Building Reusable Learning Objects – A Tutorial on Using SIMPLE Tools

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Project SIMPLE (2003 – 2007) was a federally funded grant project organized to develop resources for educators in speech-language pathology to promote progressive mastery of important content efficiently and effectively. Outcomes of SIMPLE included production of six DVDs to assist educators in developing their own resources for instruction in the area of adult aphasia. DVD's are built around (1) a set of Reusable Learning Tools (RLTs) and (2) video clips of 40 persons with aphasia and a comparable number of normal adults, all performing similar communication tasks. Video clips can be repurposed by instructors to meet local objectives.   These resources are cross-platform and are offered at no charge.

Reusable Learning Tools (RLTs) are software routines that allow creation of Reusable Learning Objects (RLOs) with authoring tools guiding design and simplifying the entry of instructional content.

Reusable learning objects (RLOs) are instructional activities intended for use in more than one instructional venue, for example in multiple courses at one institution, or for courses at different institutions. In another sense, existing instructional media (video clips, audio clips, animations, photos or other still images) can be repurposed for use with new groups of learners, or for new instructional purposes. Because well-developed instructional media require effort and resources, and because documenting the impact of learning events also requires resources, RLOs offer improved efficiency in training and teaching across a range of academic disciplines.

Web browsers (e.g., Firefox, Internet Explorer, Safari, Netscape, Opera and others) are an important key to efficiency. Browsers are portals to RLOs, and work equally well for content delivered over the Internet, at the learner's desktop by means of CD-ROMs or DVD-ROMs, or in the classroom from an instructor's computer. Instructors can also design RLOs for off-line use (no Internet connection required).

This two-hour workshop will introduce participants to the Project SIMPLE RLTs and provide a tutorial on how to develop reusable learning objects. RTLs include

- **Concept Tutor:** this authoring tool allows use of text, images, URLs and self-test questions (true-false, select all that apply) to teach definitions, facts, and structures. Outputs can be saved for later editing, or published for use with Web pages.
- **Glossary Builder:** this authoring tool automatically alphabetizes concept tutors and establishes relative URLs so concept tutors can be displayed. Outputs can be saved for later editing, or published for use with Web pages.
- **Video Annotator:** this authoring tool allows multiple, non-destructive captioning of video clips, permitting (for example) the use of a single clip to focus on (1)

client behaviors, and (b) clinician behaviors. Outputs can be saved for later editing, or published for use with Web pages.

- **Quiz Video:** This authoring tool permits enhancement of video recordings through addition of interactive questions (true-false, multiple-choice, short answer, put in order, select all that apply) with immediate feedback to the learner. Outputs can be saved for later editing, or published for use with Web pages.

For each tool, an example illustrating workflow from concept to completion will be demonstrated. For tools using recorded video media, common video and audio editing methods will be shown and compression methods will be demonstrated. Take home materials include tips for capturing and editing high-quality video and audio for instruction and research. We will identify and address essential strategic and tactical components of planning for RLO development, including error avoidance and lessons we have learned over a four year period. Each participant will be given a DVD containing the tools and encouraged to create their own RLOs upon returning to their workplace.

Learning Objectives

At the close of this session, participants will be able to

- Identify and describe the relations between RLTs and RLOs.
- Identify how RLOs can be used to support instruction about facts, concepts, structures, processes, procedures and principles.
- Identify problems and solutions for common challenges in capturing video for instructional purposes.
- Locate and begin to use RLTs

Copies of the Reusable Learning Tools DVD-ROM will be available at the workshop. Others interested in these materials can request copies by contacting Michael Flahive (Flahive@sxu.edu)

Instructors interested in adult neurogenic disorders can request the entire Project SIMPLE set of DVD-ROMs. Contact Michael Flahive (Flahive@sxu.edu)

A limited number of copies are available.