Training on Patterns

What is a pattern?

"A pattern allows the use of a reusable general solution for a problem that occurs frequently within a certain context"

Patterns

- Concept coming from Architecture

- *"Each pattern describes a problem which occurs over and over again in our environment, and then describes the core of the solution to that problem, in such a way you can use this solution a million times over, without ever doing it the same way twice"*

Patterns Elements

Name	Classification	Context	Motivation
Figure	Description	Problem	Solution
As known as	Alias	Intent	Solution Diagram
Forces	Aplicability	Structure	Participants
Collaborations	Consequences	Implementation	Example
Known Uses	Related Patterns	Influences	Sample Code
Dinamic	Resulting Context	Justification	Rationale

Pedagogical Patterns

Similarly…

> “Pedagogical patterns try to capture expert knowledge regarding the practice of teaching and learning”

Sets of Patterns

- Patterns may exist in isolation or not
- How can we group them together?
  - Collections
  - Catalogs
  - Systems
  - Languages

Sets of Patterns

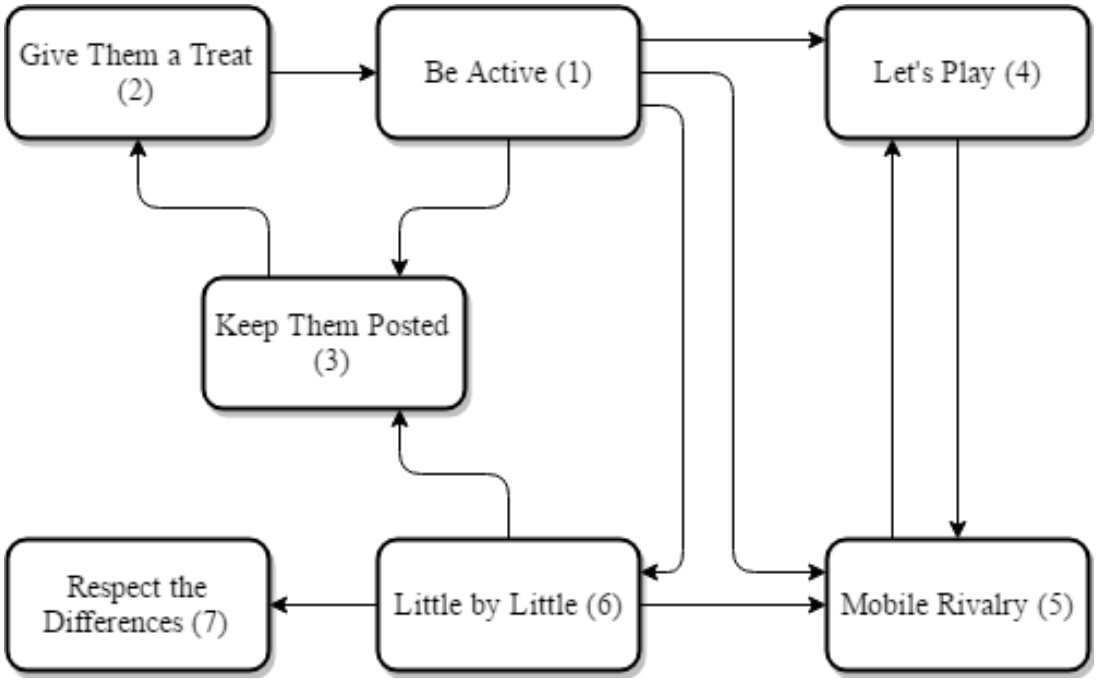
- Collection
  - Set of any patterns that have no relationship to each other and, usually, no standardization in presentation format.
- Catalog
  - A collection of related patterns, usually weakly or informally related.

Sets of Patterns

- System
  - Cohesive set of co-related patterns that work together and should have patterns described in a consistent and uniform style.
- Language
  - Structured collection of patterns that rely on each other, covering all important aspects in a given domain and must be written in an uniform style.

MLearning-PL

- Pedagogical pattern language for mobile learning applications
  - Keep learners motivated and engaged while using mobile learning applications



MLearning-PL

1	**Be Active**
Variant of	Active Student [Bergin et al. 2012]
Context	You want to maximize student learning.
Problem	The deep consequences of a theory are unlikely to be obvious to one who reads about, or hears about the theory. The unexpected difficulties inherent in using the theory or applying the ideas are not likely to be apparent until the theory is actually used.
Forces	- Passive learners don't learn much. - If learners read to explanations, without themselves becoming engaged, what is learned is unlikely to go into long-term memory. - If the learners don't actively engage the material, they won't retain it. They need to write and they need to do.
Solution	Keep the learners active. They should be active in the app, either with questions or with exercises.