

ROTECH
HEALTHCARE INC.
We Care About Patient Care

ADDIE


© 2006 - Rotech Healthcare Inc.

Agenda

- Facilitator's background
- Objectives and overview
- ADDIE
- Summary
- Assessment

2

Ingrid's Background



- Worked in
 - Healthcare industry (i.e. the business, non-clinical side) for 10+ years
 - Software industry – specifically in the healthcare software industry such as Cerner and WebMD; positions included support analysts, business analysts and training
- Education includes
 - Bachelors in Management Information Systems (i.e., computer and management curriculum)
 - Masters in Instructional Systems Design (i.e. learning how to teach teachers how to teach!)

3


Objectives

- List the 5 components of the ADDIE model
- Create objectives
- Identify and describe Kirkpatrick's 4 Levels of Evaluation Model

4

Overview – ADDIE


- Analysis
- Design
- Development
- Implementation
- Evaluation



5

ADDIE

- ADDIE is one of the models used in the training industry
 - Analysis
 - Design
 - Development
 - Implementation
 - Evaluation
- Used as a guide to develop training – like a recipe
- Normally circular throughout the process – but not always
- Other models include:
 - Dick & Carey's
 - Kemp's ISD (Instructional System Design) models



6

ADDIE

```

    graph TD
      Analysis((Analysis)) --> Design((Design))
      Design --> Development((Development))
      Development --> Implementation((Implementation))
      Implementation --> Evaluation((Evaluation))
      Evaluation --> Analysis
    
```

- **Analysis**
- Identify issues
- **Design**
- **Development**
- **Implementation**
- **Evaluation**

7

ADDIE - Analysis

- Identifying issues – what are you analyzing?
 - Audience and their characteristics
 - New expected behaviors
 - Learning limitations
 - Delivery options
 - Project timeline

8

ADDIE - Analysis

- Identifying issues – how to identify issues?
 - **Feedback**
 - Surveys: questionnaires asking for end user feedback
 - Interviews: one-on-one sessions
 - Focus groups: group sessions
 - DVP feedback
 - **Observation**
 - Direct: monitor end user(s)
 - Indirect: review data such as patient satisfaction surveys, safety data, sales reports, turnover data, and reports such as HIA and No Charge *
 - * Both will review on Thursday

9

ADDIE - Analysis

- Identifying issues – how to identify issues?
 - **Based on your observation:**
 - Is there an issue that prevents a Location from minimizing their HIA?
 - Are there issues with a particular set up of equipment?

10

ADDIE - Analysis

- Determining audience and characteristics include:

	Description
Demographics	Gender, age, or education
Attitude	Learners' outlook on content or opinion on CBT (computer-based training)
PC Comfort Level	Learner's skill level on the computer
Motivation	Learners' level of enthusiasm to learn the content
Prior Knowledge and Experience	Base level of knowledge/experience required to attend the training or content must include additional details

11

ADDIE - Analysis

- Determining audience and characteristics
 - Would experienced PSTs and a new SR attend the same class for equipment training?
 - Would experienced PSTs and a new SR attend the same course for Compliance Training?

12

ADDIE - Analysis

Let us look at the points a SR had in (a) the months *before* training and (b) *after* training

Training Month	Dec 06	Jan 07	Feb 07	Mar 07	Apr 07	May 07	Jun 07	Jul 07	Aug 07	90 Day PT Avg Before Training	90 Day PT Avg After Training	Diff
SR	11.95	9.25	14.05	21.15	14.75	22.05	2.15	1.35	10.05	19.05	8.90	

Points a SR received for 3 months before training (Dec 06, Jan 07, Feb 07) and 3 months after training (Apr 07, May 07, Jun 07). Month of training is Mar 07.

ROTECH

ADDIE - Analysis

Another example of a SR points received in (a) the months *before* training and (b) *after* training

Training Month	Dec 06	Jan 07	Feb 07	Mar 07	Apr 07	May 07	Jun 07	Jul 07	Aug 07	90 Day PT Avg Before Training	90 Day PT Avg After Training	Diff
SR	21.0	15.0	15.45	27.25	14.95	13.95	7.25	9.75	17.35	18.90	13.45	-6.20

Points a SR received for 3 months before training (Dec 06, Jan 07, Feb 07) and 2 months after training (Jul 07, Aug 07). Month of training is Jun 07.

ROTECH

ADDIE

- Analysis
- Design** - create learning and delivery strategies
- Development
- Implementation
- Evaluation

ROTECH

ADDIE - Design

- Create learning and delivery strategies
 - Designing the GUI (i.e. graphical user interface – what the learner will see) but not the content
- Rotech templates
 - Breeze PowerPoint template; this PowerPoint file will be placed on Rotech U – under RU Resources, Training and Meeting Resources, Content Author Information
 - Preview template

ROTECH

ADDIE

- Analysis
- Design
- Development** - create training
- Implementation
- Evaluation

ROTECH

ADDIE - Development

- Create training includes:
 - Content development
 - Successful learning techniques
 - Objectives
 - Assessment

ROTECH

ADDIE - Development




- Create training includes:
 - Developing content
 - Tip! Aristotle's steps to present a story:
 - Tell 'em what you're going to tell 'em
 - Tell 'em
 - Tell 'em what you told 'em
 - Sequencing content – listing step by step
 - Validating content – testing for accuracy and if objectives were met

10




ADDIE - Development




- Successful learning –
<http://brwn02.pharmacy.com/successfullearning> (10 minutes)
- 3 pieces to successful learning
 - Why?
 - Chunking (7 plus or minus 2 rule)
 - Objectives

20




ADDIE - Development




- Objectives
 - 3 steps to developing a *measurable AND specific* objective
 1. Determine type of learning
 2. Select level of learning
 3. Write down key word for objective
 - Objective toolkit <http://brwn02.pharmacy.com/objtoolkit>
 - Objective handout for Knowledge domain

21




ADDIE - Development (Exercise)




- Using the PowerPoint template, create a module for:
 - Calling the Corporate Offices using a touchtone phone
 - Starting a car with automatic gears
 - Making eggs and toast for breakfast

22




ADDIE - Development (Exercise)




- Exchange the PowerPoints with each other to assess the module for:
 - **Successful learning**
 - **Why?** Is there a reason stated why someone has to learn their module?
 - **Chunked?** Is the information chunked into manageable pieces?
 - **Objective?** Is the objective(s) measurable?
 - **Content**
 - **Sequencing?** Are there any steps missing and are they in the right order?
 - **Valid?** Is the content accurate?
 - **Clear?** Is the content easy to understand?

23



ADDIE - Development




Assessment – create questions based on the objective(s)

Example: calling the Corporate Offices using a touchtone phone

- Objective: demonstrate the steps required to call Rotech's Corporate Office
- Question: explain the steps required to call Rotech's Corporate Office

24





Time to Practice


ADDIE – Development

Assessment – create questions based on the objective(s)

Let's take a look at the objectives on your previous exercise... what assessment questions would you use in those training modules?






25




ADDIE

- Analysis
- Design
- Development
- **Implementation**
- conduct training
- Evaluation


26




ADDIE – Implementation

- Conduct training:
 - Provide student registration
 - Prepare print materials *
 - Deliver content to learners (ILT or CBT)
 - ILT (instructor-lead training) or FTF (face-to-face) instruction
 - CBT (computer based training) or WBT (web based training) – includes posting to Rotech U *

** Both will review on Thursday*





27




ADDIE

- Analysis
- Design
- Development
- **Implementation**
- **Evaluation**
- collect data to determine success





28




ADDIE – Evaluation

- Collect and review data to determine success and to improve training
- Incorporates continuous improvement – “lessons learned”
- Data includes:
 - Evaluations
 - Reports








29



ADDIE – Evaluation


- Kirkpatrick's 4 levels of evaluation – one type of evaluation:

Level 1	Reaction	Learner's reaction to the training	Happy Check! 
Level 2	Learning	Learning results	Pre and post assessments 
Level 3	Transfer or Behavior	Knowledge transferred or change of behavior at the work place, ideally performed 3-6 months after training	Determine if learner has incorporated the knowledge in their job 
Level 4	Results	Business results – including impact to the bottom line	HIA, turnover reduction, increased sales, reduced workers' comp claims 



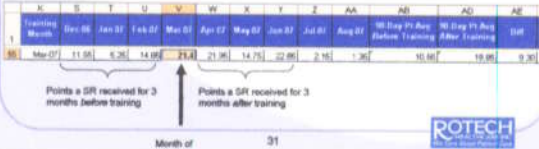
30

ADDIE – Evaluation



- Remember the SR Training Metrics used earlier? Which level of evaluation is the SR Training Metrics?

Level 1	Reaction
Level 2	Results
Level 3	Transfer or Behavior
Level 4	Results



Month of training: 31

ROTECH
The Best. The Future. The Now.

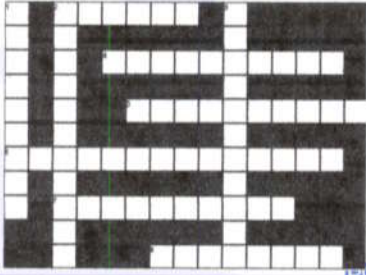
Summary

- ADDIE**
The 5 components of the ADDIE model include: Analysis, Design, Development, Implementation, and Evaluation
- Objectives**
Objectives must be specific and measurable
- Evaluation**
Kirkpatrick's 4 Levels of Evaluation Model includes: reaction, learning, transfer/behavior, and results

32

ROTECH
The Best. The Future. The Now.

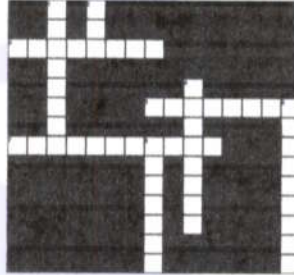
Assessment



33

ROTECH
The Best. The Future. The Now.

Assessment



34

ROTECH
The Best. The Future. The Now.

For more info...

- Additional references – ASTD (American Society for Training and Development)
 - Local chapter meetings
 - Website: www.astd.org
 - Learning Circuits: www.learningcircuits.org
- Abbreviations – next page
- If you have any questions on this topic, contact training@rotech.com

35

ROTECH
The Best. The Future. The Now.

Abbreviations – Training Related

- ADDIE** Analysis, Design, Development, Implementation and Evaluation
- ASTD** American Society for Training and Development
- CBT** Computer Based Training
- FAQ** Frequently Asked Questions
- FTF** Face-to-Face Instruction
- ILT** Instructor Led Training
- ISD** Instructional Systems Design
- KSAs** Knowledge, Skills, and Attitude (aka cognitive, psychomotor, and affective)
- PI** Process Improvement
- QRG** Quick Reference Guide (i.e. job aid)
- SME** Subject Matter Expert
- T/D** Training and Development
- TMI** Too Much Information
- URL** Uniform/Universal Resource Locator (i.e. a link to a web page)
- WBT** Web Based Training
- WYSIWYG** pronounced wtz-e-wig: what you see is what you get

36

ROTECH
The Best. The Future. The Now.