An interactive self-instructional maual for Universal Reader was developed by Adobe Captivate
For
Learners with reading disability
Ashely High School

Report One
Development Model Selection and Needs Analysis

Report Two
Performance Objectives and Assessment Items

Report Three
Formative Evaluation

A Self-instructional Module

MIT 500 Instructional System Design Theory and Research
(**Domains/Competencies/Job Qualifications/Artifacts/Rationale**)

Context & Conditions:

The course is a micro-level core course while at the same time one prerequisite of all other core courses in instructional technology program. It emphasizes knowledge and practice in instructional design theory and model, instructional design process as well as principles related. The course artifacts are measurements of course objectives prescribed by Dr. Mahnaz Moallem and were completed in Fall, 2006. Of them, a self-instructional module is a complete product integrating instructional design theory and model into a real situation. The module "how to use Universal Reader" was designed for students with reading disability in Ashley high school. These students should be able to use Universal Reader to improve their reading level for daily living. The results of learner analysis indicated that these students learn better with hands-on, auditory, and visuals than just with signal channel with low IQ. Thus, an interactive module for using Universal Reader was developed by using Captivate tool. M. David Merrill's Instructional Transition Theory was used to guide the design and development of the module.

Scope:

The self-instruction module involved a systematic process from analysis, through design and development, to formative evaluation. Needs assessment was conducted first to identify performance deficiency and goals. Based on the performance problem learners analysis and task analysis were subsequently completed. With defined goals, instructional analysis was done to produce step level flowchart of instructional tasks to accomplish them. Still, a self-instructional module were designed and developed to address the needs of target learners. Formative evaluation at one-on-one and small group levels was built in the development of the module.

The module was intended for students with reading disability in Ashley High School. Actually, it is also appropriate for normal students who want to learn how to use Universal Reader. In the meantime the teachers can use the module for instructional purpose, for example, demonstrate the feature of Captivate.

Role:

I worked with other two team members. Throughout the coursework each of us acted as an instructional designer and Subject Matter Experts (SME). As an instructional designer, we conducted the front-end analysis. Based on the results of the front end analysis we designed and developed flowchart of instructional tasks, enabling objectives, assessment items related, instructional strategies, and a self-instructional module. In addition, we conducted fomative evaluation for this module. Because we all know Univeral Reader and know how to use it, we also acted as SME.

Reflection

The class was taken after the course EDN 520 'instructional development', which was helpful to learn this class. Iin the course entitled 'MIT 500', I realized that front-end analysis is of very importance in instructional design and development. Also through the class I can see that formative evaluation is an integral part of instructional design and development stage. Its ongoing in design and development phase would bring a cost-effective product and its high quality. Going over these artifacts, I found that formative evaluation was short of work. If I have a chance to redo this project, I will spend more time on formative evaluation.

MIT 500: Domains/Competencies/Job Qualifications/Artifacts/Rationale
Skip to: Design / Development / Utilization / Evaluation

Domain of Instructional Design			
MIT Competencies	**Job Qualifications**	**Artifacts**	**Rationale**
Plan and conduct needs assessment.	Conduct needs analysis and assessment Develop assessment plan and instruments	**Needs Assessment**	The artifact illustrates the process of gathering data, determining the gap between what is and what should be, and then establishing the needs that address gaps. In the artifact, I collected data by interview, questionnaire, and extant data as well.
Assess learner/trainee characteristics.	Conduct audience analysis to confirm appropriateness of learning objectives. Identify learner characteristics/style.	**Learner Analysis**	The artifact illustrates how I conducted learner analysis, identified learner characteristics and learning styles. My purpose of conducting a learner analysis was to design instructional materials or solutions that address learner characteristics and needs.
Analyze the characteristics of a setting (learning environment).	Conduct context analysis.	**Context Analysis**	The artifact illustrates the process of assessing the characteristics of context or environment where the identified problem occurs. With the analysis, as an instructional designer, I selected appropriate deliverables and proposed proper solutions that meet given situation.
Conduct analysis of jobs/tasks and content.	Formulate learning objectives. Produce detailed descriptions of job tasks.	**Task Analysis**	The artifact demonstrates my ability to conduct research and work with Subject Matter Experts (SMEs) before analyzing content and tasks and developing flowcharts.
Sequence learner outcome.	Understand learning principles. Have knowledge of learning outcome taxonomy.	**Task Analysis** **The Self-instructional Module**	This self-instructional module design illustrates the process of applying instructional design principles and learning taxonomy to identify proper sequence for instructional tasks and learning outcomes.

Specify instructional strategies and sequence the instructional strategies.	Have knowledge of instructional strategies. Understand instructional design principles. Understand Keller's ARCS model.	**Instructional Strategies**	The product demonstrates my knowledge and skills of specifying and sequencing instructional strategies for instruction taking into account types of learning outcomes and target learners.
Determine instructional resources (media/computer technology) appropriate to instructional activities.	Determine appropriate material resources, technology resources, human resources based on learner and context analysis.	**The Self-instructional Module**	The artifact shows how I identified and selected the appropriate resources to augment or deliver instruction.
Select appropriate applied information technologies to achieve instructional objectives.	Have experience working with web based technologies Assess client needs and available resources.	**The Self-instructional Module**	The product demonstrates my understanding of the available technologies and their advantages and disadvantages when making decision about selecting the best media.
Domain of Instructional Development			
MIT Competencies	**Job Qualifications**	**Artifacts**	**Rationale**
Develop projected and non-projected graphic instructional materials.	Apply multimedia design principles. Design and develop multimedia product.	**The Self-instructional Module**	The product illustrates my experience of using Adobe Captivate interactive technology tools to develop products.
Demonstrate ability to produce audio scripts and audiotapes.	Have experiences with audio scripts.	**The Self-instructional Module**	The module demonstrates producing audio scripts in conjunction with content of the module.
Demonstrate knowledge of the principles of perception and visual learning applicable to the design and production of photographic instructional materials.	Have experience developing photographic instructional materials. Develop multimedia materials using principles of multimedia design.	**The Self-instructional Module**	The artifact demonstrates my experience of conducting interface design by using web-based development tools such as Captivate.
Demonstrate knowledge of computer utilization practices and the ability to apply them in instructional settings including: computer literacy, software selection and evaluation, instructional management, hypermedia development and distance learning.	Work with computer technologies.	**The Self-instructional Module**	The artifact illustrates my practice of utilizing computer technologies in designing, developing instructional design projects.
Design and produce computer-based instruction including drill-and-practice and tutorial programs.	Have experience creating computer-based course or tutorial.	**The Self-instructional Module**	The artifact illustrates my ability to produce computer-based instructional material in which I included self-paced and instructor-led activities for drill-and-practice.
Design and produce interactive multimedia systems.	Develop multimedia product using web-based development tools.	**The Self-instructional Module**l	The MIT 500 module was developed by Adobe Captivate to increase interactivity between

			learners and the content of the materials.
Develop curriculum and apply instructional technology to the curriculum at the systems level, the macro level and the micro level.	Develop instructional and performance solutions applying instructional design principles and system approach.	**The Self-instructional Module**	The product demonstrates my experiences of designing instructional solutions at the micro level.
Demonstrate knowledge and ability to design and produce self-instructional modules, training manuals, instructor's guides and job aids.	Work with client, creating related self-instructional and training materials.	**The Self-instructional Module**	The artifact illustrates my ability to produce a self-instructional module or tutorial.
Design and produce mediated instruction.	Develop mediated instruction using media-based development tools.	**The Self-instructional Module**	The artifact is designed to deliver instruction through computer technology, as one form of mediated instruction.

Domain of Utilization			
MIT Competencies	**Job Qualifications**	**Artifacts**	**Rationale**
Apply principles of selection and use of materials and techniques relevant to a multicultural society (e.g., non-print, print, mass media, hardware, software, and other audiovisual strategies).	Select appropriate media for instruction project with target learner.	**The Self-instructional Module**	The module illustrates the selection and use of materials and appropriate learning tools to promote learning with target learners to achieve desired objectives.

Domain of Evaluation			
MIT Competencies	**Job Qualifications**	**Artifacts**	**Rationale**
Plan and conduct needs assessment.	Conduct needs analysis and assessment.	**Needs Assessment**	The artifact illustrates the process of gathering data about what is and what should be, determining the gap between what is and what should be, and then establishing the needs that address gaps. In the artifact, I collected data by interview, questionnaire, and extant data as well.
Plan and conduct evaluation of instruction/training.	Create evaluation rubric for course. Conduct evaluation related to materials or course.	**Formative Evaluation**	The report illustrates my knowledge and skills of conducting evaluation. In the reports, I gathered data using different instruments, analyzed data, interpreted data, and made recommendations for revisions.