than sending around emails or discussing through a forum.
 - Refer to the following resources in the Box:
 - Licensing Tools
 - Copyright, Open Content, the Commons and the Public Domain
 - Participatory Media
 - Content—articles, listings, events, letters, competitions and information in general.
 - A structure for the newsletter, depending on the types of content
 - Mailing lists for distribution

WHERE TO START

- Content—the content will define the theme, tone and the structure of the newsletter.
- Frequency—weekly, bi-weekly, monthly, or quarterly? This will largely depend on how often you will be able to generate fresh content.
- Depending on this decision, mark the release dates in your calendar now!

WHERE DO I FIND CONTENT

- Original content focused on your organisation's key services is best because it will showcase your skills and knowledge most effectively. You can use alternatives as 'fillers' in the newsletter—also showing that you know your audience, are well-connected within the sector and can offer the service of gathering the most relevant content for your users or stakeholders.
- Search the Web for relevant articles, blog posts or research papers licensed under Creative Commons licenses. Creative Commons-licensed articles can be copied in their entirety (as long as the terms are respected) whereas with copyrighted works you may only be able to reproduce the headline and the URL to the full story (depending on the fair use/dealing conditions and practice in your country). Don't forget to attribute the author correctly! Read the 'Open Content' section of the Box for more information on where to find content, and the 'Open Licensing' section for more on the terms of the license.
- Scout the Internet for relevant events and competitions to include in your newsletter.

- Ask people who are knowledgeable in your field of interest to write a column or opinion piece to include in the newsletter.
- Another alternative is to set up a wiki and ask your community to post articles and announcements during the month. See the sections on wiki tools and resources for more information on how to start a wiki.
- Try to establish a process to receive content on a regular basis, so that you can set up a consistent structure for the newsletter. Having a cycle for submission of content will allow you to set expectations on what your content will be for the following newsletter. If you are using a wiki as a source of information or if you are asking people to contribute articles to the newsletter, it is important to set a deadline for when the content should be submitted. This will also allow you time to process and edit the newsletter, and release it without a delay.

HINTS AND TIPS ON STRUCTURE

- Once you have an idea of the particular focus of the newsletter, consider how you would like to arrange the information.
 - Always include an 'overview' or 'contents' section to outline what is contained in the newsletter.
 - If you're using the newsletter as a marketing tool for your organisation, always include a paragraph telling the reader a bit about your organisation, and providing a context to the goals of the newsletter.
 - Consider licensing the newsletter under a Creative Commons license. Depending on the license you choose and the specific licenses of the content it contains, this will allow others to reproduce the articles, as long as they acknowledge the source and author and abide by the conditions that you set when you choose which license you want to use. Refer to the 'Open Licensing' section of the Box.
 - Finding a structure for the newsletter is a process which can be tested and changed quite a few times before finding a winning formula.

COMPARE THE OVERVIEW SECTIONS OF THESE TWO VERSIONS OF THE ICOMMONS LAB REPORT, ICOMMONS' INITIALLY BI-WEEKLY, AND NOW MONTHLY NEWSLETTER:

1. The iCommons Lab Report: 20 April 2006
"Your Bi-Weekly Window on the Commons"
www.icommons.org

IN THIS EDITION

- From JHB with Love—A Weekly Update from the Office of the Acting ED
- Updates from the iCommons Summit
- Policy Workshop: A Meeting of Common Minds
- iCommons news
- .ccGarden Taiwan: 'A Garden of Artistic Delights'
- 'Copyright Comic Relief'
- About iCommons
- Contribute!
- License

2. The iCommons Lab Report: August/September
"Your Window on the "Commons"
www.icommons.org

IN THIS EDITION

- From JHB with Love – a Monthly Update from the Office of the Executive Director
- iCommoners Testify
- The Rio Framework for Open Science: Tools to start a

science Commons near you!

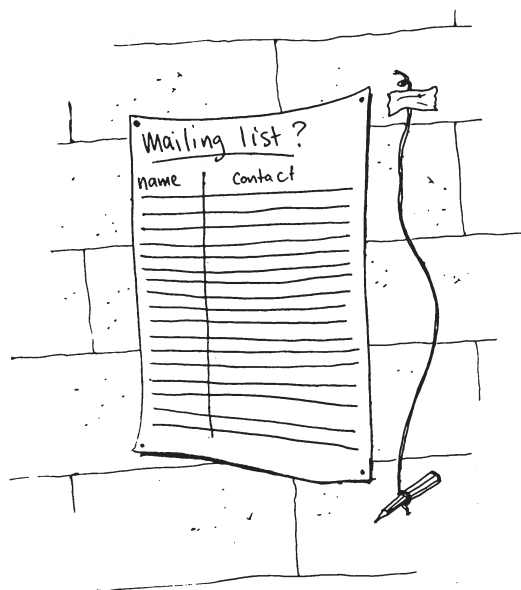
- Hello Wikimaniacs! How Wikipedia and the Commons community have more to share than you'd guess.
- Snd us ur info, luv 4rm Mofest: A Q&A with Paulo Hartmann and Marcelo Godoy, the organisers of the International Festival of Mobile Art and Creativity in Brazil.
- The Organisation Spotlight: What's up at CC HQ, San Francisco?
- Commons events calendar: Find a gathering in your part of the world.
- About iCommons
- Contribute!
- License

DISTRIBUTION

- In order to have your newsletter distributed as widely as possible, you should focus on how you can increase the number of people subscribed to the newsletter through a mailing list, for example. When you meet people at conferences, ask whether they want to be added to the mailing list, and advertise the mailing list on your organisation's homepage.
- Perhaps you know an individual or organisation affiliated to your NGO who also runs a mailing list? They might be interested in distributing your newsletter, so approach them to have your newsletter distributed through this means too.

EXAMPLES

- The iCommons Lab Report. Subscribe at: <http://lists.ibiblio.org/mailman/listinfo/icommonslab>
- The APC Monthly Newsletter. <http://lists.apc.org/mailman/listinfo/apcnews>
Retrieved from <http://wiki.icommons.org/index.php/Newsletter>



HOW TO MAKE CD/DVD BOOKLETS COVERS

WHAT YOU'LL NEED

Refer to the following tools from the Box:

- * GIMP or GIMPShop
- * Scribus or Inkscape

Refer to the following resources in the Box:

- * Open Content
- * Open Licensing

WHERE TO START

KNOW WHAT YOU'RE CREATING

• While the essentials of creating a CD/DVD booklet and CD/DVD cover are the same, the amount of information you can fit on each is very different. A CD/DVD cover is a single sheet of paper, about 120mm x 120 mm, so you can't fit that much space on the page. A booklet, on the other hand, can fit a lot more content, because it is folded, and sometimes stapled. So be sure to edit your content before you start laying out your booklet or cover.

KNOW WHAT YOU HAVE TO SAY

• What kind of information is on your disc? Your booklet and cover will have to reflect this. Do you need to include complicated instructions for using software or are you just listing what is on the disc? Will you need to include credits of co-creators, and logos of your organisation or sponsors in your design? Before you start working on the design it's a good idea to know what you have to include, so that you can be sure you'll have enough space for all the elements.

BE SURE OF THE DETAILS

Make sure you're aware of the following design details:

- Page Size—CD covers and booklets are usually about 120mm x 120 mm, but be sure before you begin.
- Margins—check the margins you're going to use as the frame for your design, and be sure you've left room for bleed and text.
- Format—what format will your design be in? Is it a JPEG, TIFF or SVG? (JPEG, TIFF).
- Fonts & Logos—do you have all the fonts and logos you need?
- Colour Format—what is your colour format? CMYK or RGB?

WHERE DO I FIND CONTENT?

- Photos: The best kinds of photographs to use are those that you have taken yourself. If, however, you need to source photos from another source, you can try using Flickr and searching for Creative Commons licensed images that can be reused.
- Illustrations: You can look for CC licensed illustrations at search.creativecommons.org
- Clip Art: Open Clip Art Library openclipart.org is a good resource for graphics that are CC licensed.
- Fonts: 1001 free fonts 1001freefonts.com is a great database of fonts, which you can download for free, for PC and MAC users.

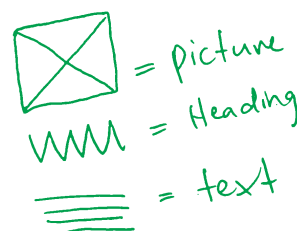
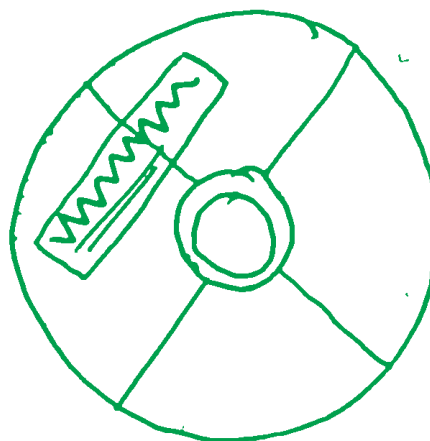
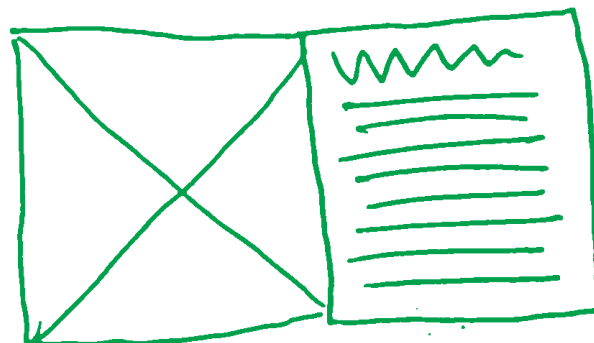
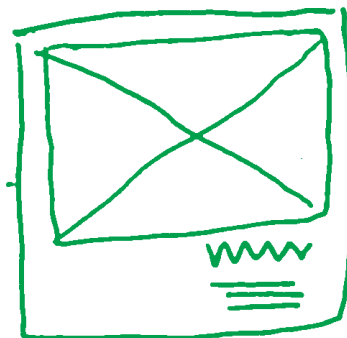
Check out the 'Copyright, Open Content, the Commons and the Public Domain' section for more information on what open content is all about.

HINTS AND TIPS

- Be sure of your margins! Always set your margins before you begin, so that they don't shift during the layout process.
- Less is more—try and keep your design as simple as possible, so that your booklet and tray card don't look too cluttered.

ELEMENTS OF DESIGN

Have a look at the Poster project in the Tools section for the elements of general design.



HOW TO TAG WEBPAGES WITH CC LICENSES

Using a few lines of HTML given to you during the licensing process, you can reference the license that covers your work. To do so as clearly as possible, you should try to do the following:

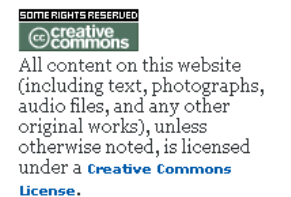
1. Specifically define what you're licensing. Websites are often made up of several components. You should note whether you're licensing the entire site, or just certain text, pages, graphics, or files.
2. Put the reference in a prominent, visible place. You should place the reference right next to the work you intend to license. If you cannot easily place it next to each work or if you are licensing a large group of works, place the reference somewhere near the top of the page or along a sidebar, rather than hidden at the footer of the page. In addition, make sure that the link appears wherever the licensed works appear on your site, rather than just on the front page.
3. If possible, use the CC button to mark your content. This symbol will help people easily recognize that your content is licensed. You can add this button to your site by using the full HTML/RDF supplied during your license selection process. Otherwise, use an ostensible, plain text link.



SOME EXAMPLES:



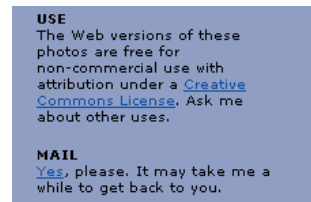
scottandrew.gif



stinkblog.gif



bgbg.gif



lightningfield.gif

- Scott Andrew lets visitors know each song is licensed with a prominent button and message.
<scottandrew.com/main/songs/american_thing>
- Stickbugblog places its button visibly on its sidebar, asserting specifically that all content is licensed.
<blogs.law.harvard.edu/stickbug>
- Bag and Baggage explains that all pages within the site are licensed.
<bgbg.blogspot.com>
- Lightningfield.com notes that only the site's photos are licensed.
<lightningfield.com>

DIGITAL AUDIO DISTRO: GETTING YOUR WORK OUT THERE

BY EVAN HENSHAW-PLATH

Producing your audio piece is just the first step in a much larger process of distribution and promotion. Once you have an interview, song, or radio programme, you need to get it out there. This article is a quick overview of what's required to produce audio for distribution including the formats you want to use for sharing audio over the Internet and what role Free and Open Source Software (FOSS) can play. Finally I will address where you can host your audio files and how to build a podcast.

Your first step is to record and produce the audio. The primary application you'll use is Audacity. It's a standard audio editing application. The most important thing to know about audio formats is there are two primary sets of audio formats.

LOSSLESS AND LOSSY AUDIO FORMATS

Some audio formats are lossless, meaning the quality of the audio does not get lost when it gets reopened and edited. Lossless file formats are good for files that are going to be edited again, or remixed in to other files. You will want to save your files in a lossless format while you create, edit, and mix your audio production. The disadvantage of lossless files is that they are very large. Popular lossless audio formats are WAV, AIFF and FLAC.

The second audio format is what you will want to use for distribution for play over the radio and the net. The file format is much smaller and can be of good quality for the listener. The most popular lossy format is MP3, but there are others like AAC, MP4, and WMA that are also lossy. The FOSS option for lossy codecs is generally referred to as Ogg. Ogg is the container used for the Vorbis codec and as such audio that is encoded in this is referred to as Ogg Vorbis, or Ogg for short.

Lossy codecs sound good when played back but not when you edit them. Mixing lossy formats like MP3 to make new audio files greatly reduces the quality. Think of it like a VHS cassette: each time you copy from one cassette to another it gets worse. After the 3rd copy the quality becomes so bad it's unlistenable. The advantage of MP3 and all lossy formats is they can be 10% or smaller in comparison to the full quality lossless formats. Most audio distributed over the Internet is done as MP3s and it's recommended that unless you plan on people remixing or editing your audio files, to use MP3 or Ogg.

Some applications like Audacity and ReZound support saving as either lossy or lossless file formats. One application for Windows users for transcoding to different media file formats is MediaCoder, on Mac you can use Max. They are set up to translate audio files from any format to another. Think about the download implications and intended uses when choosing file formats. Remember that any translation to or from a lossy format will result in lost audio quality.

UNDERSTANDING AUDIO FILE FORMATS

Audio files have a number of aspects that are important to know and will effect the size and quality of the audio you produce. Audio files have a sample rate and a bitrate. The higher the number the bigger the file, and higher quality. Lower numbers generate smaller files at worse quality. Music requires more quality than spoken word. Make sure that your sample rates are one of the following, 11, 22, or 44 KHz (that's 11,000 Hz). That way the broadest range of audio players will be able to play your files without sounding like Alvin and the Chipmonks. The other number you are going to have to decide on in your setting, especially for MP3s and related formats, is the bitrate. The bitrate is the primary thing that will make your files large or small. Most music should be set between 128 and 190 bits. Most talk and spoken word pieces should be between 32 and 64. When

you are trying to really save bandwidth you can use as little as 16, but it will not sound good. For audio that will be rebroadcast over AM radio, a bitrate of 32 is fine. Because of it's file size, most people distribute audio files over the Internet as MP3s.

UPLOADING AND HOSTING YOUR FILES

There are two issues you will face in putting your audio files online. First is uploading your files, and the second one is hosting. Audio files are big, they require a lot of space on the server to host them, and then a lot of bandwidth when they are downloaded.

There are two primary ways in which you can upload files. The first option is to use your Web browser and a form with a file upload. This is the easiest way of uploading, and will work with all the sites mentioned below. The problem is that it requires a faster Internet connection. Web browsers are not great at posting large files over 50 megabytes: that's an hour-long MP3 at medium quality. Uploading from a Web browser does not, most of the time, give you a progress bar indicating time remaining, nor does it let you continue an upload if you lose your connection. Uploading using a Web browser over a dial up modem Internet connection is unlikely to work for files bigger than a megabyte or two.

The second way you can upload files is using an FTP client. FTP stands for File Transfer Protocol, and it's an application you can run to transfer files to websites and other servers. FTP allows for you to see your progress in uploading a file and restart transfers which get interrupted. If you have an unstable Internet connection, or are using a dial up connection, I highly recommend using FTP.

There are two sites profiled in this article that allow you to upload files using FTP, radio4all.net and archive.org.

So, now that we have talked about how to post your files online, we need to know where to put them. The first possibility is to just put them on the same server as your website, if you have one. There are two problems with this. First, most website hosting accounts have a limited amount of space. MP3s are smaller than lossless formats like WAV, but they are still huge in comparison to HTML and images. Many accounts only provide 100 megs of storage. While that's plenty for websites, it's less than 2 hours of decent quality audio. It is really important that you understand how you pay for bandwidth. Many accounts allow up to several gigabytes of traffic a month, but after that you have to pay fairly steep overuse penalties. If your audio becomes popular, this could run up a bill of hundreds or thousands of dollars.

IF HOSTING YOUR FILES ON YOUR OWN SERVER IS NOT A GOOD IDEA, WHERE CAN YOU HOST THEM?

There are a few options:

- Archive.org - The Internet Archive has a section for hosting large multimedia files provided they are licensed under a Creative Commons license. The system supports both Web and FTP upload. Archive.org also supports automatic transcoding to high and low quality versions of your files to support people with low bandwidth connections. The only downside to using archive.org is the rather slow signup and cumbersome process for uploading and categorizing the files. Archive.org does not create podcast feeds automatically for easy distribution of your files. Archive.org receives some support from Amazon.com's Alexa search engine and as a result has very good bandwidth and extensive capacity to handle files. There is a wait period of a day or two between when you apply for an account and get approved.
- OurMedia - OurMedia uses archive.org and you must have both accounts to use OurMedia. What OurMedia provides is an easier and cleaner interface to archive.org and the ability to create your own page listing your audio contributions.
- radio4all - A community radio site for sharing community radio programs. Radio4all is unfunded and grassroots, but it has been around for a long time and provides an easy interface for uploading via the Web and FTP. It works well and automatically generates podcast feeds for you as well as allowing direct linking to the MP3s. Radio4all is primarily aimed at sharing radio programmes and has limited bandwidth for their servers. Their service works well, but they are overtaxed and often serve files slowly.
- Radio.indymedia.org - And other Indymedia servers. Indymedia is an activist network that allows anybody to post audio, text, photos, and video about social justice related issues. You can use the Web form to post files to your local Indymedia site and then link to them from your website. Some Indymedias generate a single podcast feed of all audio posted, but it doesn't let you build your own specific feed or update the files once they have been posted. In terms of capacity, Indymedia is somewhere between radio4all and archive.org.
- Odeo.com - A commercial service which is provided for podcasting and audio sharing

over the Internet. Odeo allows free uploading of files to their servers. Odeo lets you link directly to the MP3, but also generates many flash players for listening to your audio from within your webpage. Odeo keeps simple stats on the plays via streaming and download. By default Odeo places a 'bumper' with Odeo branding on uploaded files, but if you request, this can be removed for all NGOs.

- Others - There are many other places you can host audio content on the Internet. The primary things you should be looking for are the following: Can I post things easily, via FTP or through the Web? Can I edit my files once they are posted? Will it automatically make low quality versions for easy download? Will it generate podcast feeds or is that a separate step? Many applications such as Drupal, Loudblog and WordPress support file uploading and generating podcasts, but you need to make sure that your bandwidth costs stay under control.

PODCASTING

What is podcasting? It's a way of distributing audio files automatically over the Internet. Think of it as your favourite radio programme getting downloaded whenever a new episode is released. It is easy to do and has become very popular in the last year. Many people have become 'podcasters' and like community radio DJs and journalists they have created their own radio-like programmes. Many podcasts are actually repurposed radio programmes that are distributed over the Internet rather than the airwaves. Podcasting is popular because you can put the programmes on your computer or portable MP3 player, like an iPod, for later listening. Although it is not actually broadcasting, you don't need an iPod to do it, and Apple was not at all involved in the creation of podcasting, the name stuck as an abbreviation of i-pod-broad-casting.

GETTING PODCASTS

There are a lot of applications you can use to listen to podcasts. The first application that started podcasting is the open source Juice client. It works on Mac, Windows, and Linux. There are many others, but the one I recommend is Songbird (songbirdnest.com) which is a cross-platform open source music player with podcast client capability. It's the open source version of iTunes. With either of these or other clients you need to subscribe to a feed. It's a special RSS file that just has a list of the most recent episodes, with links. The client automatically downloads the latest shows and puts them in to your MP3 library. Juice puts it in iTunes or an XMMS play list, while Songbird has it's own MP3 library. When you want to listen to a show, it's already downloaded. You can also automatically transfer it to your portable MP3 player. This makes the process of finding and keeping up to date with many podcasts (radio programmes) easy.

MAKING PODCASTS

To make a podcast you need two things. First you need to have your audio files up on the Internet. Secondly you need to make something called a podcast RSS feed which has 'enclosures'. An RSS file is a machine readable format that lists articles, blog posts, or related content. Each article can have something called an enclosure, which is a link to a file. All a podcast file is, is a specific format for linking to a list of your audio files. Many applications automatically create podcast feeds if you link to an MP3. Those include WordPress and Drupal. Other times your software will not support it automatically. If you have an RSS feed already for your site, you can link to your MP3s and then provide that feed to feedburner.com which will 'podcastify' it for you. Once you have a podcast feed you need to include a link to it and submit it to podcast directories so people can find your audio content.

CONCLUSION

Whilst getting your audio out there on the net still takes some technical skills the bar is being lowered everyday. With a bit of patience and work you can take advantage of these new technologies to bypass the traditional media gatekeepers and get your voice heard.

