How to Write Tacit Knowledge As a Pattern Language: Media Design for Spontaneous and Collaborative Communities

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Introduction
Spontaneous and collaborative community is much sought but hard-to-get in either physical or virtual community. The difficulty in realizing such communities comes from the requirement that two conflicting conditions, the freedom of participants and a whole or order, must be satisfied. Pattern language, which describes the tacit knowledge of local acts to create global order. We propose a procedure for making pattern language, demonstrating from our experience of making “Learning Patterns”, which is a pattern language for creative learning.

Pattern Language
“Pattern languages” is known as the method to share “knowledge of practice.” The idea of pattern language was originally proposed in architectural design (Alexander et. al. 1977, Alexander 1979) and it has been applied and well known in the software design (Beck and Cunningham 1987, Gamma et. al. 1995). Recently, languages in specific theme like interface design (Tidwell 2000) and in broader domain like organization design (Manns & Rising 2005), human activity design of learning (Iba et. al. 2009), and so on.

Pattern Languages as Media
Pattern languages provide a new view for the reader so that they can think, in other words “media for consciousness”. And they fill the role of providing common vocabulary on designing principle of the problems as “media for communication”. Besides they help to transform improbable discoveries to probable discoveries, and support the creative system to forms as “media for discoveries”.

5 Phases for Making a Pattern Language
We would like to propose 5 phases process for making a pattern language.

Pattern Mining To discover embodied patterns in the activities within the target community.
Pattern Prototyping To make a few patterns in full format, in order to clarify and share the vision of final product.
Pattern Writing To write up all patterns, and to improve them through Writer’s Workshop inside the project.
Language Organizing To clarify the relations among patterns, and make the whole well-organized.
Catalog Editing To made and edited the pattern catalog, including cover design, books recommendation, and index.

Case: Learning Patterns 2009
“Learning Patterns” is a pattern language for creative learning, which is originally developed for an official guidebook for learning “how to learn” in Keio University. The catalog booklet of Learning Patterns to undergraduate students was handed out to more than 4,000 students of two faculties: Faculty of Policy Management and Faculty of Environment and Information Studies.

Pattern Catalog

Pattern Form

Pattern Mining

Catalog Editing

Pattern Prototyping

Language Organizing

Pattern Writing

Collaborative Improvement of Patterns

Overview of Learning Patterns

Project Members

Illustrations

9 Undergraduate students of Iba lab, Keio University.