

## **A Study on the Development and Characteristics on the TFS(The First Study) System**

Hyounggu Kang  
Soongsil University, Seoul, Korea  
godlike09@ssu.ac.kr

Seongwoo Choi  
Soongsil University, Seoul, Korea  
choiss@ssu.ac.kr

Pansoo Kim  
Soongsil University, Seoul, Korea  
ckhrd@ssu.ac.kr

**Abstract:** This study describes the development process and characteristics of TFS, which is a learner-centered on-line LMS(learning management system) based on the self-directed learning SMMIS model of Soongsil University. TFS system consists of a learner-centered LMS and learning content. The LMS is conducted based on the on-line learning planner, and the learning content consists of digital textbooks, based learning and SDL (self-directed learning) on-line content.

**Keywords:** *Self-Directed Learning, LMS(Learning Management System), TFS(The First Study)*

# I. INTRODUCTION

## 1. The Problems and Purpose of the Study

Korea's education environment is divided into public education and private education, and it is faced with the problems of the collapse of public education and the explosive expansion of private education. What actually important is that the reason for the demolition of public education is not caused by private education but the learners who do not study by themselves. In other word, above all, it is very important to foster self-directed learners with the power to study by themselves(Kim & Choi, 2011).

CK Instructional Development Institute in Soongsil University developed self-directed learning SMMIS model for improving self-directed learning ability and conducted a variety of research for its effectiveness(Kang, 2011; Kim & Choi, 2011; Yoon, 2012; Lee, 2012; Choi & Kim, 2010). Despite continued research, the need for the online training program for the students in various areas has increased, becoming the cause for developing the self-directed learning SMMIS model-based TFS system. The development direction and characteristics of the TFS system will be examined through this study.

## 2. Research Questions

The research questions to be investigated in this study are as follows. First, what is the development direction of the self-directed learning SMMIS model-based TFS system? Second, what are the characteristics of the TFS system?

# II. SMMIS Model for Self-directed Learning

## 1. SMMIS Model

Recently self-directed learning(SDL) is very important education method in Korea. Professors and researchers of the CK Instructional Development Institute in Soongsil University have developed an SDL model for adolescent students, parents and teachers(Kim&Choi, 2011). We call the model SMMIS.

## □. METHODS

CK Instructional Development Institute has developed the TFS system according to the self-directed learning SMMIS model. First, the acquisition of learning motivation for self-motivation. Second, setting goals for motivation. Third, the preparation and practice of learning plans for meta-cognition. Fourth, the feedback process for interaction. Fifth, the learning assessment and modification for reflection.

## **IV. RESULTS**

### **1. The Features of the TFS System**

TFS system is an online learning system to help learners have the ability to study by themselves and teachers and parents can manage the learning conducted by learners together. For this purpose, counseling and career guidance are available and learning is managed. In addition, the communication about the process and results of learning can be achieved through a variety of communication methods, and the learning management system is available through the online learning planner.

### **2. The Application Example of the TFS System**

The TFS system is designed to improve the self-directed learning ability for learners to learn by themselves and consists of digital textbooks and the learning content of base learning type A and B to help learners apply it to learning together with the self-directed learning content and make a regular habit of it. CK Instructional Development Institute has developed the TFS system and is applying it to the education fields.

## **V. CONCLUSIONS AND RECOMMENDATIONS**

The TFS system is the learner-centered learning management system designed for learners to experience the whole process of self-directed learning that learners diagnose themselves, set goals, establish plans, implement or modify them and assess the results by themselves beyond the existing teacher-centered online learning system. In addition, the TFS system facilitated various interactions by having learners, their parents and teachers check and manage the learning process and its status together. This study has the following significance.

First, the online learning program that helps learners develop their power to learn by themselves rather than increasing the content and amount of learning has been developed. The TFS system was configured in a way that it does not simply provide the method of learning for the purpose of the improvement of the learners' self-directed learning ability but also they can apply it to actual learning and make a regular habit of using it. The TFS system consisting of digital textbooks, base learning types A and B together with the provision of self-directed learning online content induced the actual learning to be applied to a variety of methods.

Second, there is the need for additional studies. There is a need to study the effectiveness of the TFS system through a variety of application examples to apply it to more education fields, and the studies that can continuously examine the impact of the TFS on the actual self-directed learning ability are needed.

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