You're Doing it Wrong:
Ten Rules to Break to Create Awesome Tutorials

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What learning "rule" do you break when creating online tutorials?

Your Turn
Rule 1:
State Learning Outcomes
Rule 2: Address Different Learning Styles
Students differ in their abilities, interests, and background knowledge but NOT in their learning styles. Students may have preferences about how they learn but no evidence suggests that catering to those preferences will lead to better learning.

(Riener & William, 2010)
Each search box (whether it be on the main page, or on any of the search forms in the Search By Content Type Menu) default to a Natural Language search. However, if a user enters a Boolean connector such as:

and, not, not w/n, not w/para, or, pre/n, pre/, w/, not w/seg, not w/sent, w/n, w/p, w/seg, w/s, atleast, allcaps, caps, nocaps, plural, singular

the search box will recognize the language and run a Boolean Search. Also, if the user narrows their search by date, uses any of the options on the Advanced Section, or types in a segment like PUBLICATION(), the search will run as Boolean.

Boolean search logic gives you the tools to construct sophisticated queries that have high recall (return almost all relevant documents in the database) and high precision (do not return many irrelevant documents). When combined with segment search techniques described in the Build Your Own Segment Search Box article, these tools become even more powerful.

From LexisNexis Academic
Visual Learner

<table>
<thead>
<tr>
<th></th>
<th>cats AND dogs</th>
<th>cats OR dogs</th>
<th>cats NOT dogs</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Description</strong></td>
<td>retrieves items that contain both terms</td>
<td>retrieves items that contain either term</td>
<td>retrieves items that contain only one term</td>
</tr>
</tbody>
</table>

http://sdcc.libguides.com/content.php?pid=311164&sid=2547421
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The design occurs at intersections where at least one road is a divided highway or boulevard, and left turns onto—and usually from—the divided highway are prohibited. In almost every case, the divided highway is multi-laned in both directions. When on the secondary road, drivers are directed to turn right. Within $\frac{1}{4}$ mile (400 m), they queue into a designated U-turn (or cross-over) lane in the median.

When traffic clears they complete the U-turn and go back through the intersection. Additionally, the U-turn lane is designed for one-way traffic. Similarly, traffic on the divided highway cannot turn left at an intersection with a cross street. Instead, drivers are instructed to "overshoot" the intersection, go through the U-turn lane, come back to the intersection from the opposite direction, and turn right.

When vehicles enter the cross-over area, unless markings on the ground indicate two turning lanes in the cross-over, drivers form one lane. A cross-over with two lanes is designed at high-volume cross-overs, or when the right lane turns onto an intersecting street. In this case, the right lane is reserved for vehicles completing the design. Most cross overs must be made large enough for semi-trailer trucks to complete the cross over. This large cross-over area often leads to two vehicles incorrectly lining up at a single cross-over.

http://en.wikipedia.org/wiki/Michigan_left
Text, Image, or Video?
Rule 3: Use Images

Types of Articles

**Popular Articles (Magazines)**
- Often written by journalists or professional writers for a general audience
- Use language easily understood by general readers
- Rarely give full citations for sources
- Written for the general public
- Tend to be shorter than journal articles

**Scholarly Articles (Journals)**
- Written by and for faculty, researchers or scholars (chemists, historians, doctors, artists, etc.)
- Use scholarly or technical language
- Tend to be longer articles about research
- Include full citations for sources
- Are often refereed or peer reviewed (articles are reviewed by an editor and other specialists before being accepted for publication)
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Rule 4: Use Audio and Text

Although copyright owners do have many rights, there are some exemptions to those rights. Section 110 of the US Copyright Law provides exemptions for educational purposes.

- Section 110(1) allows for displaying or performing entire works in face-to-face instruction.
- Section 110(2) allows for performing or displaying “reasonable and limited portions” of lawfully acquired copies of works in online instruction. Copyright still requires fair use or getting permission.
Audio and Text Research

Visual Text

Visual Text Plus Audio

Audio
Which is better?

Number of reattempts at interactive exercises

Visual Text

Visual Text Plus Audio

Audio
Are two sources needed?
Rule 5:
Treat Your Tutorial Like a Classroom

Stated Learning Outcomes
- Create a research strategy
- Identify different sources of information
- Find a book using the library catalog
Stated Learning Outcomes
• Create a research strategy
• Identify different sources of information
• Find a book using the library catalog

Actual Learning Outcomes
• Define the term research strategy
• Identify benefits of a research strategy
• Identify steps of a research strategy
• Define keywords
• Identify benefits of keywords
• Identify keywords for a given topic
• Define alternative terms
• Identify benefits of alternatives
• Determine when alternative words are needed
• List alternative words for keywords
• Explain how AND is used to combine search terms
• Explain how OR is used to combine search terms
• Explain how NOT is used to combine search terms
• Identify benefits of quality sources
• Identify where sources can be found
• Identify when to use a book
• Identify when to use a journal
• Identify when to use a database
• Identify when to use a website
• Identify when to use a newspaper
• Identify when to use a document
• Identify uses of the library catalog
• Describe how to find the library catalog
• Describe a catalog record
• Describe three ways to search the catalog
• Identify library catalog URL
• List the different steps for searching the catalog (appx 20 steps)
• Determine when a search needs to be refined
What is the optimal length for a tutorial?
Optimal Length

Preliminary edX video engagement findings

- Certificate-earning students
- All other students

Analysis by Philip Guo (pg@cs.rochester.edu)
Bite-Sized Tutorials

- Narrowing the Topic (5 mins.)
- Keyword Searching (5 mins)
- Boolean Operators (5-10 mins.)
- Different Types of Sources (3 mins)
- Evaluating Results (5-10 mins.)
Rule 6: Step-by-Step Instructions

![Learning Pyramid]

Source: National Training Laboratories, Bethel, Maine
Screen Casting: Good or Bad?
Guide on the Side
What eLearning software are you using?
Rule 7: Use an Academic Tone

Academic tone:
- Establishes authority
- Creates barriers

Non-academic tone:
- More fun
- Engaging
- Motivating
Fun Theory

SEARCHING THE LIBRARY CATALOG

Introduction
In this tutorial, you’ll learn how to use the UA Library Catalog.
Use the arrows below to navigate through the tutorial.
Using the page to your right, select UA Library Catalog.

SEARCH FOR A VARIETY OF SOURCES WITH SUMMON

What is Summon?
A unified search tool for finding print and electronic sources in the Libraries’ databases and catalog.
You can find a variety of sources with ONE Summon search.
One search to rule them all

Image: © Flagg Gemring
Rule 8: Use Knowledge Checks

Common Instruction

Tell

Test

Grade

Unmotivated Learner

Based on the information you learned in the last section, please answer this question:

- All of the above
- This isn't as effective!
- None of the above
Rule 8: Provide Knowledge Checks

Individualized Instruction

Tell and test

Test and tell

Active Learner
Apply Skills vs Testing

Assume you are looking East. Drag the Sun to where it would appear to set.

In Front of you

In Back of you
Scenario-based Training

How do you respond? (Click on your response)

“I’m very sorry, the check out period for bound journals is three days. This is to ensure everyone has equal access to the resource.”

“Ok, because you are Faculty, I will go ahead and check this out for three months.”

“How about if I check this out for two weeks which will allow me to confer with our librarians to see if they will allow this to circulate for three months. Would that be Ok?”
Rule 9: Use Menu Navigation

Does Your Menu Serve A Purpose?
Rule 9: Use Menus for Navigation

Does Your Menu Serve A Purpose?
Rule 9: Use Menu Navigation

Does Your Menu Serve A Purpose?
Rule 9: Use Menu Navigation

Does Your Menu Serve A Purpose?
Rule 9:
Use Menu Navigation

Minimize the number of Slides

Customer Service & Data Gathering
In this tutorial, you will learn about the importance of gathering qualitative data from our customers using strong customer service.

Begin
Rule 9:
Use Menu Navigation

Minimize the number of Slides
Guide Your User

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Rule 9:
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- Minimize the number of Slides
- Guide Your User
- Make Tutorials Engaging

Customer Service & Data Gathering

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Rule 9:
Use Menu Navigation

- Minimize the number of Slides
- Guide Your User
- Make Tutorials Engaging
- Make Tutorials Interactive

Customer Service & Data Gathering
In this tutorial, you will learn about the importance of gathering qualitative data from our customers using strong customer service.

Begin
Rule 10: Set Time Constraints

This tutorial should take you... 3 to complete
Rule 10:
Set Time Constraints

5 Min
30 min
1 hour
Rule 10: Set Time Constraints

[Diagram showing start and finish with a Self Pacing circle in the center]
Rule 10:
Set Time Constraints
Don’t Forget

• http://www.astd.org/Publications/Blogs/L-and-D-Blog/2012/05/Stop-Wasting-Resources-on-Learning-Styles


### Suggested Readings and References


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