

Proposal for Prior Learning to Support The Effective Improvement of Disaster Prevention Drill for Sediment Disaster

Mizuki Kawai¹

Keywords: Prior Learning, Sediment Disaster, Disaster Prevention Drill

Introduction

In recent years, in response to landslide disasters that have become particularly drastic, efficient learning opportunities related to landslide disasters can be ensured for officials of government agencies who have insufficient experience and knowledge specialized in Sediment Disaster.

In order to cope with this situation, i think that it is important to secure learning opportunities for training participants before training and to improve the basic knowledge skills of staff at the preparation phase from normal times.

In this paper, i examined the prior learning contents for the disaster prevention staff of the government organizations participating in the training.

Methods

In reviewing the contents of prior learning, i examined the contents of the pre-learning based on the results of the “joint disaster prevention drill assuming Sediment Disaster” conducted by the relevant municipalities, prefectures, and the government of the Fuji River basin from 2014 to 2016.

Table 1 shows the things to learn in advance.

The flow of examination of the prior learning content is pre-learned about one month before the joint disaster prevention drill in which Nirasaki City, Yamanashi Prefecture participates.

Then, after conducting the training, a questionnaire is conducted to confirm the prior learning effect, and the result is fed back to the learning content.

Table 2 shows the prior learning items to be implemented before training.

¹ Department of Planning and Research, Sabo Frontier Foundation, Tokyo, JAPAN,
(sfro@sff.or.jp)

Table 1: Things to learn in advance

①	Meteorological information up to the time of occurrence of large-scale Sediment Disaster (Large-scale Sediment Disaster, etc.), response to Sediment Disaster
②	Correspondence contents based on local disaster prevention plans
③	Knowledge about Sediment Disaster Prevention Act and large-scale sediment disaster response
④	National technical support (Technical Emergency Control Force, etc.)

Table.2 Prior learning items

No.	Study items
1	Characteristics of Sediment Disaster
2	Characteristics of deep collapse
3	Role of Sabo Project
4	Features of the Sediment Disaster Prevention Act
5	Local disaster prevention plans
6	Provision of weather information
7	Principles of evacuation behavior
8	Evacuation site management
9	The role of Technical Emergency Control Force
10	Emergency investigation based on the Sediment Disaster Prevention Act

Results and discussion

The e-learning format was adopted so that it could be answered in about 30 minutes and the commentary could be checked, considering that it could be done at a convenient time during the job.

About 10 people who participated in the training conducted the prior learning.

The survey was carried out by relatively elderly people aged 40-60, and the average number of correct answers tended to be relatively high at 75%. The majority of the results of the prior learning (questionnaire results) answered that they were useful for training and disaster management work.

About 10 people in Nirasaki City, Yamanashi Prefecture who are expected to improve their knowledge skills in response to Sediment Disaster, will try the operation methods and answer procedures. I confirmed that there was no problem.

Conclusion

In this study, i examined prior learning contents for staff in Nirasaki City, Yamanashi Prefecture.

By learning in an e-learning format, the level of understanding of staff in Nirasaki City regarding sediment disaster increased from 30% to 70%.

The study contents including the purpose of improving basic knowledge related to Sediment Disaster were examined, and it was found that there was a certain effect as prior learning before disaster prevention training.