

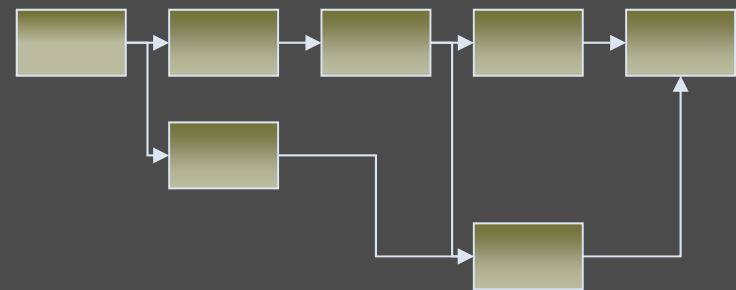
Legal & Effective Graphics

Chicago eLearning & Technology Showcase

Pete Hybert, *principal consultant*

Ian Hybert, *project manager*

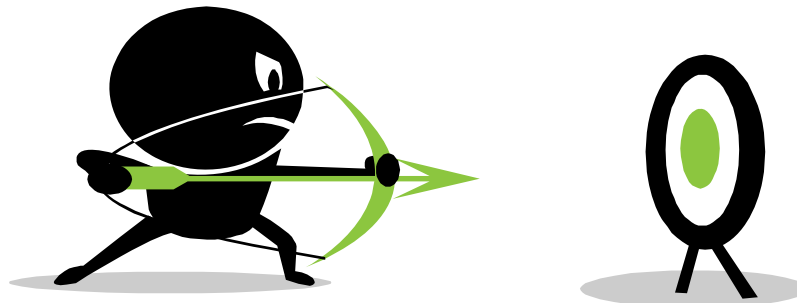
PRH Consulting Inc.
20 Danada Square West, #102
Wheaton, IL 60189
phone: 630.682.1649
web: www.prhconsulting.com



leveraging know-how for performance! ®

Purpose and Objectives

- Goals**
- Determine whether a given use of a graphic is allowed
 - Select the appropriate type of graphic for use in different situations
 - Create a .gif, whiteboard animation, and infographic



Assumptions

Application

- Informational presentation – for legal advice, consult an attorney

- Focus on performance
- Company policies may vary
- Technical capability may vary

Target audience

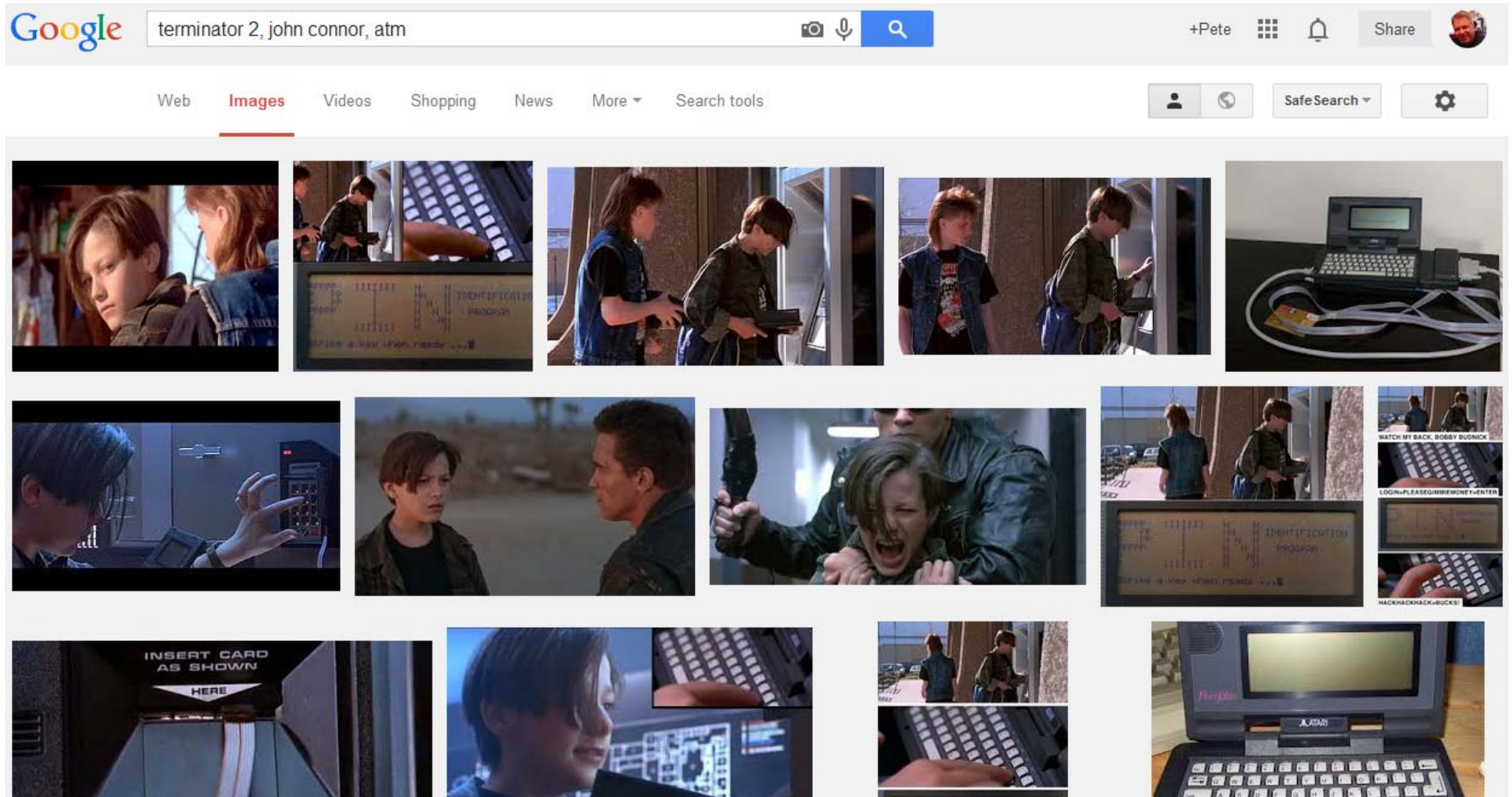
- Training designers/developers
- Managers
- Consultants

The Situation



- Customer expectations
- eLearning should be
 - Visually appealing and impressive
 - Detailed and realistic
 - Low cost or free

Option 1: Just Grab it Off the Internet



Option 1: Just Grab it Off the Internet

“It’s Easy!”



“No one is
going to find
out”

“Everybody does it”



Option 2: Build Your Own

Software



Time



Option 3: Use Graphics Legally

You Hold Copyright

- Created by you
- Rights reserved

Not Protected

- Public domain
- Government work
- Works from countries without trade agreement

Someone Else Holds Copyright

- Specific authorization or license
- General license (e.g., Creative Commons)
- Fair use

By Keith Allison from Owings Mills, USA (NBA Referees) [CC-BY-SA-2.0 (<http://creativecommons.org/licenses/by-sa/2.0>)], via Wikimedia Commons

What Can I Use?

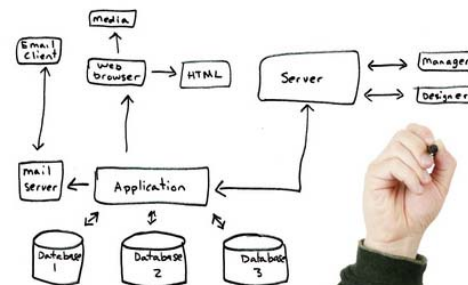
Overview of the rules of copyright, fair use, and public domain

What is Copyright?

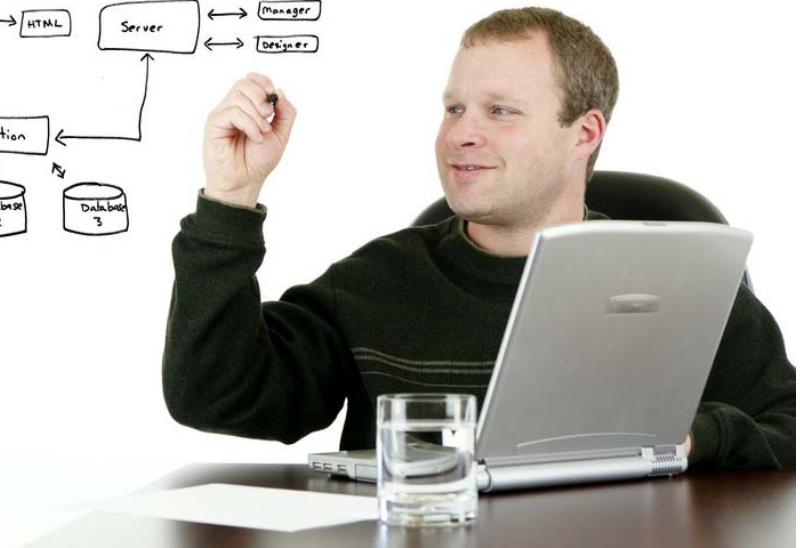
At what point does a work become copyrighted?

Copyright protection is **automatic** – no notification, registration, or publication is required to initiate it

Copyright is for original works of authorship but does not protect facts, ideas, systems, or methods of operation



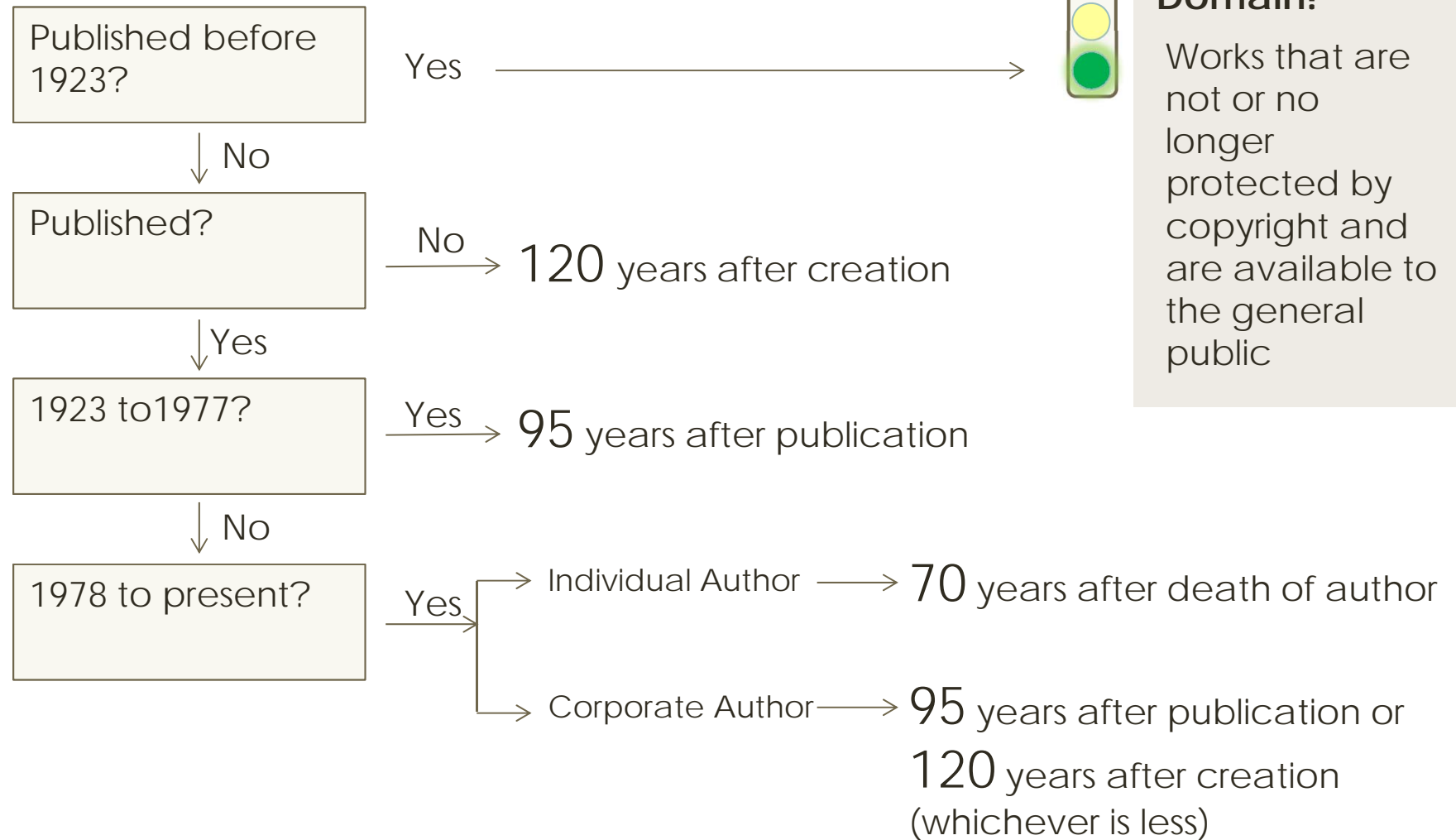
Prior to 2002, additional rules pertain regarding notification and registration.



You Own the Rights...Or Do You?

	Yes	No	Maybe
Work made for hire <ul style="list-style-type: none">• Employee• Freelancer			
A photo you took of <ul style="list-style-type: none">• A sports stadium (with visible logo)• A public figure• A crowd of people			

Public Domain – Written Works



Resource: <https://copyright.cornell.edu/resources/publicdomain.cfm>

Fair Use

Fair use is ultimately determined by a judge



- ☐ Purpose and character of use
- ☐ Nature of the work
- ☐ Amount/substantiality of work used relative to the total work
- ☐ Effect of the use upon the value of the work

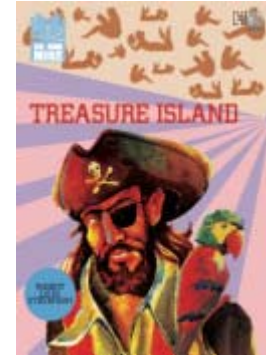


Examples of generally accepted fair use include teaching, criticism, research, scholarship, news reporting, and comment

Resource: https://copyright.cornell.edu/policies/docs/Fair_Use_Checklist.pdf

Is This Permitted?

Purpose: Print out chapter of “Treasure Island” to use in editing training for new journalists at the New York Times

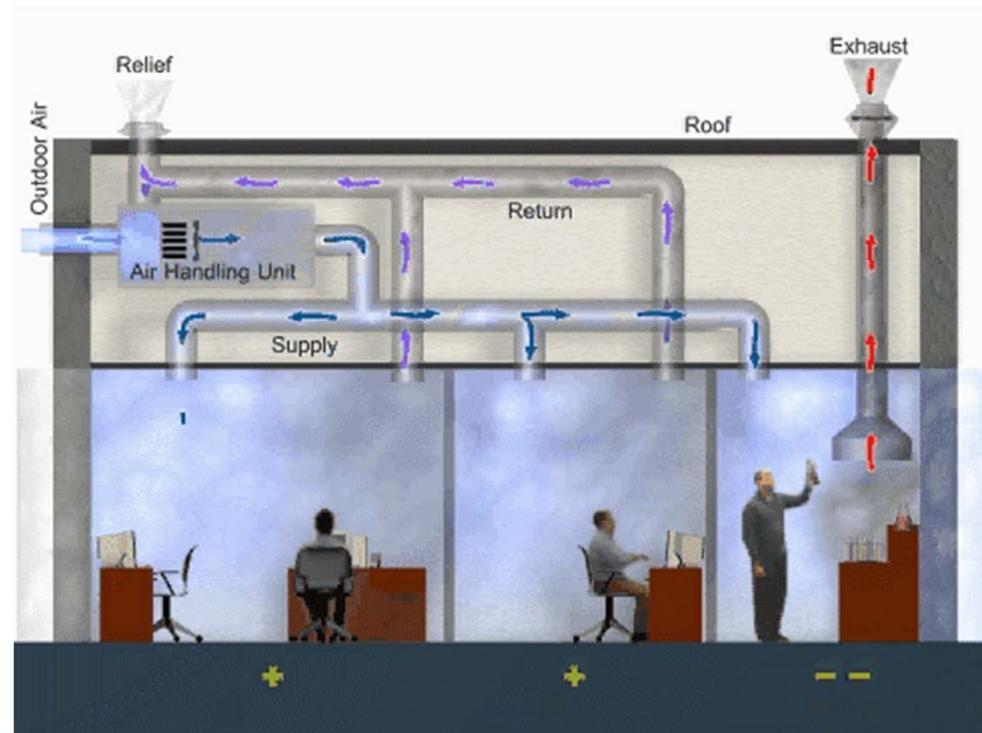


Yes

No

Is This Permitted?

Purpose: Use a gif published on an EPA site for a pay-to-view web-based training module



Yes

No

Is This Permitted?

Purpose: Show a 30 second clip from Ghostbusters to introduce an idea in our company orientation program



Yes

No

"Ghostbusters logo" by Self-traced in Adobe Illustrator. Licensed under Fair use of copyrighted material in the context of Ghostbusters (franchise) via Wikipedia - http://en.wikipedia.org/wiki/File:Ghostbusters_logo.svg#mediaviewer/File:Ghostbusters_logo.svg

Fair Use Myths

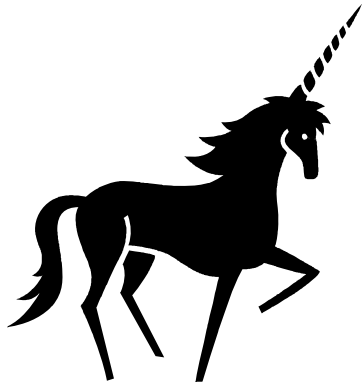
"As long as I include a source, I am covered."

"As long as I include a disclaimer, I am covered."

"I'm not trying to make money off of it...I'm covered..."

"As long as I add my own content to the work, I'm covered."

You are still making
a copy of a
protected work –
must qualify as
"fair use."



Is This Permitted?

Purpose: Use a photo you took of the “Aqua” building on title pages within an eLearning module

Yes

No









"Aqua Tower Chicago" by George Showman - <http://www.flickr.com/photos/gshowman/3668250139/> . Licensed under Creative Commons Attribution 2.0 via Wikimedia Commons - http://commons.wikimedia.org/wiki/File:Aqua_Tower_Chicago.jpg#mediaviewer/File:Aqua_Tower_Chicago.jpg

Licenses: Creative Commons

Creative Commons is a nonprofit organization that enables the sharing and use of creativity and knowledge through free legal tools.



License	Attribution (BY)	No Derivs (ND)	Share-Alike (SA)	Non-Commercial (NC)
	X			
	X	X		
	X		X	
	X			X
	X		X	X
	X	X		X

Resource: <http://creativecommons.org/licenses/>

Typical “Royalty-Free” Requirements

“Royalty free” may not mean free –there may still be fees and other limitations

- Limitation on usage
- Limitation on media or number of copies (if printed)
- Fee to download, based on image size
- Pay for set number of images (credits) or subscription access
- Prohibition on using for templates or logos

Make sure you check for specific license requirements when downloading clipart or photos from sites on the web

Example: <http://www.istockphoto.com/license.php>



But, there are free resources

- <http://www.cler.com>
- <https://openclipart.org/royalty-free-clipart>

Instructional Considerations

Clarity Beats Complexity

- Understand performance requirements
 - Emphasize the key characteristics
 - Eliminate unnecessary complexity
-

Example: <http://www.historicalfirearms.info/post/72485370963/cutaway-of-the-day-steyr-aug-steyrs-armee>

What Works?

For example:
Bandaging a Hand Injury



Which method was most effective? Why?

Adding arrows improved learning – both transformational graphics (B and C) were effective

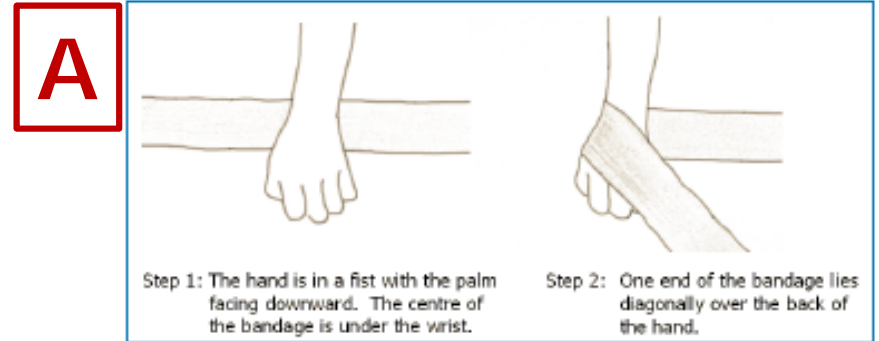


FIGURE 7 Line drawing with text to show a bandaging procedure. (From Michas and Berry, 2000)

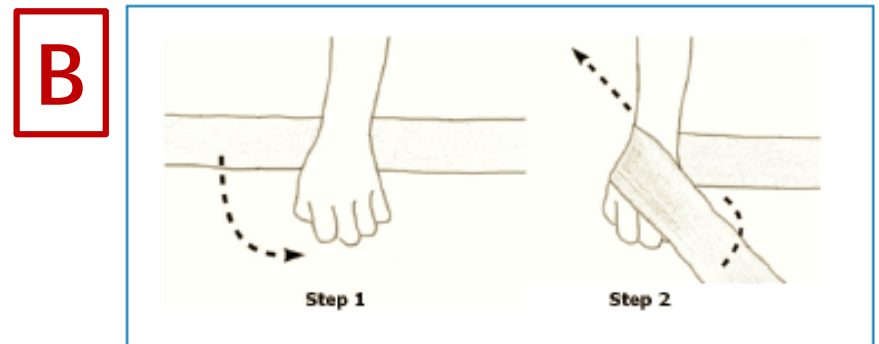


FIGURE 8 Line drawing with arrows to show a bandaging procedure (From Michas and Berry, 2000)



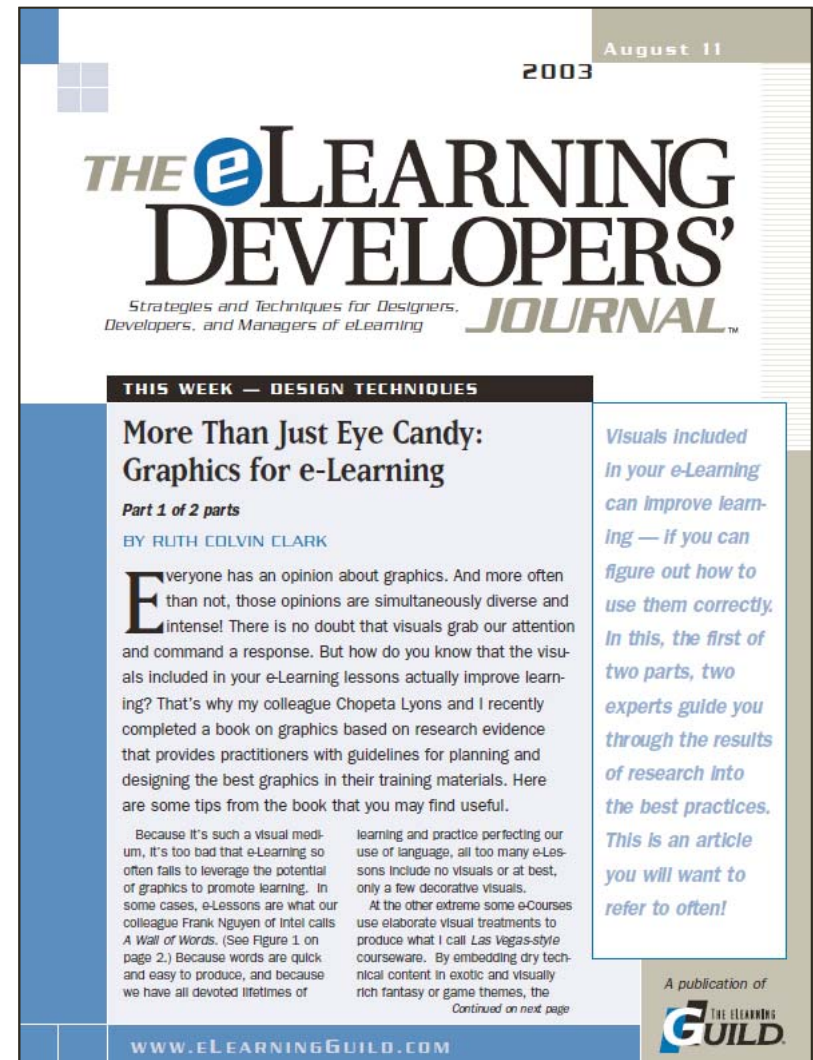
FIGURE 9 Video animation to show a bandaging procedure. (Adapted From Michas and Berry, 2000)

Source: “More Than Eye Candy,” Ruth Clark, 2003

Science of eLearning: Ruth Clark

Categories Graphic Functions

- Decorative
- Representative
- Mnemonic
- Organizational
- Relational
- Transformational
- Interpretive



Definitions

Source: Ruth Colvin Clark, *"More than Just Eye Candy: Graphics for e-Learning,"* The Elearning Developers Journal, August, 11, 2003.

TABLE 1 A communication taxonomy for graphics for Learning		
Function	A graphic used to:	Examples
Decorative	Add aesthetic appeal or humor	<ul style="list-style-type: none"> • Art on the cover of a book • Visual of a general in a military lesson on ammunition
Representational	Depict an object in a realistic fashion	<ul style="list-style-type: none"> • A screen capture • A photograph of equipment
Mnemonic	Provide retrieval cues for factual information	<ul style="list-style-type: none"> • A picture of 10 forks stuck in a door to retrieve meaning of Spanish word for fork: Tenador
Organizational	Show qualitative relationships among content	<ul style="list-style-type: none"> • A two-dimensional course map
Relational	Show quantitative relationships among two or more variables	<ul style="list-style-type: none"> • A line graph • A pie chart
Transformational	Show changes in objects over time or space	<ul style="list-style-type: none"> • An animation of a weather cycle • A video showing how to operate equipment
Interpretive	Illustrate a theory or principle	<ul style="list-style-type: none"> • A schematic diagram of equipment • An animation of molecular movement

Which Graphic Function and Why?

Situation: Want to teach sales people what data to enter into a software estimating tool

Graphic Functions

- ☐ Decorative
- ☐ Representational
- ☐ Mnemonic
- ☐ Organizational
- ☐ Relational
- ☐ Transformational
- ☐ Interpretive

Which Graphic Function and Why?

Situation: You are training technicians to isolate components of a heating and cooling system for troubleshooting

Graphic Functions

- ☐ Decorative
- ☐ Representational
- ☐ Mnemonic
- ☐ Organizational
- ☐ Relational
- ☐ Transformational
- ☐ Interpretive



[Example Equipment](#)

Which Graphic Function and Why?

Situation: Want to illustrate project steps and interdependencies to a team

Graphic Functions

- ☐ Decorative
- ☐ Representational
- ☐ Mnemonic
- ☐ Organizational
- ☐ Relational
- ☐ Transformational
- ☐ Interpretive



[Example PERT Chart](#)

[Example Mfg Process](#)

Graphics Files Types

Type	Description	Pros & Cons
Graphic Interchange File (.gif, .gfa, .gff)	<ul style="list-style-type: none">• Lossless• Oldest format• Accepted by all browsers• Can include animation	<ul style="list-style-type: none">+ Best for flat color, sharp edge art or text+ Does support transparency- Max 256 colors (8-bit)- Poor for photos, gradients
Joint Photographic Experts Group (.jpg, jpeg, .jpe)	<ul style="list-style-type: none">• Lossy compression method• Designed to compress full-color nature images	<ul style="list-style-type: none">+ Use where small file size is needed+ Good for photos (up to 16 million colors)- Poor for text or line drawings- Does not support transparency- Can blur or distort flat color graphics
Bitmap (.bmp, .dib)	<ul style="list-style-type: none">• Maps pixels to color values	<ul style="list-style-type: none">- Large files- Poor scalability
Portable Network Graphic (.png)	<ul style="list-style-type: none">• Lossless• Replacement for GIF	<ul style="list-style-type: none">+ Better compression, smaller file size+ Good for true color imaging+ Best for line diagrams and text- No animation- Poor for photos
Scalable Vector Graphic (.svg)	<ul style="list-style-type: none">• 2-D animation• Defined in XML text file	<ul style="list-style-type: none">+ Scalability+ Used for games, web graphics
Tagged Image File Format (.tif)	<ul style="list-style-type: none">• Lossless	<ul style="list-style-type: none">+ Highest quality+ Max compatibility with photos, graphics- Large file size

For Comparison



PNG



GIF



JPG



BMP



For explanations and visual examples, visit the link below

<http://stackoverflow.com/questions/2336522/png-vs-gif-vs-jpeg-when-best-to-use>

<http://sixrevisions.com/graphics-design/jpeg-101-a-crash-course-guide-on-jpeg/>

How to Make Your Own

GIFs, Whiteboard Animations, Infographics

What is a GIF?

We've all seen GIFs, usually something humorous...

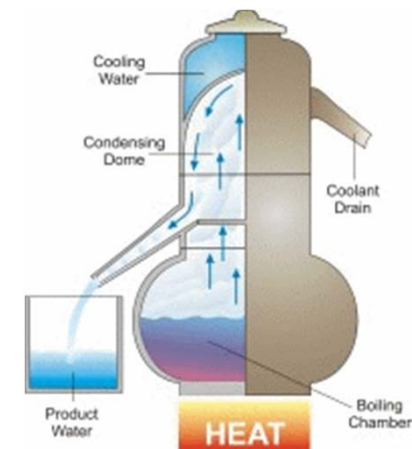


<http://imgur.com/LKlWcWH>




GIF animations won't play in Articulate Presenter

But in a training situation, they can be a good way to show a process at work



GIFs

Tool	Type	Cost	Pro's	Con's
Photoshop	Desktop	\$10/mo	Functionality Easy to use	Cost Learning Curve Prefers VLC and MP4
GIFBrewery	Desktop	\$5	Simple to use High quality	Mac Only
Jiffy	Browser-Based (Chrome only)	Free	Simple to use	Low functionality Uses YouTube as source Changes YouTube controls
Giffing Tool 	Desktop	PWYW	Easy to use Any video source	Windows only Questionable feedback
GIMP & GAP	Desktop	Free	High functionality	Prefers VLC and MP4
MakeaGIF.com	Browser-Based	Free	Multiple sources (e.g., stills, webcam)	Hosted on their site, but can download
Imgflip.com/gif generator	Browser-Based	Free or \$10/ mo	Multiple sources (e.g., stills) Full features	Watermark (small, removed with pro account)
Gifmaker.me	Browser-Based	Free	Can add music (YouTube)	Uses series of stills

Making a GIF Demo

Using Browser Tool (Make-a-GIF)

1. Decide your source and note duration and start time
2. Upload your stills, movie, or YouTube video
3. Set start time and duration, add description
4. Publish
5. Download if desired



If desired, upload to
<http://www.gfycat.com/> to reduce file size

[View sample
reduced GIF](#)

Free – Requires an account to make a
GIF longer than 5 seconds

Whiteboard Video

Actual video
shoot

D-I-Y

<http://www.whiteboardanimationshop.com/>



Videoscribe

<http://www.videoscribe.co>



iPad

Use AirDrop and Reflector app – not recommended

- Practice – “single take”
- Poor image
- Size is limited

InfoGraphic

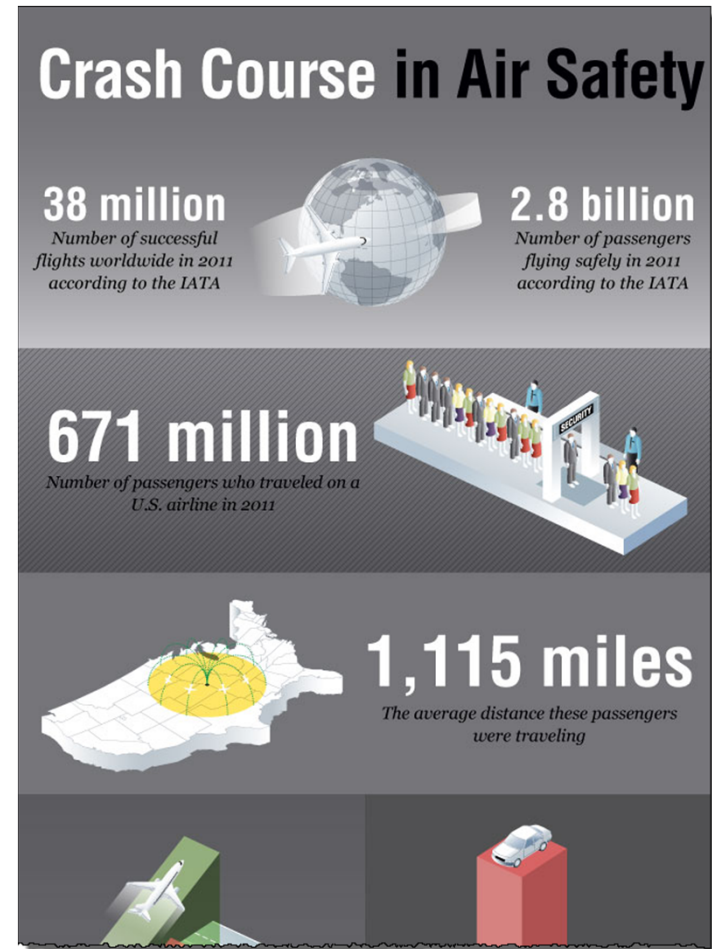


What are your thoughts on the utility of infographics for eLearning?

- Capture interest at the beginning of a module
- Summarize information on single page for reference
- Consolidate a large amount of detailed information



One key to effective infographics is good information – for statistics, see <https://developers.google.com/chart/>



Source:

<http://science.howstuffworks.com/transport/flight/modern/curiosity-aircraft-infographic.htm>

InfoGraphic

How to build infographics

Use Web Service

<http://piktochart.com/>

<http://infogr.am/>

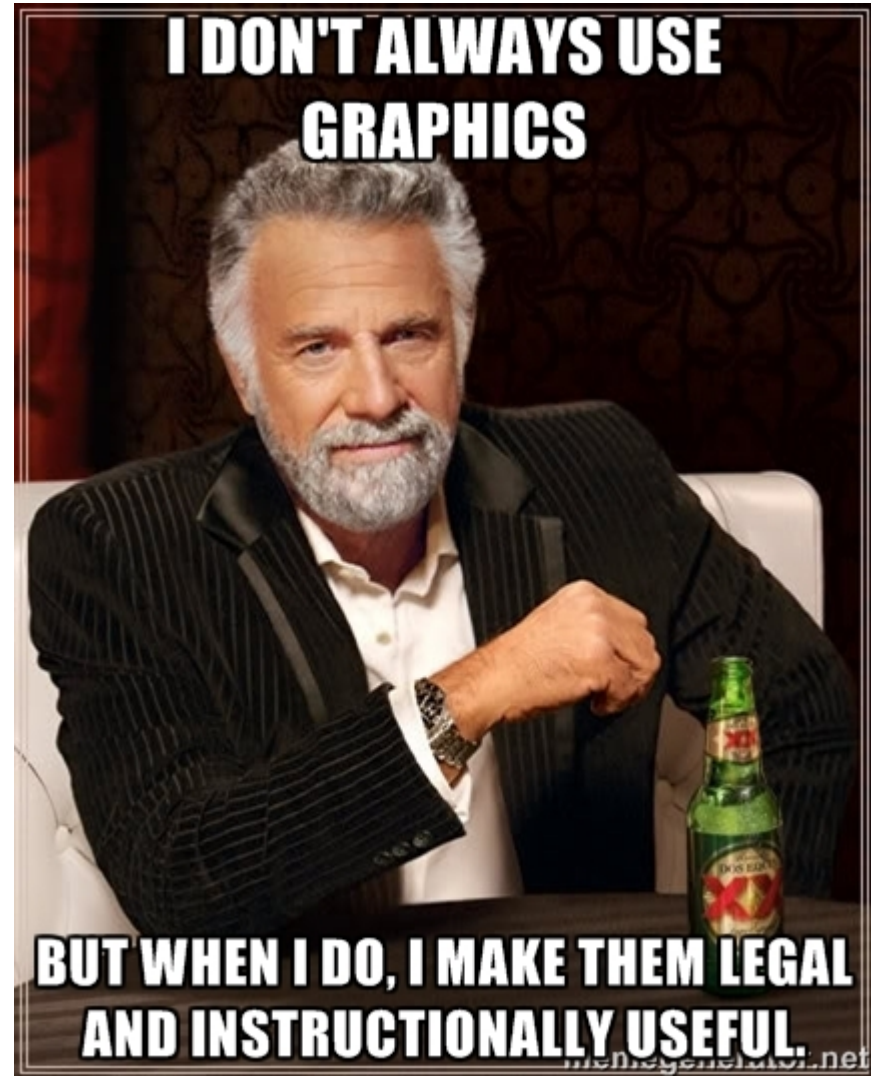
<http://www.easel.ly/>

Use Visio with Excel (or PPT)

- Custom size
- Export to pdf
- Can add links

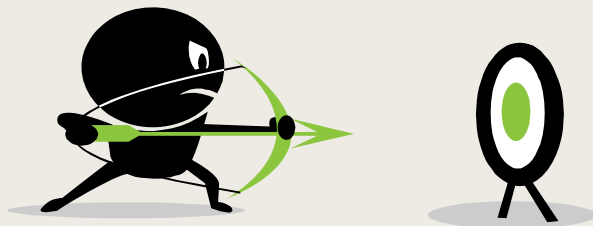
Graphics...

It's all fun and
games until
somebody gets
hurt



Evaluation and Session Goals

- We value your feedback. Please **complete the Breakout Session Evaluation** form before you leave.
- If this is the last session you plan to attend, turn over the form and **rate the entire event**.
- Return the form **to the room monitor** once you are finished.



Goals

- Determine whether a given use of a graphic is allowed
- Select the appropriate type of graphic for use in different situations
- Create a .gif, whiteboard animation, and infographic

Team Bios

PRH Consulting Background



Pete Hybert has been working in the field of human performance improvement and support since 1984 and a consultant since 1989. His clients include many well-known firms, including Eli Lilly, Siemens, Chrysler Financial, General Motors, AT&T, Fireman's Fund Insurance, Hewitt Associates, Hospira Worldwide, SPX Corporation, Huron Consulting, and others.

He has analyzed performance and designed and developed performance solutions for almost every type of business function and process. He has managed over two-hundred projects ranging from e-learning to group-paced simulations to performance-based qualification.

He is a Certified Performance Technologist (CPT).



Ian Hybert had been working off and on as a freelancer for over a year when he joined PRH Consulting as a full-time employee in the spring of 2008.

He graduated cum laude from Augustana College with majors in philosophy and political science in 2007. Upon graduation,

Ian was invited into the Phi Beta Kappa Society based upon academic achievement and leadership.

He has developed training for Siemens Building Technologies, Hospira Worldwide, Eli Lilly, and Hewitt.

PRH Consulting (2002 – Present) Role: Principal Consultant

Primary Responsibilities: Lead consultant on projects, development of methods and tools, marketing the business.

CADDI, Inc. (1998 – 2002) Role: Partner

Primary Responsibilities: Lead consultant on projects, development of methods for instructional design and qualification, and internal process improvement. Also oversaw information technology, finance, and consultant development and qualification processes.

SWI • Svenson & Wallace, Inc. (1989 – 1998) Role: Senior Consultant

Primary Responsibilities: Project team leader, job analysis, curriculum architecture design, client account management.

MCC Powers (1984 – 1989) Role: Sr. Instructional Specialist

Primary Responsibilities: Job analysis, curriculum design, course development, evaluation and test development.

PRH Consulting (2008 – Present)

Role: Project Manager and Developer

Primary Responsibilities: Track and communicate project progress using PRH Consulting website tools. Develop content, graphics, and quiz/test items.



www.prhconsulting.com/Chicago-eLearning

References

Copyright

[https://copyright.cornell.edu/policies/docs/Fair Use Checklist.pdf](https://copyright.cornell.edu/policies/docs/Fair_Use_Checklist.pdf)

<http://www.copyright.gov/help/faq/faq-fairuse.html>

<http://www.copyright.gov/title17/92chap1.html#107>

<https://copyright.cornell.edu/resources/publicdomain.cfm>

Instructional Effectiveness

http://www.clarktraining.com/content/articles/MoreThanEyeCandy_part1.pdf

http://www.syberworks.com/articles/10tips_graphics.htm

<http://www.42designsquare.com/elearning-blog/?p=83>

<http://www.articulate.com/rapid-elearning/here-are-ten-rules-to-create-engaging-elearning/>

Video

http://en.wikipedia.org/wiki/Comparison_of_container_formats

http://en.wikipedia.org/wiki/Video_file_format

http://en.wikipedia.org/wiki/Video_file_format

http://en.wikipedia.org/wiki/List_of_file_formats#Video

References, *continued*

Graphics

http://www.ehow.com/how_6284174_make-gif-files-videos.html

[http://www.reddit.com/r/mylittlepony/comments/1o5q61/i am making this faq so that i can link to it/](http://www.reddit.com/r/mylittlepony/comments/1o5q61/i_am_making_this_faq_so_that_i_can_link_to_it/)

<http://www.buzzfeed.com/katienotopoulos/how-to-make-a-gif-without-photoshop>

<http://lifehacker.com/the-complete-guide-to-making-animated-gifs-1503276993>

http://en.wikipedia.org/wiki/List_of_file_formats#Graphics

<http://design.tutsplus.com/articles/50-totally-free-lessons-in-graphic-design-theory--psd-2916>