

#### 确信模式

威廉 克来默 詹姆士 迪卡罗

#### PEN国际项目

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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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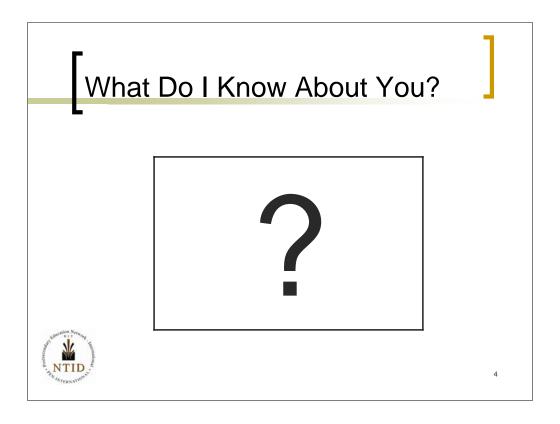


基于教育技术课程 一教育技术及授课 http://www.rit.edu/~pen2

- 给研究生的10 周混合课程

一学习用的教育多媒体和技术

http://cwx.prenhall.com/heinich/



我知道有关于你的什么?

## 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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#### 我所不知道的

- 一懂不懂英文
- -是聋人还是正常人
- 一教育水平
- 一对聋人的经验
- 一手语经验
- 一学生,老师或行政管理人员
- 一技术方面的经验

## Objective

- A. Participants at the ASSURE workshop,
- B. 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,
- c. At the conclusion of the lecture, on note paper,

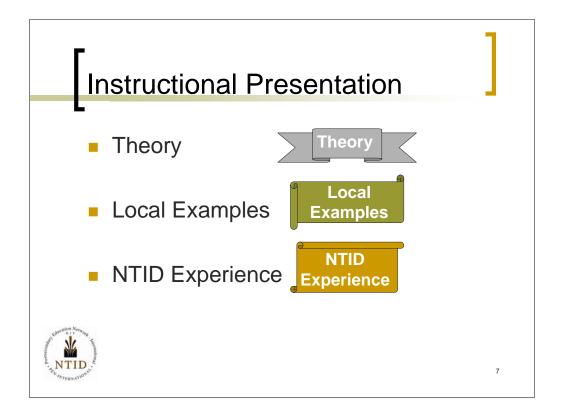


With 100% accuracy.

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#### 目标

- A 所有参与确信研讨会的人员
- B 将会描述确信模式教育开发的主要部分,并能对每个过程给出自己的一个亲身经历
- C在本讲座总结的时候写在笔记本上
- D 并有100% 准确率



#### 教育讲演

- 一理论
- 一本地实例
- -NTID (美国国家聋人工学院) 经验

# Technology Terms

- 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.

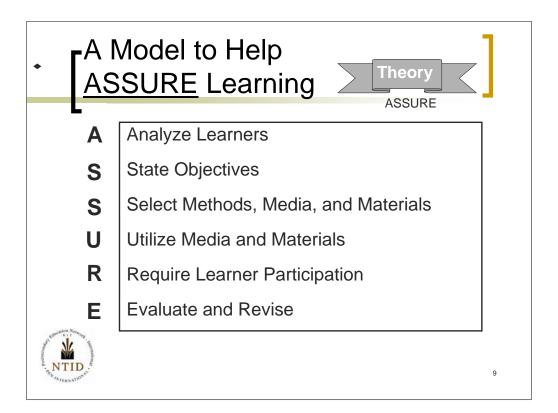


(Adapted from "Training and Instructional Design", Applied Research Laboratory, Penn State University)

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#### 教育技术词汇总揽 (理论)

- 一教育技术: 从行为,认识,和构成理论教育问题的解决方法中演变全面和系统的应用战略和技术。
- 一教育设计: 利用学习和教育理论来系统的开发教育规范, 保证教育的质量。
- -教育开发:实行设计计划的过程
- (从"培训和教育设计"摘抄。研究实验室。宾州大学)



一个帮助学习**确信**模式的方法

理论

A 分析学习者

S确定目标

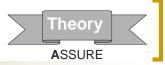
S 选择方法,媒体和材料

U利用多媒体和材料

R 要求学习者的参与

E 评估和改进

## Analyze Learners



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



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分析学习者 理论

- 一基本特性
- 一明确基本资格
- 一学习风格
- --知觉上的参数和优势
- --信息处理特性
- --动机上的因素
- --生理学上的因素

# Analyze Learners Local Examples

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



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分析学习者 本地实例

- -Ratchasuda大学的学生
- 一语言水平
- 一参数
- 一现在技能水平
- 一等等

## 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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分析学习者 NTID的经验

- -18岁的聋人学生
- 一一有4级到6级的阅读能力
- 一一有9到10年的写作能力
- -采用不同的阅读解释战略
- 一用模式和社会交际来学习写作

## 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

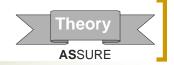


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#### 分析学习者 NTID经验

- 一更多的依靠视觉信息
- -有困难理解多重涵义词
- 一对长期记忆的激活可能不象被指导或重视的那样

## State Objectives



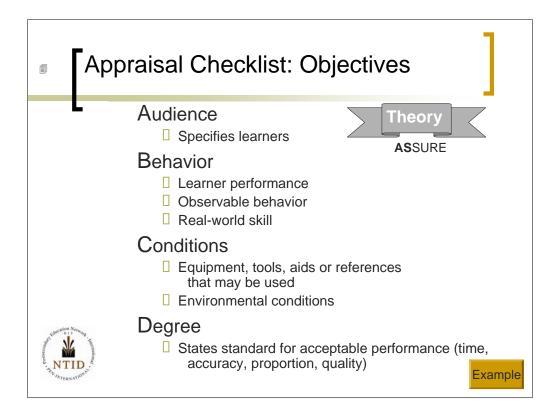
- ABCD's of Well Stated Objectives
  - Audience
  - Behavior
  - Conditions
  - Degree
- Classification of Objectives
  - Objectives and Individual Differences



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#### 确立目标 理论

- -ABCD四个被很好确立的目标
- --A听众
- --B行为
- --C条件
- --D学历
- 一目标的分类
- -目标和每个人的不同



评估检查单:目标 理论 观众
一确定学习者
行为
一学习者的表现
一看得见的行为
一现实技能
条件
一能被使用的装备,工具,帮助或参考
一环境条件
学位
一为可以接受的行为规定标准(时间,准确度,比例,质量)

例子

# State Objectives Typical Instructional Presentation? A,B,C,D Elements

确立目标 本地实例

一典型的教育讲演

-A, B, C, D元素

## State Objectives

NTID Experience

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



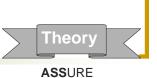
Non-linear sequence

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#### 确立目标 NTID实例

- 一重视在个人
- 一目的使能
- 一演示被期望的表现
- 一显示样板测验问题
- -回忆近期的,相关的知识
- 一提供补习
- 一非线性的结果

# Select Methods, Media, & Materials



- 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 MaterialsDesigning New Materials



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选择方法,多媒体和材料 理论

- -选择一种模式方法
- 一选择多媒体格式
- 获取特殊材料
- 一选择可用的材料
- --求助于多媒体、技术专家的帮助
- --调查来源
- --选择条件
- --教师的个人档案
- 一修改现有的材料
- 一设计新材料

### Select Methods, Media, & Materials



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



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选择方法, 媒体和材料 本地实例

- 一可用的多媒体
- 一有可用的材料吗?资源?
- 一选择材料?
- 一修改现有的材料?
- 一设计新材料?资源?

# Select Methods, Media, & Materials



- 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

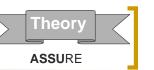


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#### 选择方法,媒体和材料 NTID实例

- 一对不 熟悉的科学, 数学或技术词汇采用词汇单
- 一如果公式或方程需要书写在黑板上的话,给聋人学生一份书面拷贝。方程是很难用 手语表达或字幕表达清楚的。
- 一建议采用网站做辅助
- 一尽可能采用图形

# Utilize Media & Materials



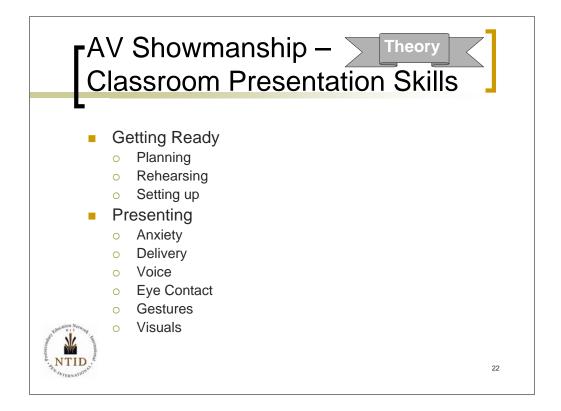
- Preview the Materials
- Prepare the Materials
- Prepare the Environment
- Prepare the Learners
- Provide the Learning Experience



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利用多媒体和材料 理论

- 一预习材料
- 一准备材料
- 一准备环境
- 一准备学习者
- -提供学习经验



音频视频主技演出的技巧 理论 教室的讲演技能

- 一准备
- 一一计划
- --预演
- --设置
- 一讲演
- --渴望
- --传递
- --声音
- --眼神接触
- --姿势
- --视觉形象

# Utilize Media& Materials

Local Examples

- Typical Classroom?
- Presentation Technology
- Practice Opportunities



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利用媒体和材料 本地实例

- 一典型的教室
- 一讲演技术
- 一练习的机会

# Utilize Media& Materials



- 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.



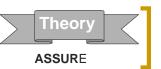
Establish a communication plan

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#### 利用媒体和材料 NTID实例

- 一聋人学生表示一个好老师要有丰富的知识,会应用视觉材料,有好的交流技能
- 一聋人学生喜欢亲善和有关怀态度的老师
- 一安排好教室为交流做准备
- 一建立一个交流计划

# Require Learner Participation



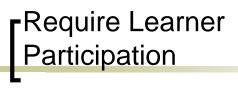
- The one condition that pertains to all objectives is *practice*!
- Learning is an active process; mental processing, not physical activity
- FEEDBACK!
  - Meaningful information to correct performance



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#### 要求学习者的参与 理论

- -一个适合于实现各种目标的条件是练习
- 一学习是一种主动的过程,心理过程,不是身体的活动
- 一反馈!
- --有涵义的信息能改善成绩



Local Examples

Strategies to promote learner participation?



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要求学习者的参与 本地实例 一促进学习者的参与的战略

# Require Learner Participation



 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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#### 要求学习者的参与 NTID实例

- 一角色扮演促进记忆老师讲授的知识的持久性
- 一如果学生能够互动的学习材料,即使阅读技能低的学生也能同阅读技能好的学生一样在考试中表现出色。

# Require Learner Participation

NTID Experience

 Significant correlation between deaf students course grades and participative learning style



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要求学习者的参与 NTID实例

一聋人学生课程分等级和参与式的学习风格的重大关联

# Evaluate and Revise ASSURE

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



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评估和改进 理论

- 一评估学习者的收获
- 一对方法和媒体的评估
- 一改进

## **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

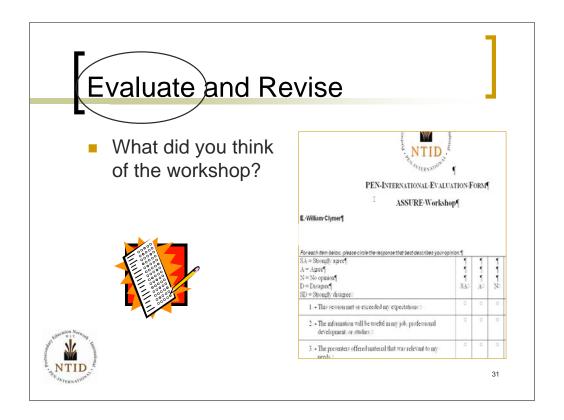


Review your answers

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#### 评估和改进

- 一在一页纸上
- 一写下以ASSURE六个字母开头的单词
- 一以你作为学生或老师的亲身经历中给出一个最能表现ASSURE确信模式 实例
- 一回顾你回答



#### 评估和改进

一你对本研讨会有何见解?



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



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评估和改进 本地实例

- -你如何改进本讲座?
- --学习者的收获?
- --材料和方法?
- --对研讨会的态度?

## Evaluate & Revise

NTID Experience

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



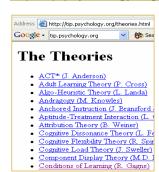
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#### 评估和改进 NTID实例

- 一格式化的评估
- 一累积性评定
- 一获取目标
- 一对经验的态度
- 一指令的有效率

## 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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理论到实践 (TIP)

http://tip.psychology.org/

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问题