Applying Human Performance Technology for Improving Performance of Educational Organizations

Eun-Joo Oh*
*Kyungil University, Korea
E-mail : eoh1@daum.net

1. Introduction

The purpose of the proposal is to develop technology solutions by proposing Electronic Performance Solutions Systems for improving the performance of the Technology Enhanced Curriculum Lab at the one of the Universities located at the southern part of the USA. After analyzing the performance problems of the TEC Lab, the suggestionsweremade by identifying discrepancies between the desired goals and the existing situations.

2. Research Methods

The following activities were made to solve performance problems: (1) Theresearcher evaluated the performance of lab activities and determine the extent to which the objectives of the facility are achieved based on the mission statement. The necessary data were collected from the staff, patrons, and administrators using a checklist, a problem log, survey questionnaires, and observations. The collected data were carefully examined the data by the instructional design in order to identify the performance problems of the Lab.Upon identifying the performance problems, the instructional design teamdeveloped a technology solution plan including training and an Electronic Performance Support System (EPSS).

3. Problem Findings

When analyzing the situations of the TEC Lab, the following are the discrepancies between desired goal and current situation.

[Table 1] Analysis of the Performance of the TEC Lab

Desired Goal	Current Situation	Reasons for Discrepancy
1. All the curriculum collection holdings in the database in order to be retrieved and checked out as needed. 2. The staff members are competent in using the database system and trouble shooting techniques. 3. The staff is knowledgeable both in technology and curriculum. 4. The staff is available to assist with equipment preparation to make effective use of class time and model efficient technology use. 5. Information regarding Lab activities and experienced problems are written on a message board and problem log. Staff is informed to other staff for appropriate reactions and solutions. 6. The staff will update and obtain the necessary information and skills through regular meetings and training.	1. Many of the collections are not in the database system. 2. Most of the staff knows the basic features of the database system only and are not competent with trouble-shooting. 3. The Staff does not provide enough information regarding curriculumrelated questions. 4. The staff does not support students and classes held in the TEC Lab for the use of educational technology. Most of the staff is limited in their knowledge and skills in the use of technology. 5. Necessary information (i.e. memos about changes in settings of computers) is not transmitted well among the staff members. 6. Staff meetings are held bi-monthly and there is no training offered to the staff.	1. There is one staff member scheduled to work each hour; it is hard to find the time to work on the database since they are engaged in other duties. 2. None of the staff knows the database system (FileMaker Pro) well enough to teach others. 3. The staff does not have a chance to be trained about curriculum systems, materials, and technology equipment housed in the Lab. 4. Some of the support staff is from outside the Instructional Technology department, and does not have necessary skills and knowledge regarding technology infusion in the classroom. 5. The staff works different shifts and do not communicate with each other about activities and events during other staff's work time. There is not any message board or problem log available to leave a message. 6. Staff meetings held bi-weekly do not provide sufficient necessary information to the staff and the developer of the TEC database system is not available to offer training.

4. Proposed Solutions

Based on the problems found at the Lab, a blended approach is proposed to improve performance issues within the TEC Lab. A blended approach is a combination of training and nontraining solutions in which Electronic Performance Support System (EPSS) takes a part of Human Technology Performance Management System (HTP). For problem areas which need training, traditional training will be scheduled, and for the nontraining problem areas, an Electronic Support System will be designed and implemented in order to offer necessary solutions. The EPSS will be developed in Macromedia Authorware 7 with the combination of text based documents and multimedia files, uploaded on the TEC Lab server and made it available on a CD-Rom. The EPSS will provide the staff with instructional modules and resources to improve their performance as well the performance of the organization. Each section includes text, graphics (screen shots), video clips, and interactivity depending on the context.

In addition, training sessions are scheduled on a regular basis at the beginning of each semester, during the semester, and at the end of semester as needed. Tentatively, the training are planned to teach how to use the database, instructional software, trouble shooting techniques focusing on the management of the School server systems and account management systems, and the EPSS that will be implemented in the lab. Three mandatory training sessions will be scheduled for each semester, and additional sessions will be scheduled on a need basis. The training is to be arranged by the TEC Lab coordinator with the collaboration of the OCC technology. The following EPSS system was proposed to implement at the lab as one of the solutions to improve the lab performance.
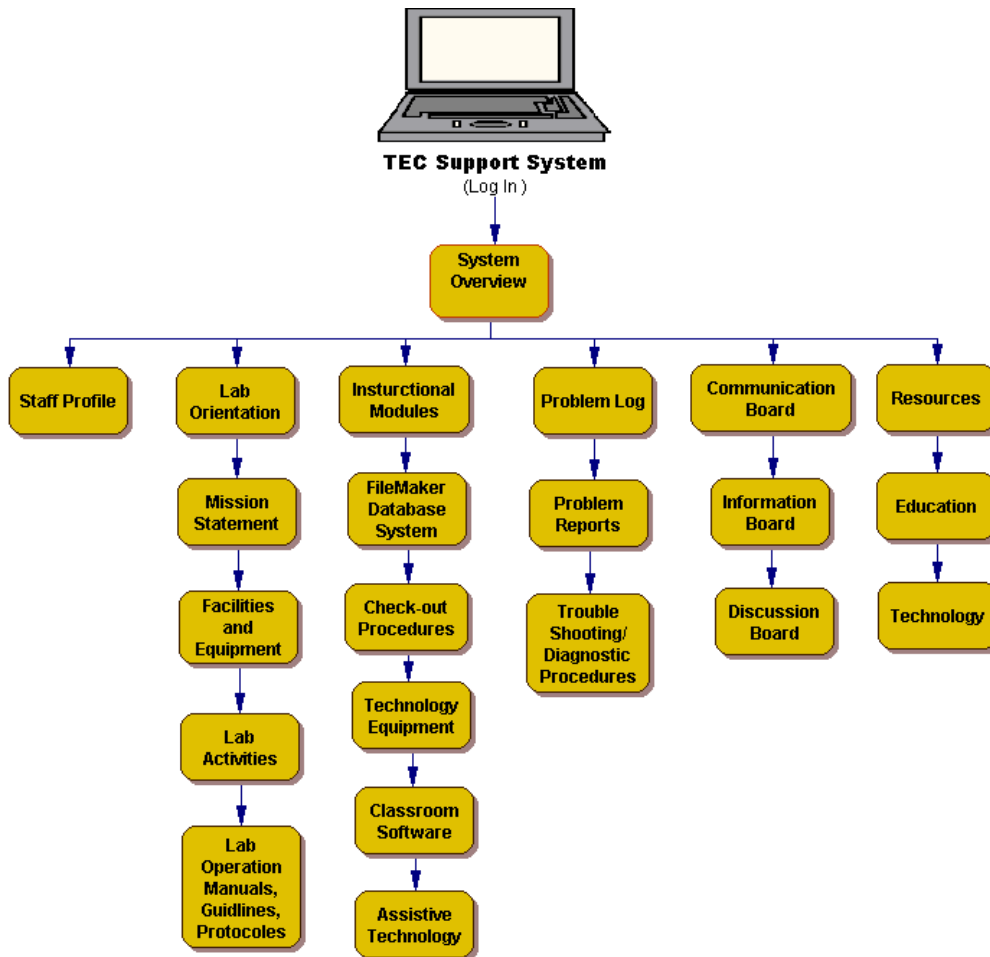

Figure 1. Overview of EPSS