

UNESCO “Training-the-Trainers” in Information Literacy Workshop

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PDF handout files for Session #1:

Theory-based, practical strategies for teaching information literacy

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Instructional Design defined

ADDIE - The generic term for the five-phase instructional design model consisting of Analysis, Design, Development, Implementation, and Evaluation. Each step has an outcome that feeds into the next step in the sequence. **The five phases of ADDIE are as follows:**

Analysis - During analysis, the designer identifies the learning problem, the goals and objectives, the audience's needs, existing knowledge, and any other relevant characteristics. Analysis also considers the learning environment, any constraints, the delivery options, and the timeline for the project.

Design - A systematic process of specifying learning objectives. Detailed storyboards and prototypes are often made, and the look and feel, graphic design, user-interface and content is determined here.

Development - The actual creation (production) of the content and learning materials based on the Design phase.

Implementation - During implementation, the plan is put into action and a procedure for training the learner and teacher is developed. Materials are delivered or distributed to the student group. After delivery, the effectiveness of the training materials is evaluated.

Evaluation - This phase consists of (1) formative and (2) summative evaluation. Formative evaluation is present in each stage of the ADDIE process. Summative evaluation consists of tests designed for criterion-related referenced items and providing opportunities for feedback from the users. Revisions are made as necessary.

Rapid prototyping (continual feedback) has sometimes been cited as a way to improve the generic ADDIE model.

Source: <http://www.learning-theories.com/addie-model.html>

See also: <http://ed.isu.edu/addie/analyze/analyze.html> Idaho State University. College of Education
<http://www.e-learningguru.com/knowledge.htm> E-Learning Guru.com Knowledge Centers

Adult learners are motivated by

- interest and relevancy of the topic to their life and work
- the reward realized by learning the information or task

What you can do to stimulate learning:

- Know your learners and why they need this training
- Answer questions and concerns that are important to them
- Address situation that limit their success

- Show them how to overcome barriers
- Build on what they know
- Solve real problems
- Give them time to share experiences and practice what they have learned
- Focus in on the specific tasks and information they need to know
- Offer resources (e.g., a bibliography, keyword, name of authority) so they can continue to learn.

Source: Hassell-Corbiell, R. (2001). *Developing training courses: A technical writer's guide to instructional design and development*. Tacoma, WA: Learning Edge Publishing, 42-44.

T-3 Basic Classroom Facilitation Outline (summary of Piskurich, 2006, 252-253)

- I. Introduction
 - a. Quality of a good facilitator
 - b. Basic presentation styles
- II. Adult learning principles
- III. Pre-class planning
 - a. Audience analysis
 - b. Effective design of instruction
 - c. Resources needed
 - d. Practice, practice, practice
 - i. Preparing the learning environment (e.g., equipment, room set up, handouts)
- IV. Delivery
 - a. Building rapport
 - b. Delivery (e.g., voice, vocabulary, eye contact, appearance)
- V. Using lesson plans (e.g., ice breakers, objectives, motivation, activities, summaries)
- VI. Strategies for leading lectures, discussion, and demonstrations
- VII. Question and answer sessions
- VIII. Collaborative learning
- IX. Using media (e.g., handouts, flip charts, computers, chalk boards, demonstrations)
- X. Evaluation (e.g., feedback from and to the learner)

Webliography

Association of College and Research Libraries (ACRL).

- <http://www.ala.org/ala/acrl/acrlissues/acrlinfolit/infolitstandards/standardstoolkit.cfm>
- Google keywords: ACRL "Information literacy"

Information literacy instruction in higher education: Trends and issues

- Eric Data base
- Google keyword: ED465375

Narrative of the Life of Frederick Douglass

- Google keyword: narrative of the life of Frederick Douglass
- <http://sunsite.berkeley.edu/Literature/Douglass/Autobiography/06.html> (Chapter 6)

Pew Internet and American Life Project

- <http://www.pewinternet.org/reports.asp>
- Google keywords: Pew internet reports

Spoof sites

- <http://www.telegraph.co.uk/connected/main.jhtml?xml=/connected/2007/11/17/dlweb17.xml>
- Google keywords: Telegraph spoof websites

Stanford Guidelines

- <http://credibility.stanford.edu/resources.html>
- Google keywords: web credibility

University of Maryland.

- http://www.umuc.edu/ewc/faculty/design_questions.shtml
- Google Keywords: UMUC developing assignments

Usability.gov

- <http://www.usability.gov/>
- Google keywords: usability.gov

Useit.com

- <http://www.useit.com/>
- Google keywords: use it

Vincent Flander's Websites that suck

- <http://www.webpagesthatsuck.com/>
- Google keywords: web sites that suck

Web Watch

- <http://www.consumerwebwatch.org/>
- Google keywords: web watch Consumers Reports

Publications on Instructional Design, Usability, and Training

American Society of Training and Development, *ASTD: Workplace learning and performance*. Retrieved May 27, 2008 from <http://www.astd.org/ASTD>

Clark, D. (2006, July 26). *Introduction to instructional system design*. Retrieved May 27, 2008 from, <http://www.nwlink.com/~donclark/hrd/sat.html>

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Furjanic, S.W. & L.A. Trotman (2000). *Turning training into learning: How to design and deliver programs that get results*. New York: AMACOM, American Management Association.

Gagne, R.M., L.J. Briggs, & W.W. Wager (1992). *Principles of instructional design, 4thed*. Belmont, CA: Wadsworth/Thomas Learning.

Information Architecture Institute. (2006). Retrieved May 27, 2008 from <http://iainstitute.org/>

Krug, Steve. *Don't Make Me Think: A Commonsense Approach to Web Usability, 2nd ed*. Indianapolis, Ind.: New Riders, 2005.

Lucas, R.W. (2003). *The Creative training idea book: Inspired tips and techniques for engaging and effective learning*. New York, NY: AMACOM, American Management Association.

Nielsen, J. (2008) *Jakob Nielson on usability and design*. Retrieved May 27, 2008 from <http://www.useit.com/>

Ryder , M. (2006, September 3). *Instructional design models*. Retrieved May 27, 2008 from University of Colorado at Denver Web site: http://carbon.cudenver.edu/~mryder/itc_data/idmodels.html

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Instructions for giving Instructions

Instruction / product overview: The opening section offers an overview of the purpose, importance, benefits, and even limitations of doing the process.

If you are explaining a mechanical process, the introduction can also provide a brief theory of operation that explains the general principles on which the device operates (e.g., mechanical principles, laws, codes, specification, professional standards).

The introduction often explains why it is important to follow the instructions and urges the reader to do so. The consequences of not following instructions may also be noted.

The opening can be used to project the expectations or benefits the person completing the process might have during and at the completion of the process.



Page Design Tip: Use information hierarchy. Put the most important information in larger font , **highlight it**, box it, or **bold it** to make it stand out. You can use page design to emphasize information. Do not over use emphasis devices as it can become annoying to the reader.

Putting a graphic next to an idea draws attention to the idea and creates a visual bookmark for the reader to use to retrieve the information.

Use wider margins and more white space if the material is challenging to understand.

For digital media, use a sans serif font such as Verdana, Tahoma, Arial. For print media, use Calibri, or a serif font such as Times New Roman or Courier New. The serif helps the eye move across the page.

Use left justification and ragged right margins for improved readability.

Chunk and cluster related ideas to create a visual connection between ideas.

List format speeds reading and helps users read step by step through the process.

Graphics: You may use graphics such as a flow chart, mind map, or illustration of an object to provide an overview that names the key parts of the process. Number and name the graphic and refer to it in your text (see Figure 1). For example, this could be a flow chart (see figure 1) or a descriptive graphic (see figure 2).

Always refer to the graphic in the instructions and place the graphic as close as possible to the idea it illustrates.

Be sure to front load your graphics so the reader has them as a reference point in the text. If you are going to use specialized names, graphics may be used to establish the vocabulary. Use the same vocabulary in your graphics that you use in your text.

Do not use graphics as decoration if they confuse the user. If you are describing a technical process, make sure your graphics are accurate and to scale. Typically people will look at the graphics and not bother to read the text unless they are having problems understanding the process.

Do not use copy right protected graphics without permission.

Figure 1: Introduction flowchart

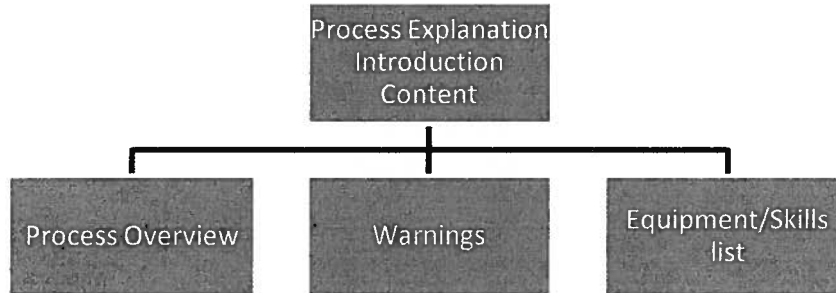


Figure 2: Explanatory graphic





Warning: Cautions, warnings, or alerts are always “frontloaded” and set off in a way to draw attention to them. There may be a series of alerts from “notes” to “cautions” to “warnings,” each with a different degree of danger or harm noted.

You may emphasize warnings by using a bulleted list or using an appropriate symbol to mark them off from the text.

Warnings alert the reader to all reasonable and possible harm and hazards and tell them of any special conditions that must exist during the process.



The warnings and cautions are often written by legal personnel or subject matter experts because they create or reduce liability.

Expertise: You may want to designate the level of difficulty for the instructions (e.g., beginner, intermediate, expert). If any special expertise, certification, licensing, or experience are needed to complete the process, you should note this up front so users will know whether to continue with the instructions or not.

Equipment: List all the necessary tools, supplies, and other equipment needed in order to complete the process. Be specific in your descriptions (e.g., Do not just say “screwdriver.” Instead, designate a Phillips head or standard screw driver). This section can also include the product or systems’ specifications.

Major steps preview: If it is a longer process explanation, forecast the major steps or categories of work that the process involves. This section lists the major steps so the reader can understand exactly what to expect in terms of how much work, time, or what types of support systems are required.

Required steps: For longer processes, break the procedure explanation into subdivisions of action or completion. You may determine these sections based on major units of the equipment or the time frame or setting of the work.

This section can be chronological (e.g., getting started, step one, etc.) , spatial (e.g., top to bottom, side to side), general to specific, or ergonomic in organization (e.g., assembling the handle, connecting one part to another, testing the success at each stage, or completing the final step).

1. Use heading and lists to organize the material. This
 - Allows the user to scan read the document and avoid “dense text” blocks of reading
 - Presents the process in single units of action or thought.
2. Insert graphics as you move through the text, especially for difficult sections of the operation where a picture can help to clarify the action or idea described.
 - Number and name each graphic (e.g. see figure 1).
 - Place the graphic as close as possible to the idea it illustrates

3. Use numbers if the sequence is long or very detail oriented. Use bullets if the list is short.

Interim summary: If the explanation is long or complicated, you can provide a periodic summary of the progress along the way to help readers / users check their progress. These can take the form of:

- Testing performance (e.g. at this stage you will see a red light blinking on the machine),
- Positioning a product to get ready for the next stage (e.g. remove the club shaft from the vise and place the club head on the floor so you can begin applying the grip), or
- Letting something wait until the next stage is ready (e.g. allow the glue to dry to insure a proper fit).

Summaries can be positioned in places where the reader/user can take a break from the process without causing harm.



Remember! Caution! Warning! Attention! Insert these various levels of alert directly before any step in the process that requires them. Be specific in your warning and offer the logic to back up your advice so your reader will not ignore the instructions.

4. Continue with your required steps providing details that allow the reader to mentally and graphically “see” how the process is performed.

Conclusion: Restate the benefits of completing the process and summarize what the person should have gained as a result of the doing the process (e.g. you should now be able to use the Gizmo II to).

Optional portions of a process explanation:

Trouble shooting guide – This is not a required part of a set of instructions, but it can offer advice on problem solving in areas of difficulty that most people may experience. This section may be used to:

- Offer help or technical assistance call line or web pages.
- Refer the user to specialist if any serious problem should arise with the produce being sure to – once again – warn users of any hazards that are beyond their expertise to handle.

Glossary - This section provides a definition of any specialized terms that some users may need help understanding.

- If most users understand the term, do not break the flow of the writing to offer a definition in the text of the process explanation; instead, use the glossary to provide the information to the non-traditional reader / user.
- Alert readers to the glossary at the beginning of the description and use some kind of alert mechanism (e.g. italics, asterisk or bold) to let the reader know the term is defined in the glossary at the end of the process explanation.