

ADDIE

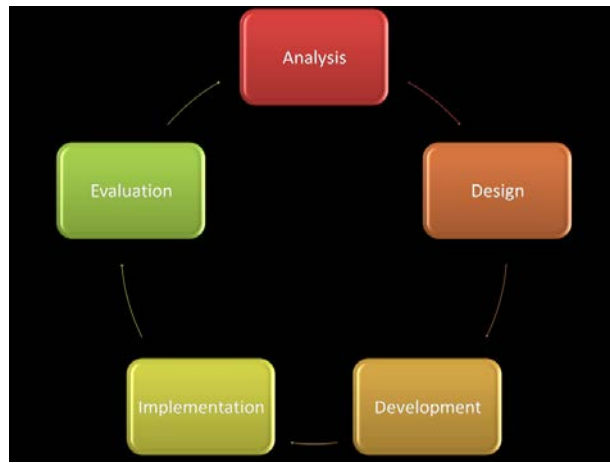
Analysis

Design

Development

Implementation

Evaluation



AnalysisDDIE

In the Analysis phase, the instructor first determines if there is a need, and then collects the information that will help them understand the audience, content, situation and goals of the instruction session.

Collecting Information: *Information can be gathered by various methods, such as talking to others in your library or students/users look at stats or data from websites or usage, surveys, pretests, meeting with the teacher, a syllabi, etc.*

Conducting the Needs Assessment:

Does this instruction need to happen? Define how you will collect the data, who will be involved in the project, budget? Ask tech folks what's possible?

Roughly sketch out how you will go about determining your need, including: methods used for gathering data, the stakeholders and other team members who need to involved, etc.

The Needs Statement: Perceived needs statement for your project.

Example: "We determined through interviews and focus group sessions that students need to be able to access information on citation styles during non-staff hours."

Goal Statement: What is the goal of this instruction/training/etc.?

Example: "The goal of this instruction will be to help students access citation style information during non-staff hours."

Learner Analysis/Audience type:

Learning Styles

<http://www4.ncsu.edu/unity/lockers/users/f/felder/public/ILSdir/styles.htm>

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|--|--|
| Active -learn by doing-discussing, applying or explaining, groups | Reflective -learn by thinking it through, work alone |
| Sensing -focuses on facts & details, likes process & method | Intuitive -discover relationships between theories & concepts |
| Visual -charts, films, demos | Verbal -written and spoken |
| Sequential -linear steps, logical order | Global -"big picture," details are fuzzy |

Learning styles inventory: <http://www.engr.ncsu.edu/learningstyles/ilsweb.html>

http://www.childfirst.com.cn/gifs/en_soundcurr05.gif

Multiple Intelligences

Closely related to learning styles, the concept of Multiple Intelligences, developed by Howard Gardner, broadens the traditional category of "intelligence" to include other ways in which individuals can learn, process and interact with information. Take the inventory here:

<http://surfaquarium.com/MI/inventory.htm>
<http://www.ldrc.ca/projects/miinventory/mitest.html>



Educational Psychology

Behaviorism (Pavlov, Skinner) - focuses on behavioral outcomes (getting the answer right), rather than an internalization of concepts

Constructivism (Piaget) - students learn by incorporating new information into a framework based on previous experiences

Connectivism (Siemans) - learning comes from the ability to connect and integrate information from various locations, subjects and concepts

Who is your audience? -library staff, faculty, undergraduates, students, community members

What do you want them to learn?

What do they already know? -specific skill, content, method

Where/how are you teaching? – synchronous/asynchronous

How much time do you have? -one synchronous class, a whole online class, a two minute video

Task Analysis:

These are things that the student will need to know or learn during the instruction. You may want to provide a “requirements” section before the instruction, letting students know what sort of technology skills or computer requirements they need to have before they begin the training. This lets the user know you will not be covering things like ‘how to right click’ or ‘how to user the browser’.

Create an Outline:

You will want to think about all the information that a student might need to know to complete this instruction. Creating an outline will help you identify all the parts needed in your instruction.

Citation Style Tutorial Example:

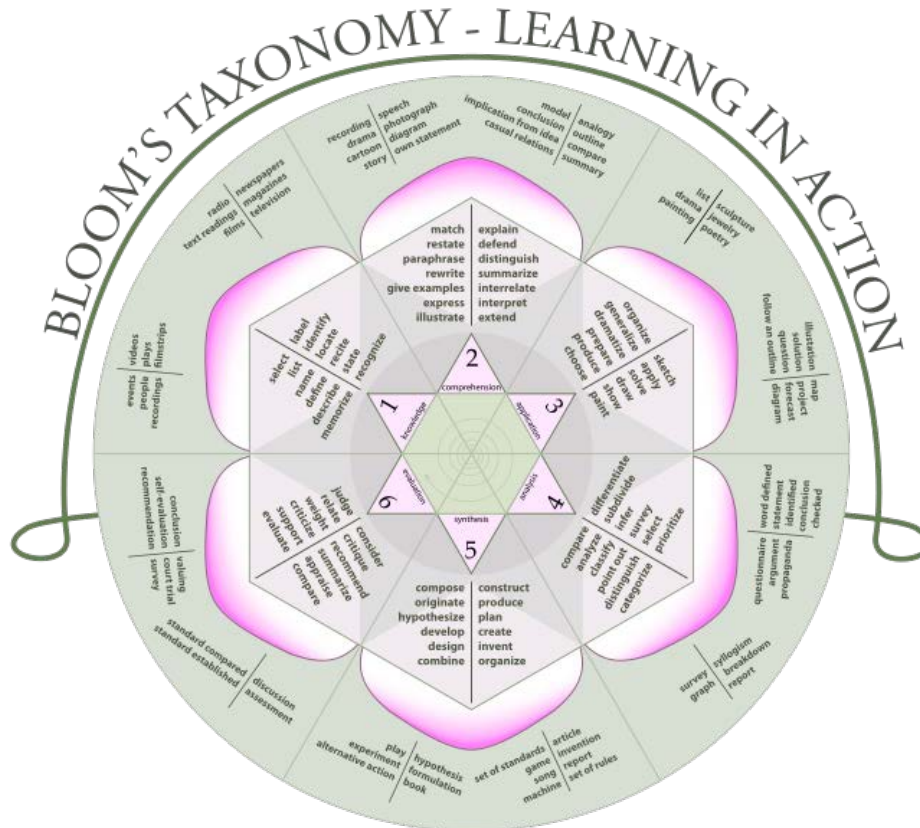
- I. Source Type*
 - a. Print*
 - i. Book*
 - ii. Journal*
 - b. Electronic*
 - i. Online Journal*
 - ii. Website*

Start w/ nouns Then add verbs!

Bloom's Taxonomies

Bloom's Taxonomy is a method for describing the learning process, from the basic acquisition of knowledge to the application of critical thinking skills.

Vocab list here: <http://eduscapes.com/tap/topic69.htm>



http://en.wikipedia.org/wiki/File:Blooms_rose.svg

Determine your objectives:

Looking at your tasks, you can now begin to write your objectives.

Example: "After this instruction, the student will be able to "determine the correct source type "

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A Design DIE

In the Design phase, the instructor takes the information collected in Analysis and creates a strategy for what content should be covered, what types of activities would be appropriate and what practical issues need to be resolved.

Using Analysis Data:

-what did the data collected during the Analysis phase tell you about your students, course content and logistics? -do you have 30 minutes or 2 hours? -are your students first year undergraduates or advanced majors? -do you need to create online content to supplement the in-class time?

Teaching Styles:

-Considering the teaching style of the instructor is as important as considering the learning style of the students -how can you incorporate aspects of other styles into your own teaching?

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|-----------------------|---|
| Transmission | Enthusiastic masters of content, lecture-based |
| Apprenticeship | Able to show processes, let students direct speed of learning |
| Developmental | Question & problem solving oriented, simple to complex |
| Nurturing | Creates supportive learning environment, sets goals |
| Social Reform | Challenges student assumptions & encourages critical thinking |

http://www.one45.com/teachingperspectives/tpi_html/tpi_summaries.htm

Take an inventory of your style: http://www.teachingperspectives.com/html/tpi_frames.htm

Compare and contrast strengths of asynch or synch?

Generally how do you create engagement in a synchronous learning experience?

Generally how do you create engagement in asynchronous learning experience?

ADDevelopmentIE

In the Development phase, the instructor creates the content of the presentation, including activities, search examples, scripts and learning objects.

Technology Tools:

-various technology tools can be used when developing your class or final product and assist in communicating content to the audience -would a two minute video on using a database tell the students what they need to know when you can't meet synchronously with a class? -would a quick online quiz assess student learning better than a full assignment?

- **Blogs**-easy to update, can use comments as reflection space, embed calendars, PowerPoints, links and videos, start at <http://wordpress.org> or <http://www.blogger.com/>
- **Wikis**-create a wiki to facilitate collaboration on projects, create resource guides, start at <http://pbworks.com>
- **Surveys:** google forms, clickers (for in person sessions), PollEverywhere - take quick polls and class surveys, do assessment while teaching <http://www.polleverywhere.com/>
- **Quizzes**-create short, easy to grade quizzes to focus students on a specific skill or piece of information, short answer and essay options allow for reflection; use in Blackboard, Sakai or other CMS's; try Hot Potatoes or Quandry <http://www.halfbakedsoftware.com/quandary.php> or Jeopardy Labs <http://jeopardylabs.com/>
- **Videos/Screenshots** -free tool to record short videos or screenshots, upload PowerPoint presentations or on website or blog <http://www.jingproject.com>
- **Websites:** -create resource guides, embed video, pull RSS feeds for new books, delicious bookmarks or news sites, easy to update, include librarian contact information using Libguides (\$) <http://springshare.com/libguides> or Google Sites (free) <http://sites.google.com/>
- **Creative Commons Images** -illustrate PowerPoint slides, website, blog etc, with creative commons licensed images from flickr; try a search here: <http://flickrcc.bluemountains.net>
- **Presentations/PPT** --post PowerPoints in one place and embed where ever you need it such as into a blog or website <http://www.slideshare.net>
- **Google Docs** -create documents, spreadsheets and surveys, invite others for easy group editing <http://docs.google.com>
- **MindMapping** -write expandable outlines for presentations and study guides <http://www.mindomo.com>
- **LMS** - present info into an LMS like Blackboard, Sakai, Moodle.

More ideas: http://library.uncg.edu/info/depts/reference/instruction/tech_toolkit_homepage.aspx

Pick a partner. Pick a tech tool. Determine the pros or cons.

| Technology | PRO | CON |
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ADDImplementationE

In the Implementation phase, the instructor takes the plan into the classroom and must utilize their knowledge of teaching and learning styles as well as classroom management to communicate with students.

Active Learning:

The more active the learning, the more students learn the content. Active learning is a good way to engage students with different learning styles, who may learn best with audio, visual or physical components. It does not necessarily mean physically activity, but rather that students are **interacting** with the content and the learning process. Ways of incorporating active learning can include:

- **reflection**-blog responses, journal entries, service learning
- **problem solving/problem based learning**-working with case studies, real-life situations
- **creating**-videos, art, storyboards
- **competing**-games, challenges
- **sharing**-students teach or mentor their classmates, presentation
- **pair/group work**-many of these ideas work well when students are in pairs or groups for their work, and can help with classroom management

Classroom Management

Handling online classrooms can be challenging. What to do if students don't actively participate? What to do if major technology fail? How can you incorporate active learning into online situations? Can you incorporate it into asynchronous situations?

What active learning, online classroom management or engaging activities can you use in implementing your e-learning experience:

ADDIEvaluation

In the Evaluation phase, all of the phases of the plan are analyzed for any changes or improvements that can be made for the next implementation. Evaluation can be a continuous element of the cycle, informing each step in the process.

Evaluation and Assessment

- measures student learning, performance and engagement with the material
- helps the teacher plan for the next version of the course or presentation
- does not always relate to grading, but can include surveys, focus groups, and peer evaluation
- happens continually, at the beginning, middle and end
- it must be designed **from the beginning!**

Students need to know:

- ✓ what you expect them to learn
- ✓ what they are responsible for completing
- ✓ how you will be grading and evaluating their work
- ✓ what the grading rubric is
- ✓ your feedback on their assignments
- ✓ that you will be consistent and clear in grading

Formative-gives frequent feedback on progress, students know how they are doing, reinforces learning, examples: clickers, weekly blog posts or journal entries

Informal-focuses on student processing and application of content, examples: journals, essays, performances

Objective-measures content learned, replication of a process, examples: fill in the blank, multiple choice tests, equations

Internal-assessment and evaluation tools are created by the teachers, feedback is given directly to the students

Summative-feedback comes at the end of an assignment or project, graded, demonstrates what the students know, examples: graded assignments, finals and quizzes

Formal-assesses content learned, test-taking ability, examples: unit or standardized tests

Subjective-measures how the student can integrate and synthesize knowledge and content, examples: essays, short answer

External-standardized tests created by outside institution or organization, little feedback is given to students beyond score

Brainstorming Activity:

| | |
|------------------|------------------|
| Formative | Summative |
| Informal | Formal |

| | |
|------------------|-------------------|
| Objective | Subjective |
| Internal | External |
