

## The ASSURE Model

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PEN-International  
<http://www.pen.ntid.rit.edu>

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A workshop presented at Ratchasuda College, Mahidol University, Thailand

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## Based on Educational Technology Course

- Educational Technology and Teaching
- <http://www.rit.edu/~pen2>
- 10 Week Blended Course for Graduate Students
- *Instructional Media and Technologies for Learning*
- <http://cwx.prenhall.com/heinich/>



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## What Do I Know About You?

- 5 Members of the faculty
- 5 Officers of organizations serving deaf
- 10 Representatives of local schools for the deaf
- 60 Students



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## What I Don't Know About You?

- Understand English
- Deaf or Hearing
- Level of Education
- Experience with Deafness
- Sign Language Experience
- Teacher, Student or Administrator
- Technology Experience



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## Objective

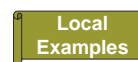
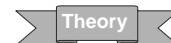
- Participants at the ASSURE workshop,
- Will describe the major parts of the ASSURE model of instructional development and give an example from their own experience, of each step in the process,
- At the conclusion of the lecture, on note paper,
- With 100% accuracy.



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## Instructional Presentation


- Theory
- Local Examples
- NTID Experience



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## Overview of Instructional Technology Terms Theory

- **Instructional Technology:** systemic and systematic application of strategies and techniques derived from behavioral, cognitive, and constructivist theories to the solution of instructional problems.
- **Instructional Design:** systematic development of instructional specifications using learning and instructional theory to ensure the quality of instruction.
- **Instructional Development:** process of implementing the design plans.

 (Adapted from "Training and Instructional Design", Applied Research Laboratory, Penn State University)

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### Workshop Schedule

	26-Feb-04 Thursday	27-Feb-04 Friday	1-Mar-04 Monday	2-Mar-04 Tuesday
		Instructional Technology	Instructional Design	Instructional Development
9:30 AM		Planning for the Day	Planning for the Day	Planning for the Day
10:00 AM				
10:30 AM				
11:00 AM				
11:30 AM	Planning Meeting Clymer & Samper with College Leadership	Instructional Technology at NTID Use of Technology at NTID to Develop Instruction Report on the 2003 Instructional Tech Symposium	ASSURE Model of Instructional Design What Research and Practice Tells Us About Using Technology Examples of NTID Faculty Developed Materials Use of a Multimedia Classroom	The Development of Media and Materials
12:00 Noon				
12:30 PM	Lunch	Lunch	Lunch	Lunch
1:00 PM				
1:30 PM	Overview of Workshop Activities	Discussion & Consultations	Discussion & Consultations	Discussion & Consultations
2:00 PM	Overview of RIT, NTID			
2:30 PM	Overview of PEN-International			
3:00 PM				
3:30 PM				

## A Model to Help ASSURE Learning Theory

ASSURE

<b>A</b>	Analyze Learners
<b>S</b>	State Objectives
<b>S</b>	Select Methods, Media, and Materials
<b>U</b>	Utilize Media and Materials
<b>R</b>	Require Learner Participation
<b>E</b>	Evaluate and Revise



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## Analyze Learners Theory

ASSURE


- General Characteristics
- Specific Entry Competencies
- Learning Styles
  - Perceptual Preferences and Strengths
  - Information Processing Habits
  - Motivational Factors
  - Physiological Factors



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## Analyze Learners Local Examples

- Students at Ratchasuda College
- Language Levels
- Preferences
- Current Skills
- Etc.



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## Analyze Learners NTID Experience

- 18 Year Old Deaf Students
  - Read at 4<sup>th</sup> to 6<sup>th</sup> grade level
  - Write at 9 to 10 year old level
- Use Different Reading Decoding Strategies
- Model & Social Interaction to Learn Writing



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## [ Analyze Learners ]

**NTID**  
Experience

- Depend more on visual information
- Difficulty with multiple meanings of words
- Activation of long-term memory may not be as directed or focused

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## [ State Objectives ]

**Theory**  
ASSURE

- ABCD's of Well Stated Objectives
  - Audience
  - Behavior
  - Conditions
  - Degree
- Classification of Objectives
- Objectives and Individual Differences

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## [ Appraisal Checklist: Objectives ]

**Theory**  
ASSURE

**Audience**

- Specifies learners

**Behavior**

- Learner performance
- Observable behavior
- Real-world skill

**Conditions**

- Equipment, tools, aids or references that may be used
- Environmental conditions

**Degree**

- States standard for acceptable performance (time, accuracy, proportion, quality)

**Example**

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## [ State Objectives ]

**Local Examples**

- Typical Instructional Presentation?
- A,B,C,D Elements

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## [ State Objectives ]

**NTID**  
Experience

- Focus on individual
- "Enabling objectives"
- Demonstrate expected performance
- Show sample test questions
- Recall recent, relevant knowledge
- Offer remediation
- Non-linear sequence

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## [ Select Methods, Media, & Materials ]

**Theory**  
ASSURE

- Choosing a Method
- Choosing a Media Format
- Obtaining Specific Materials
- Selecting Available Materials
  - Involving the Media/Technology Specialist
  - Surveying the Sources
  - Selection Criteria
  - The Instructor's Personal File
- Modifying Existing Materials
- Designing New Materials

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### Select Methods, Media, & Materials Local Examples


- Available Media?
- Materials Available? Resources?
- Selecting Materials?
- Modifying Existing Materials?
- Designing New Materials? Resources?



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### Select Methods, Media, & Materials NTID Experience


- Make vocabulary lists for unfamiliar science, math or technology terms
- If formulas or equations are to be displayed on the board, make a paper copy for the deaf student. Equations are difficult to sign and cannot easily be displayed in caption systems.
- Suggest alternative web sites
- Use graphics whenever possible



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### Utilize Media & Materials Theory ASSURE


- Preview the Materials
- Prepare the Materials
- Prepare the Environment
- Prepare the Learners
- Provide the Learning Experience



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### AV Showmanship – Classroom Presentation Skills Theory


- Getting Ready
  - Planning
  - Rehearsing
  - Setting up
- Presenting
  - Anxiety
  - Delivery
  - Voice
  - Eye Contact
  - Gestures
  - Visuals



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### Utilize Media & Materials Local Examples

- Typical Classroom?
- Presentation Technology
- Practice Opportunities



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### Utilize Media & Materials NTID Experience

- Deaf students report that content knowledge, use of visuals, good communication skills are characteristics of a good teacher (Lang et al, 1993)
- Deaf students prefer teachers who have a rapport and caring attitude (Lang et al 1994)
- Arrange classroom for the best communication.
- Establish a communication plan




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## Require Learner Participation

**Theory**  
ASSURE

- The one condition that pertains to all objectives is *practice*!
- Learning is an active process; mental processing, not physical activity
- **FEEDBACK!**
  - Meaningful information to correct performance




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## Require Learner Participation

**Local Examples**

- Strategies to promote learner participation?




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## Require Learner Participation

**NTID Experience**

- Role playing improves retention of information over lecture presentation (Quinsland, 1986)
- Students with lower reading skills did as well on tests as students with higher reading skills, if they interacted with the material. (Dowaliby & Lang, 1999)




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## Require Learner Participation

**NTID Experience**

- Significant correlation between deaf students course grades and participative learning style




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## Evaluate and Revise

**Theory**  
ASSURE



- Assessment of Learner Achievement
- Evaluation of Methods and Media
- Revision



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## Evaluate and Revise

- On a piece of scrap paper
- Write the word that corresponds with the letters in ASSURE.
- Give one example, from your experience as a student or teacher, that represents each step in the ASSURE Model
- Review your answers

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## Evaluate and Revise

- What did you think of the workshop?



NTID  
PEN-INTERNATIONAL EVALUATION FORM  
ASSURE Workshop

William O'Brien  
Mahachulalongkornrajavidyalaya College

For each item below, please circle the response that best describes your opinion.

	1	2	3	4	5
1 = Strongly agree					
2 = Agree					
3 = No opinion					
4 = Disagree					
5 = Strongly disagree					

1 - The content met or exceeded my expectations.

2 - The information will be useful in my job, professional development, or studies.

3 - The presentation offered material that was relevant to my needs.

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## Evaluate and Revise

Local Examples

- How would you revise this presentation?
  - Learner achievement?
  - Materials and methods?
  - Attitude towards workshops?



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## Evaluate & Revise

NTID Experience

- Formative Evaluation
- Summative Evaluation
- Attain Objectives?
- Attitude Towards Experience?
- Efficiency of Instruction?



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## Theory Into Practice (TIP)

- <http://tip.psychology.org/>



- (1) gaining attention (reception)
- (2) informing learners of the objective (expectancy)
- (3) stimulating recall of prior learning (retrieval)
- (4) presenting the stimulus (selective perception)
- (5) providing learning guidance (semantic encoding)
- (6) eliciting performance (responding)
- (7) providing feedback (reinforcement)
- (8) assessing performance (retrieval)
- (9) enhancing retention and transfer (generalization).



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## References

- Lang HG (2002) Higher Education for Deaf Students: Research Priorities in the New Millennium. *Journal of Deaf Studies and Deaf Education*, 7, 267-280.
- Heinich, Robert et.al. (2002). *Instructional Media and Technologies for Learning, 7th Edition*, Prentice-Hall; ISBN 01-030536-7.
- Gagne, RM, Briggs, L.J., & Wager, W.W. (1992) *Principles of Instructional Design, 4th Edition* Harcourt Brace Jovanovich College Publishers; ISBN 0 03 034757 2
- Marschark. Lang & Albertini, (2002) *Educating Deaf Students: From Research to Practice*, Oxford Press



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