

Theory-based, practical strategies for teaching information literacy

Session I: UNESCO / Training the Trainers Workshop
Bibliotheca Alexandrina

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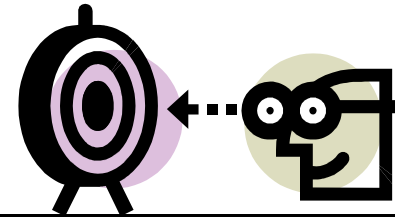
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Our goal

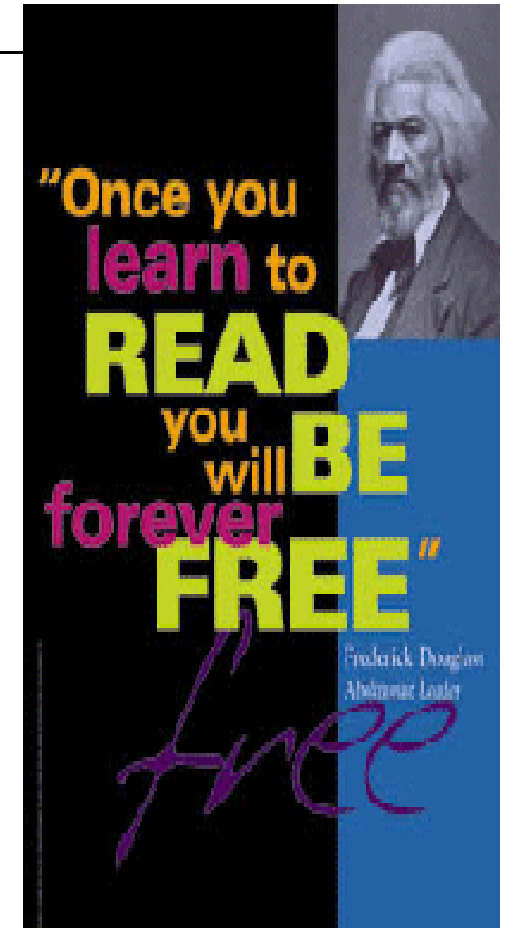


- Not to cover all the material, but to point you to **further reading**
- To consider instructional design and training **strategies**
- **Practice** some basic ID principles

Narrative of the Life of Frederick Douglass

Chapter 6 [see bibliography](#)

"...I understood the pathway from slavery to freedom.... I was gladdened by the invaluable instruction.... Though conscious of the difficulty of learning without a teacher, I set out with high hope, and a fixed purpose, at whatever cost of trouble, to learn how to read."



How to be a great trainer in one minute

□ **What is “instructional design”?**



□ **Training-the-trainer(T-3)** see handout

- T-3 workshop should practice the whole ID cycle for IL
- We will focus on just a few aspects of ID

□ **Bibliography** see handout



Instructional Design /Training sources

(see bibliography)

- ❑ **usability.gov** (gateway to digital design)
- ❑ **George Piskurich** (instructional design guru)
- ❑ **Harold Stolovich /ASTD Press** (training)
- ❑ **Florida Gulf Coast University** (online instruction)
- ❑ **Useit.com** (Jakob Nielsen and usability)

Basic ID model

ADDIE

see handout

A - Analysis

D - Design

D - Development

I - Implementation

E - Evaluation





“Instructional Design”

keyword search

- **Have specific learning goals**
- **Plan a learning progression**
- **Use the appropriate methods/media**
- **Practice effective teaching strategies**
- **Evaluate your success and failure**

Education and Training

Have different goals and strategies

- **Education** – How many planets are there in our solar system?
- **Training** – How do I do a Boolean search to find out how many planets are in our solar system?





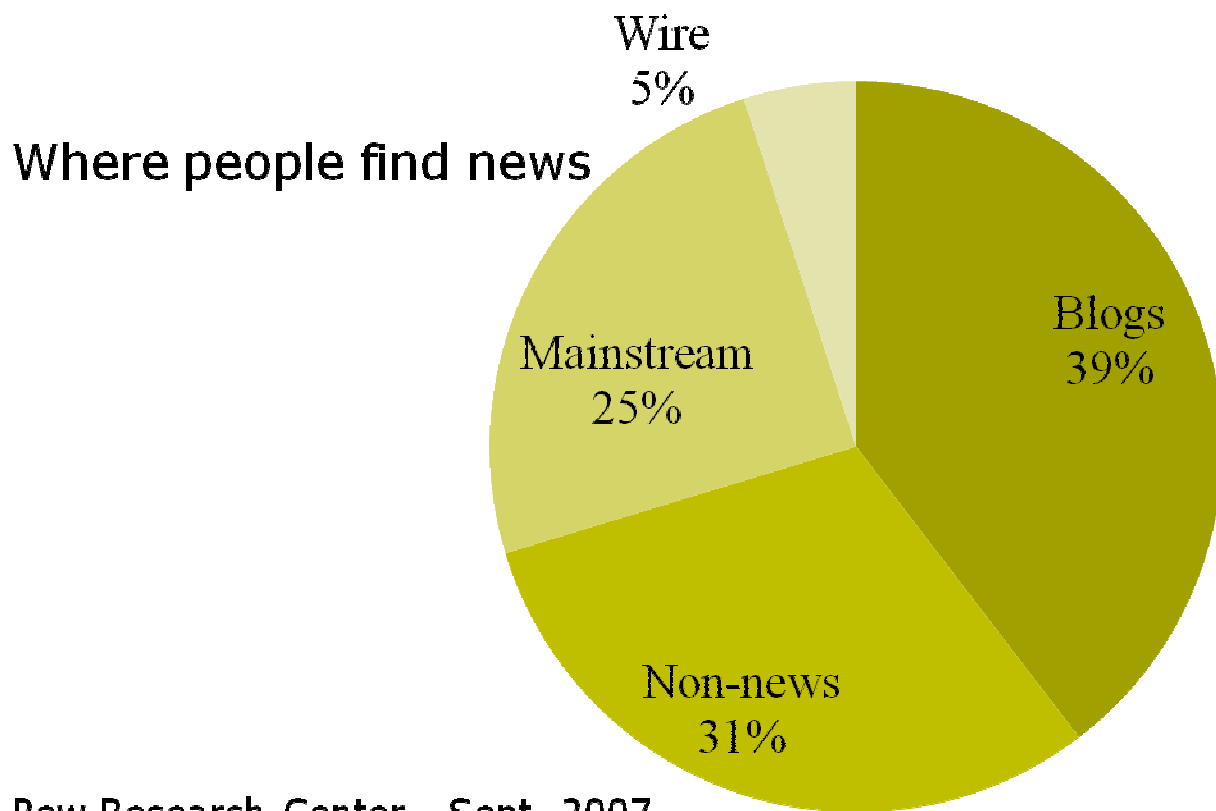
Creating Information Literacy Instruction

- Instructional design should guide your IL education and training

- Effective IL instruction should be
 - Systematic
 - Cumulative
 - Comprehensive
 - Not limited to libraries

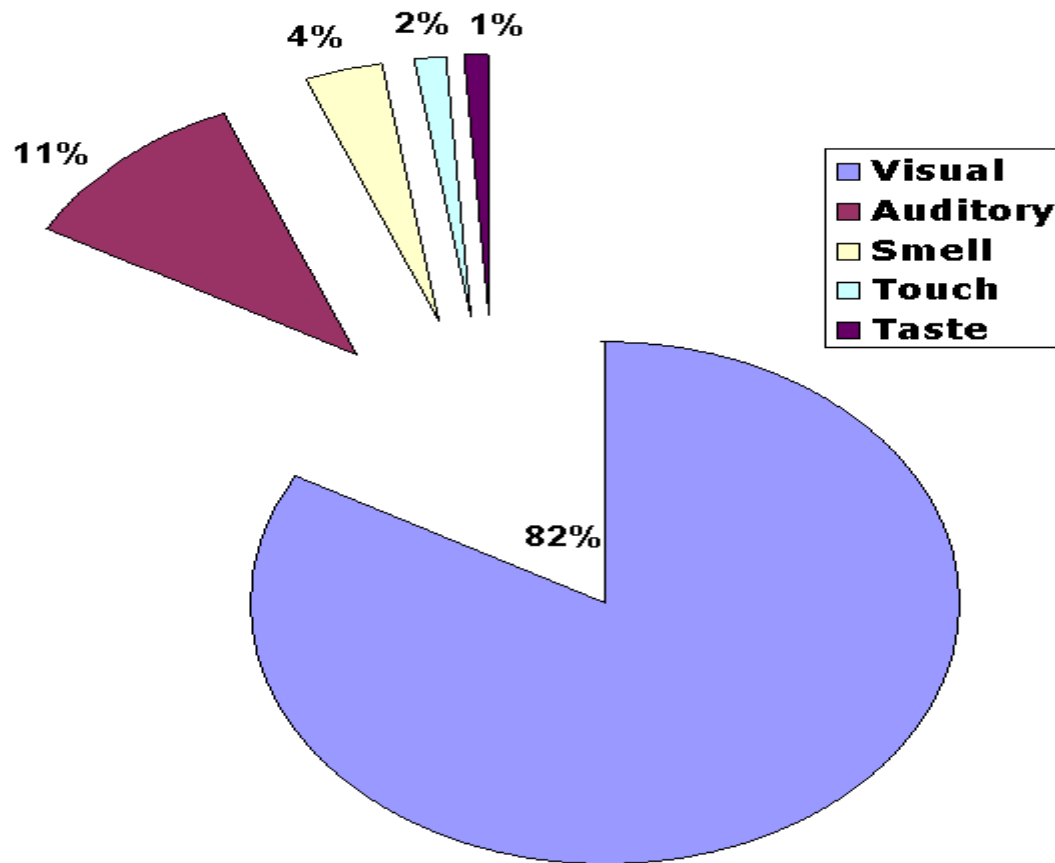
How do people self-instruct?

User-Driven News Sites



Pew Research Center , Sept. 2007

What trainers need to know



Most people are visual learners



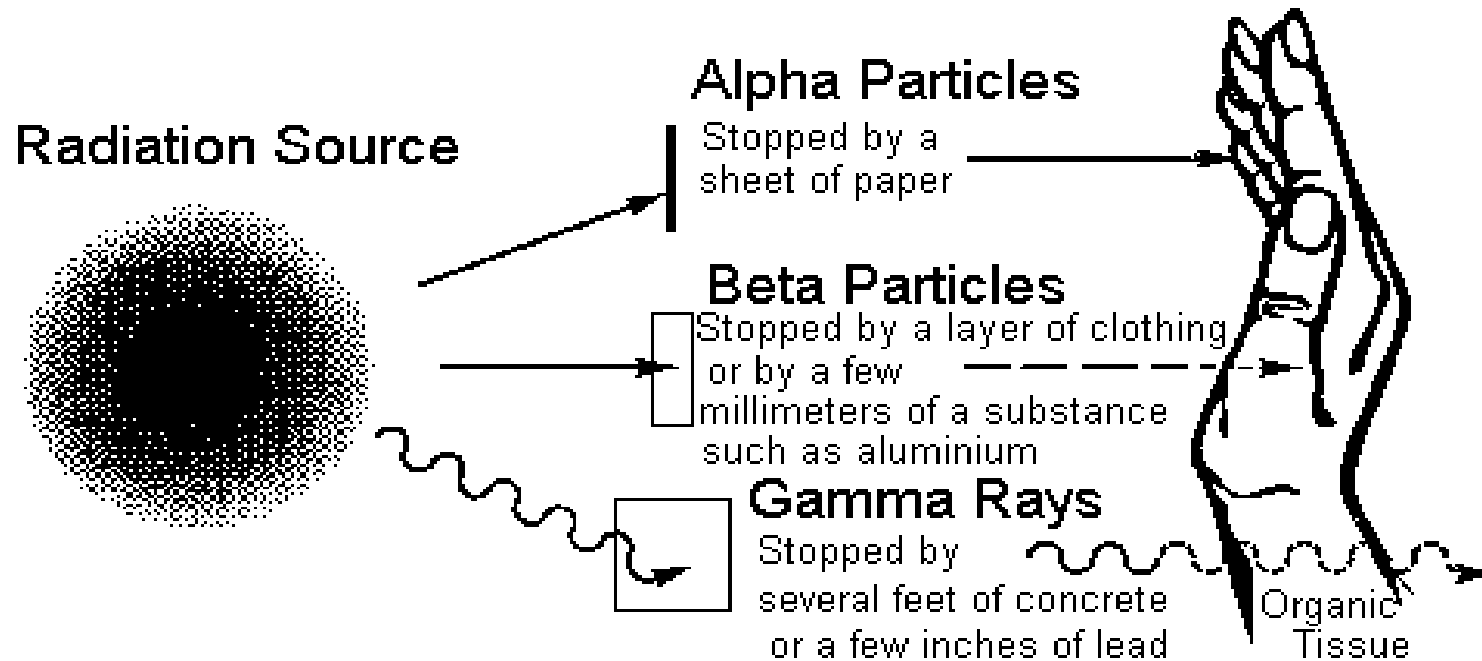
Learning by just reading

There are three main types of ionizing radiation. They may be found in sources of man-made radiation as well as natural radiation sources. They are called: alpha, beta, gamma.

- **Alpha radiation** can be shielded by a sheet of paper or by human skin.
- **Beta radiation** particles cannot be stopped by a sheet of paper. Some beta particles can be stopped by human skin, but some need a thicker shield (like wood) to stop them.
- **Gamma rays** are the most penetrating of the three types of radiation listed here. Gamma rays usually accompany beta, and some alpha rays. Gamma rays will penetrate paper, skin, wood, and other substances. To protect yourself from gamma rays, you need a shield at least as thick as a concrete wall.

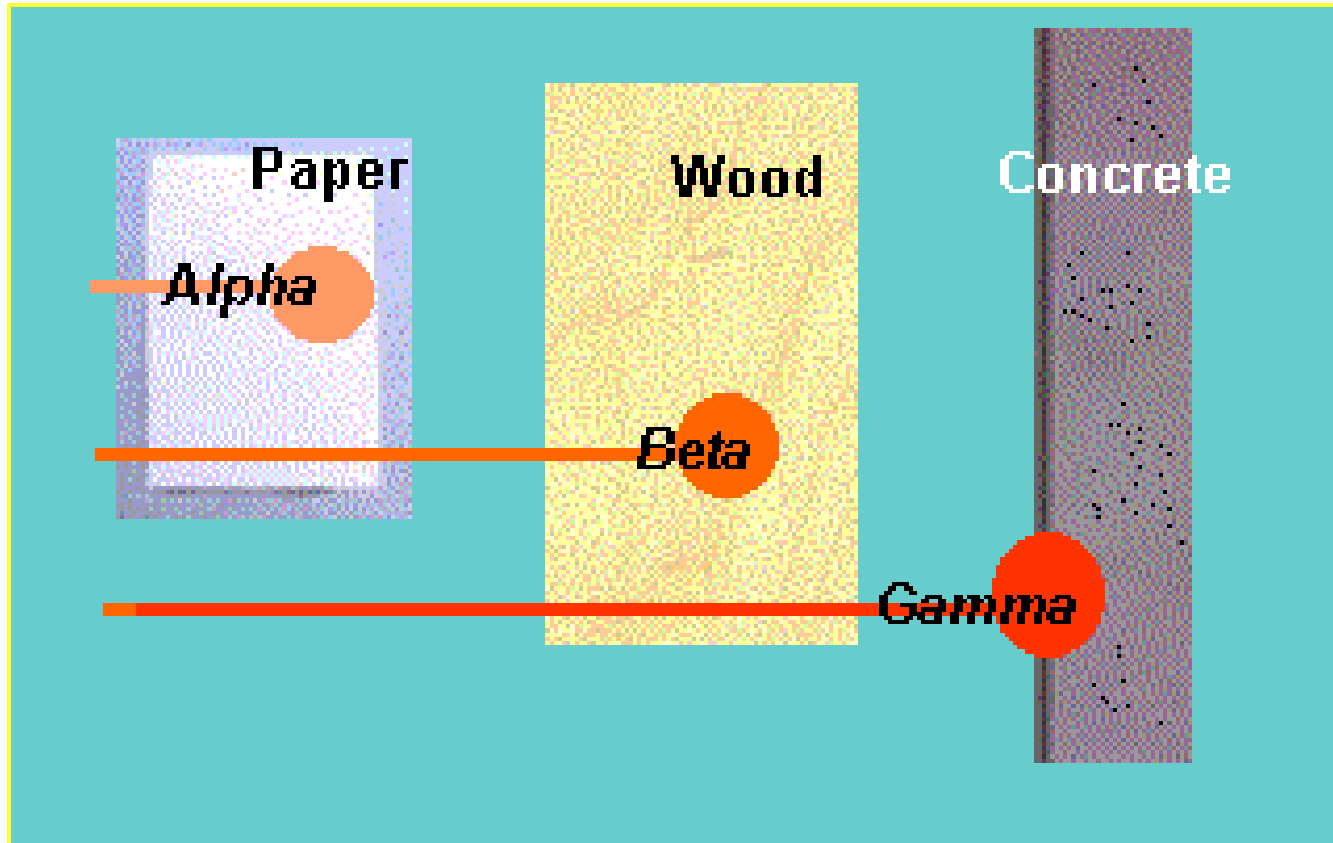
Visual Design to anchor learning

Source: <http://www.epa.gov/radiation/docs/ionize/graphics/ionize1.gif>



Visual design to help learning

Source: <http://www.epa.gov/radiation/students/graphics/alpha.gif>



More visual design

Source: http://www.deq.state.id.us/inl_oversight/radiation/images/alpha_beta.jpg



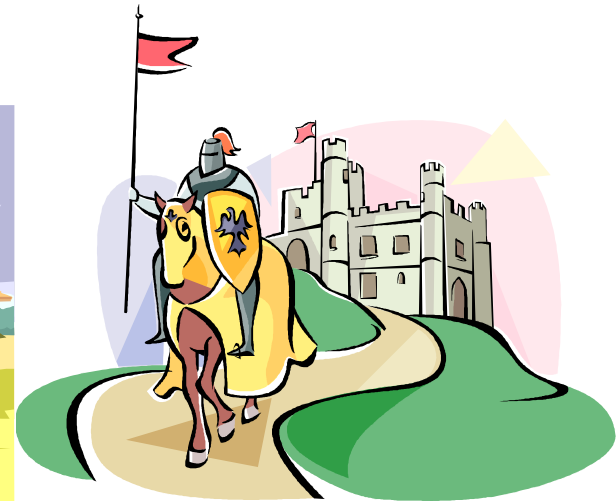
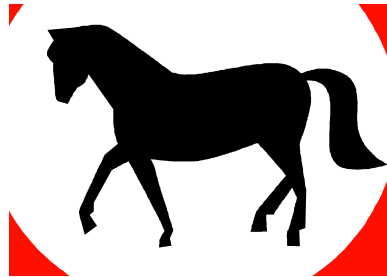
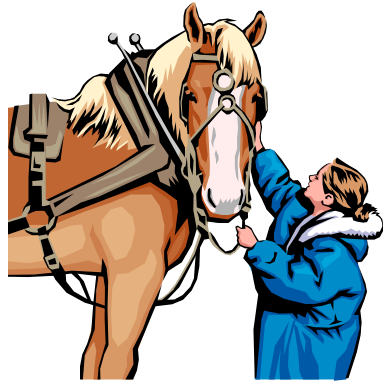


Visual learning is more than showing pictures

Assignment:

- Trust me (this might be the hardest part)
- Close your eyes
- Picture a horse
- Open your eyes
- What did your horse look like?

Which horse was your horse?
What can we learn from this?





Tip #1

Make the abstract concrete **1 billion**

Dateline Amman :

“Jordanian Prime Minister Nader Dahabi ...
launched a project for building a 335-kilometre
water pipeline that was due to pump 100 million
cubic metres of water annually from the Disi area
near the Saudi border to Amman at an estimated
cost of **1 billion dollars.**”

Middle East News Aug 3, 2008



Making 1,000,000,000 dollars concrete

Tell learners that

- A billion seconds ago it was 1959
 - Pipeline costs
 - One dollar per second for 50 years
 - Sixty dollars an hour

- A billion hours ago our ancestors were living in the Stone Age.



Tip #2 Motivate learners

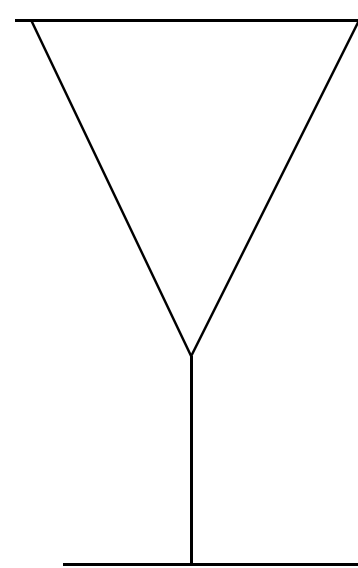
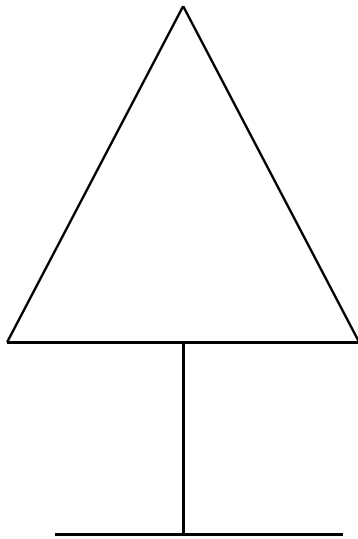
The goals must be clear
before the instruction begins

Instructions:

Draw a triangle with an upside
down T under it



Did you get a tree or a glass?



The goal is it looks like a tree. Draw a triangle with an upside down T under it.



Tip #3 Know your students

Analyze the learning obstacles and resources

- Grandmother vs. the physician
 - Authority of the teacher
 - Needs of the learner
 - Sustainability of the instruction

- What good is a pencil without paper?
 - Analyze from the learners' point of view
 - Understand the learning context

Let's practice

This is a very
easy assignment.

Set a mouse trap



The mousetrap package lists 3 steps

1. Open bag
2. Bait the trap
3. Set the trap





What do you already know?

- How do I know if I have a mouse problem?
- What bait do I use?
- Where do I place the trap?
- Any warnings I need to issue?
- Is the trap clean?
- Oh no! What do I do with a dead mouse?
- _____?



Wow, that was a really easy task!

- Why did you fail?
- Weren't you listening?
- This is REALLY important to know!
- Everyone knows how to set a trap!
- Why can't you learn it?



What are the obstacles to learning?

- Cultural objections
- Personal fear
- No motivation to learn
- Too complex to begin to understand
- Lack of personal experience
- Others?



Tip #4

Teaching and Learning are hard work

Teachers sometime underestimate how hard it is to learn

Students sometimes overestimate how hard it is to learn. They need support to learn.

See the handout on “Instructions for writing instructions”

Back to the mousetrap – the forgotten steps

- ❑ Go to the location before setting the trap
- ❑ Baiting the trap BEFORE engaging the “death spring.”
- ❑ Checking the trap every few days
- ❑ Re-baiting the trap safely
- ❑ Disarming the trap
- ❑ Disposing of the trap / mouse





Tip #5

Let students process what they learn

- Place the learning in a relevant or interesting context
- Put students in teams to learn together
- Use activities to teach
- Watch as students learn
- Discuss with the group what they learned



What practice taught us

I could tell you what:

- What you needed to learn
- What I needed to tell you
- What I wanted to teach you
- What I think you learned

It is better if you tell me

- What you want /need to learn
- What obstacles you have to learning
- How you will use the learning
- Why you didn't learn
- What else you need to know



Effective training requires

- Understanding your learners
- Having clear and relevant goals
- Making the goals clear to the learners
- Having a strategy for teaching
- Analyzing your success and failure



Support your training

- Provide visuals
- Allow for practice
- Offer strategies for learning
- Encourage your students
- Revise your instruction/training to fit your students.

Most importantly!

- Love your students
- You can't teach everything about training one session



Thank you!

Let me know how I could be better:

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