

## Types of Online Teaching-Learning Resources MERLOT

**1) Information Websites:** "Organized" text, visual images, and auditory clips within a website or links between websites which the user reads, watches and listens while navigating through the web of information.

Some generic goals of information websites:

- Develop knowledge of subject matter through application of generic learning skills (reading, watching, and listening).
- Develop information search skills through consequences of navigational choices.
- Develop information evaluation skills by applying rubrics for "good information" within the discipline.
- Develop content analysis/data analysis skills relevant the discipline.

**2) Tutorials:** Users navigate through an electronic workbook to study and be tested on information. The study elements of tutorials are sequentially organized information and activities similar to an information website. The tests evaluate the acquisition of knowledge and skills that should have occurred during navigation. Tests can be drill and practice activities or reading comprehension tests.

Some generic goals of using tutorials:

- Develop and verify knowledge in subject area
- Develop and verify skills in subject area
- The goals from informational websites

**3) Drill and Practice:** Activities where users repeatedly respond to questions or stimuli presented in various sequences.

Some generic goals of using drill and practice:

- Develop reliable performance of knowledge and skills
- Provide opportunities for students to practice at their own pace.

**4) Simulations:** Users determine the initial conditions of some dynamic circumstance, and then initiates an "engine" that drives the dynamic circumstance in accordance with specific rules. The engine which simulates the "real phenomena" generates an output - a circumstance changed from the initial conditions and determined by specific rules.

Some generic goals of using simulations:

1. Develop hypothesis testing skills
2. Develop skills in interpreting "data"/output from the simulations
3. Develop planning skills for conducting experiments

**5) Animations:** Concepts, models, processes, and/or phenomena are visually and dynamically represented. Animations are like simulations except that the initial conditions are not determined by the users.

Some general goals of using animations:

- Develop understanding of interdependencies of complex concepts and processes
- The goals from informational websites

**6) Communication Tools:** Students engage in synchronous or asynchronous dialogues with other users for a wide variety of purposes. Some communication tools include: individually addressed email, threaded discussions (where a variety of users responded to a common issue or thread within an asynchronous discussion), chat rooms (where a variety of users responded to issues within a synchronous –real time discussion), and list-serves (where messages from each member of “the list/group” get broadcast to all the members on the email list)

Some generic goals of using communication tools:

- Develop personal context for educational process
- Facilitate active engagement of subject matter through dialogues with faculty and students
- Provide feedback to students on their understanding of the subject matter and performance on learning activities
- Facilitate collaboration during learning

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