

## Session 3: ISD models

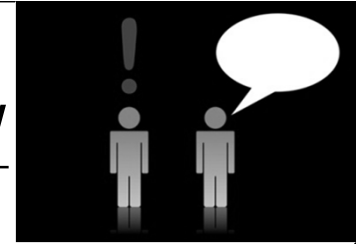
Objectives	Learners will be able to: <ul style="list-style-type: none"><li>• apply instructional systems design models for their instructional design</li></ul>
Agenda	This session will cover: <ul style="list-style-type: none"><li>• Instructional Systems Design Models</li></ul>
Next Class	We will cover: <ul style="list-style-type: none"><li>• Instructional Methods</li><li>• Communication Theory</li></ul>

# Instructional Systems Design



**Sangmyung  
middle school**

**SM** *SM Consulting*



- In 2010, selected as a 'Edunet' model school
- In 2011, low usage of 'Edunet'
- The principal wants to solve this problem

- Sangmyung middle school asked consulting
- Need to provide solution for the problem

• Teacher: 12

• Consultant: 13

**A team**

Teacher: 6

Consultant: 7

**B team**

Teacher: 6

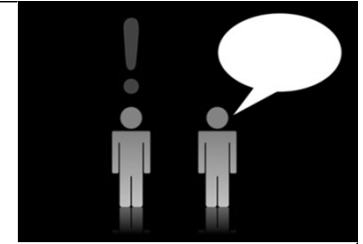
Consultant: 7



**Sangmyung**  
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Prepare  
5 min

Survey  
5 min

Analysis  
5 min

Solution  
5min

Present  
10 min

# Instructional Systems Design Models

## ADDIE Model

(Gustafson & Branch, 2002)

### Analysis

- Assessment of need, problem identification, occupational analysis, competence, or training requirements
- Formulation of system and environmental descriptions and identification of constraints
- Characterization of learner population
- Analysis of goals and subgoals for types of skills/learning required

# Instructional Systems Design Models

## Design

- Formulation of broad goals and detailed subgoals stated in observable terms
- Sequencing of goals and subgoals to facilitate learning
- Consideration of alternative solutions to instruction
- Formulation of instructional strategy to match subject-matter and learner requirements
- Selection of media to implement strategies

# Instructional Systems Design Models

## Development

- Author and produce interventions based on design plan

# Instructional Systems Design Models

## Implementation

- Development of materials and procedures for installing, and periodically repairing the instructional program
- Costing instructional program



# Instructional Systems Design Models

## Evaluation

- Development of pretest and post-test matching goals and subgoals
- Empirical try-out of courseware with learner population, diagnosis of learning and courseware failures, and courseware revision
- Evaluate after full-scale implementation

Dick & Carey Model

# Dick & Carey Model

(Dick, Carey, & Carey, 2009)

# Reusable Learning Objects

A learning object is a resource, usually digital and web-based, that can be used and re-used to support learning

“any digital resources that can be reused to support learning”  
(Wiley, 2009, p.351)

# References

Dick, W., Carey, L., & Carey, J. O. (2009). *The systematic design of instruction* (7<sup>th</sup> ed.). Upper Saddle River, NJ: Merrill.

Gustafson, K. L., & Branch, R. M. (2002). *Survey of instructional development models* (4<sup>th</sup> ed.). Syracuse University, Syracuse, NY: ERIC Clearing House on Information & Technology.

Wiley, D. (2009). Learning objects and instructional theory. In C. M. Reigeluth & A. A. Carr-Chellman (Eds.), *Instructional-design theories and models, Vol. 3* (pp. 349-364). New York: Routledge.