Mission-Based Learning Model and Its Instructional Activity Design

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Abstract

A task-based learning model defines the process whereby students organize teams to accomplish some tasks by using and integrating what they have learnt in a creative way through access to the resources available on network. The task-based learning model can be further broken down into sub-divisions to address different perspectives. The mission-based learning model is one of those. The mission-based learning model particularly helps students develop attitude and ability to accomplish some special task accepting the risk that they may fail. The main characteristics of a mission-based learning model are commitment, risk-taking, persistence and learning by error.

In this study, we develop a typical instructional activity, named “Telling Story about Paper Bill”, as mission-based learning model. The activity we propose is intended to help students integrate knowledge such as history, geography, environment, animal-care and computer skill. During this process of integration, students should develop attitudes of commitment, risk-taking and persistence, and the ability to accomplish tasks collaboratively.

Keywords: Mission-based Learning Model, Instructional Activity Design, Task-based learning model.

1. Introduction

The goal of education is to intend to help students solve different kind problems autonomously. The purpose of developing task-based learning is to provide students with integrated knowledge and prepare them for attaining the problem-solving abilities. Chan et al. have identified four spaces of emerging network-based collaborative learning models. A mission-based learning model is one of them [2].

Like the task-based learning model, the mission-based learning model consist of the following five core capabilities:

(1). Knowledge integration.
(2). Teamwork and cooperative learning.
(3). Critical thinking.
(4). Complex problem solving.
(5). Creativity.

The mission-based model also emphasizes commitment, risk-taking and persistence.

2. Mission-based Learning

Mission

A mission here means a goal-oriented, real-life, and motivated activity under time pressure and limited resources, which is designed for students to engage themselves during their learning process. When assigned one, students will take responsibilities to accomplish it. Then a series of activities will be taking place and learning will occur during the process.

Mission-based Learning (MBL)

Simply put, mission-based learning model intends to help students develop attitude and ability of accomplishing some special task under the risk that they may fail. Students also learn to be responsible, willing to take risk, and persistent in completing the task under time and limited resources pressure.

The following section will draw the main characteristics of mission-based learning model from previous researches.

Commitment

Commitment reflects the extent to which an individual is involved in whatever he or she is doing. Committed people have a sense of purpose and do not give up under pressure because they tend to invest themselves in the situation. Usually, the difficulty of the appointed goal will affect his goal commitment and in turn affect the work performance [3,4]. Thus, “goal commitment” plays an important role in goal setting.

Persistence

Persistence here means the effort expended on a task over an extended period of time. Many entrepreneurs eventually succeed because their internal locus of control helps them overcome setbacks and keep persistence [1,6].

Persistent people tend to see obstacles as challenges to be overcome rather than as reasons to fail. A difficult goal that is important to an individual is a constant reminder to keep exerting effort in the appropriate direction.

Risk-taking

McClenlland proposed that high achievement-motivated people share three common characteristics. Simple put, high achievement-motivated people prefer challenge and risk-taking. Challenge is represented by the belief that change is a normal part of life [5].

Thus the main characteristics of mission-based learning model are commitment, persistence and risk-taking.
3. Instructional Activity of MBL Model

According to above three main characteristics, we proposed a typical instructional activity, named “Telling Story about Paper Bill”, for mission-based learning model.

Mission Goal

Paper bills play an important role in our life. Pictures or characters on paper bill reflect our history, culture and environment (see figure 1). Design a Website that documents and showcases pictures and characters on the current paper bill. All work has to be done in 4 hours at school.

The benefits of proposed activity are shown as follows:

- Students learned more about the WWW and how to create web pages.
- Supervisors/teachers understood the value of the Internet in classroom curriculum.
- Students learned about their history and culture.
- Students learned to work with each other.
- Students and teachers within same team were motivated to share and collaborate.

![Figure 1. Samples of some NT Paper Bill.](image)

Eligibility

Participative students must be between the ages of ten and sixteen years. Each participating team needs to form 5-person team with same grade.

Mission Narrative

Observe and record the following elements of your team’s work and include that information in the required Mission Narrative. You may want to act as activity historians to observe and describe these processes.

- Describe how the activities conducted by your team processed.
- Describe how the workload distributed by your team processed.
- Describe how the creative problem solving proposed by your team processed.
- Describe how the obstacles overcame by your team processed.
- Describe what you have learned from the activity.

Peer Review and Final Judging

We suggest that Web works will be evaluated in a two-stage process: peer review and expert judges. All decisions of the judges will be final and are not subject to review or revision.

Evaluation Rubric

Final judges and Peer Review will be suggested using the same evaluation rubric (see Table 1).

<table>
<thead>
<tr>
<th>Evaluation Items</th>
<th>Scores</th>
</tr>
</thead>
<tbody>
<tr>
<td>The rate of mission achievement</td>
<td>10</td>
</tr>
<tr>
<td>Strategy and Methodology</td>
<td>8</td>
</tr>
<tr>
<td>The time of mission achievement</td>
<td>5</td>
</tr>
<tr>
<td>The completeness of Mission Narrative</td>
<td>5</td>
</tr>
<tr>
<td>The completeness of Web pages</td>
<td>5</td>
</tr>
</tbody>
</table>

In order to balance the weight of each item, final scores of each entry obtained from each reviewer will do multiplication for these five items. Thus, the highest scores of entry will be 10000 (10 X 8 X 5 X 5 X 5).

4. Conclusion

There is a best annotation for mission-based learning, that is, “Education is that which remains, if one has forgotten everything he learned in school.” said by Albert Einstein. Even though we do not believe that educators must apply any learning model to their instructional activities. But we hope that the typical MBL instructional activity we proposed could help educators to adopt and integrate to their curriculum.

We will hold a contest of the mission-based learning. We will observe two aspects of the learning results from that activity: 1) review of the contest activities, 2) analysis of student’s character of problem solving. In addition, we will try to identify the difficulty and cause of give-up that the teams have encountered. Eventually, we will try to find out the framework of MBL by using qualitative and quantitative methodology.

Acknowledgement

The study is supported by National Science Council of R.O.C. (Project No. NSC91-2511-S-110-004).

Reference