



- Unit 4:  
INSTRUCTIONAL  
DESIGN



Hello!

WE ARE Katharina Hohla  
& Martin Ebner



1

# INSTRUCTIONAL DESIGN

What is it?

## ● INSTRUCTIONAL DESIGN

### ○ Wikipedia:

“... is the practice of systematically designing, developing and delivering **instructional products and experiences**, both digital and physical, in a consistent and reliable fashion toward an efficient, effective, appealing, engaging and inspiring **acquisition of knowledge**.”

The process consists broadly of determining the state and needs of the **learner**, defining the **end goal** of instruction, and creating some “intervention” to assist in the transition.”

Source: [https://en.wikipedia.org/wiki/Instructional\\_design](https://en.wikipedia.org/wiki/Instructional_design), CC BY-SA 3.0

## ● INSTRUCTIONAL DESIGN PROCESS



1. Analyse the needs of the learners
2. Define the goal
3. Create instructional material



2

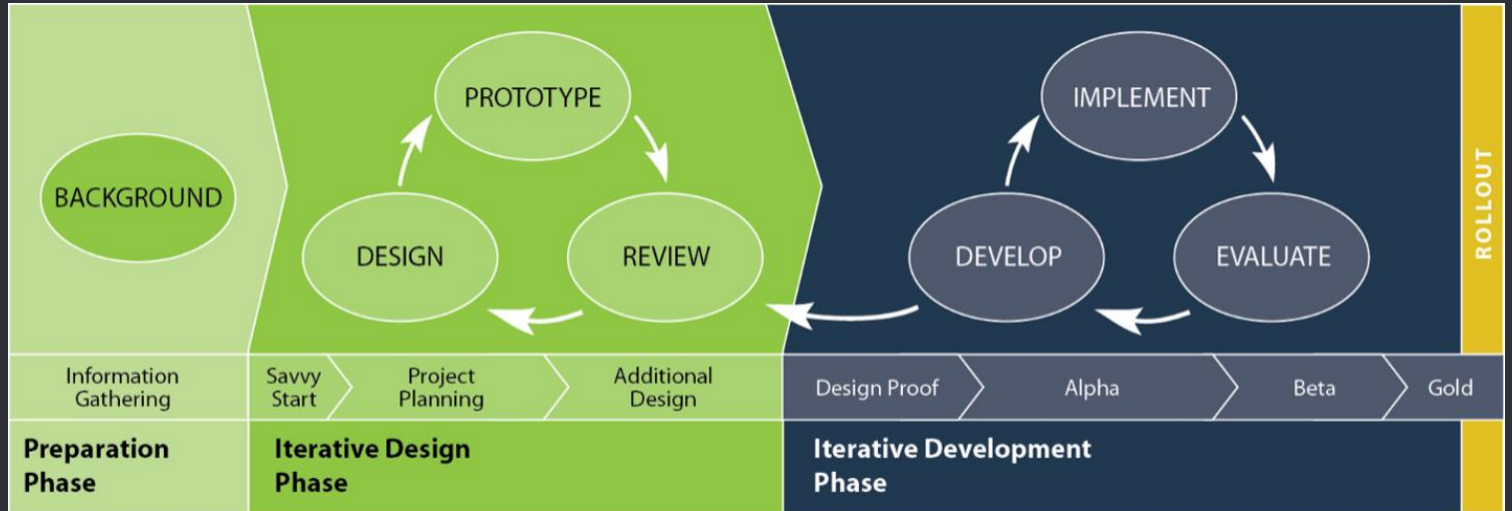
# INSTRUCTIONAL DESIGN MODELS

Guidelines for Instructional Designers

## ● ADDIE

- **A**nalysis
  - Who are the learners? What's the problem? What's the goal?
- **D**esign
  - Creating outcome (learning objectives), storyboards, user interface, ...
- **D**evelopment
  - Creating material (slides, worksheets, videos, games)
- **I**mplementation
  - Go live (upload material, use it in class, ...)
- **E**valuation
  - Surveys, interviews, ...

# SAM = SUCCESSIVE APPROXIMATION MODEL

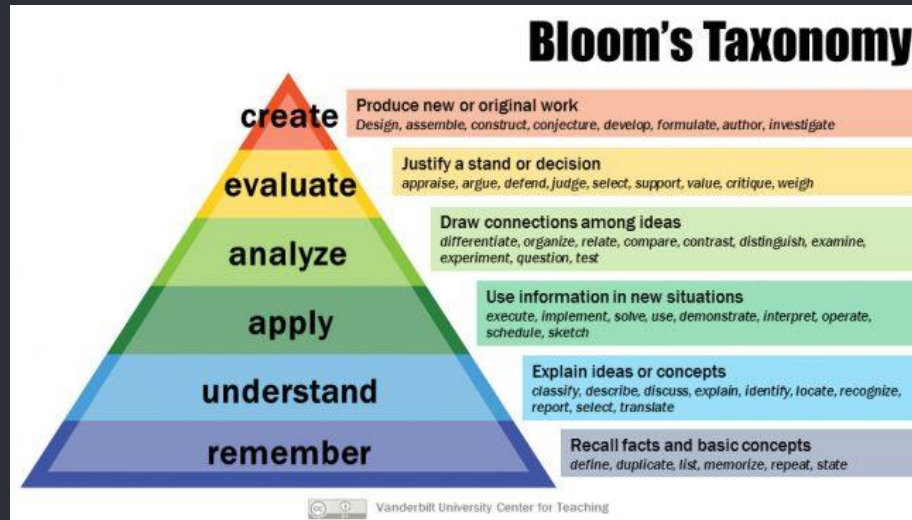


Source: <https://www.alleninteractions.com/services/custom-learning/sam/elearning-development> (May 2021)



- BLOOM'S TAXONOMY (1956)  
(for Design)

○ For defining the level of learning objectives





3

## INSTRUCTIONAL DESIGN FOR GAME BASED LEARNING

How do I apply those models on game design?

## ● ID MODELS IN GAME DESIGN

- for the whole process of game design:  
ADDIE or SAM
- for learning objectives of games:  
Bloom's Taxonomy
- for the implementation of the game:  
Gagné's Nine Events of Instruction



# Group Work

... it's your turn

## ● SEMINAR WORK

- Teams of two, two pages (about 4000-4500 characters without spaces).
- Choose an educational game.
- Write an analysis of the game:
  1. Describe it shortly.
  2. Analyse the game from a didactical point of view including:
    - Target audience
    - Learning objectives
    - Instructions to the learners (support)
    - Learning elements
    - Learning progress
    - Performance measurement (assessment)
  3. Propose improvements.
- Upload the analysis as PDF until 7 June 23:59.

## ● SEMINAR WORK - PRESENTATION

- Presentation in the last unit (9 June)
  - 10 minutes / group
  - Introduction of the game and presentation of your analysis
    - ◆ Option A: Presentation with slides (incl. screen-shots of the game)
    - ◆ Option B: Live-presentation of the game and the seminar work (PDF)



## Resummee

What can you take away for yourself and your work?

Go to <https://fbr.io/join/idgbl> and enter your answer



## References

- Dirksen, Julie (2016): *Design for how people learn*. Berkeley: New Riders.
- <https://www.alleninteractions.com/services/custom-learning/sam/elearning-development>, May 2021
- <https://cft.vanderbilt.edu/guides-sub-pages/blooms-taxonomy/>, May 2021
- <https://youtu.be/8lbajf1MHkQ>, May 2021

- CREDITS

- Special thanks to all the people who made and released these awesome resources for free:

- Presentation template by [SlidesCarnival](#)
- Photographs by [Unsplash](#)

• Thanks for the attention!



**KATHARINA HOHLA**  
Instructional Designer

katharina.hohla@tugraz.at



**MARTIN EBNER**  
Educational Technologist

martin.ebner@tugraz.at