

## EXPLORING THE EFFECTIVENESS OF TEACHERS TRAINING ABOUT USE OF ICT FOR ENHANCING DISASTERS AWARENESS AND PREPAREDNESS

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### ABSTRACT

ICT play important role in teaching and learning to understand difficult concept like awareness and preparedness about natural disaster. This study investigated the effectiveness of teacher training workshop about use of ICT for enhancing disaster awareness and preparedness. During the study, prepared a module for training in-service primary school teachers for disaster awareness and preparedness with the use of ICT, provide training to in-service primary school teachers for disaster awareness and preparedness with the use of ICT and assess the effectiveness of training workshop, Qualitative method was utilized. A focus group discussion guide use to collect data. The sample of the study was selected through purposive. Data was analyzed thematically. The finding of this study showed that training workshop was effective for primary school teachers. So, there are need to conduct face to face training programs for in-service teacher on different domain of teaching.

**Keywords:** Natural Disaster, ICT, Preparedness and Awareness

### INTRODUCTION

Mulyasari et al. (2011) define, disaster education as education that educates individuals about disaster threat, reduction, awareness, readiness, and preparedness strategies which is a method to minimize the destructive impact of the disaster on human lives. While Nicholai (2003), defined disaster education as it is a program which conducted during an emergency or natural disaster when children cut off from the education system due to complex emergencies. (p. 2). Because they are in such a situation society has to manage by using its resources. (Nicholai, 2003, p. 11). After the catastrophic earthquake of 2005 in Pakistan, first time mentioned disaster education in National Education Policy 2009. According to the National Education Policy of Pakistan (2009), disaster education is the preparation of children for

disasters, recovery, and disaster dealing strategies which would be integrated into the National Curriculum in the future. (P.40).

To educate student about natural disaster teacher training is necessary. A teacher training is a program in which teacher learn new teaching techniques and strategies which helps for better learning of students. For students better awareness and preparedness about natural disaster, teachers training is required which play an important role to educate them. Shah et al. (2021) explored that, during different types of disaster, individual have opportunity to save himself if they know the safety rules and teachers are a person who have good chance to provide awareness about disasters and train students for disaster so, children can save their lives during disaster situation, even in the

absence of their guidance. In addition, they described that, classroom is a right place, teachers are right person and teaching is right technique to aware and prepare students about disaster risk management. Most of the children are not prepared for disasters because of lack of training among the teachers and school staff, therefore, training is important to teach student and teacher to deal disaster challenges. Training children and disseminating information about natural disasters is a critical task because if we train them in a real situation then it is time-consuming, expensive and may injure trainees, so it is time to prepare teachers to train students for a natural disaster by using technologies through learning games and videos through which people take training in a short time, less cost and reduce injuries (Almeida et al., 2014). The goal of teachers is the achievement of students. To become a great teacher, teachers need training just like other specialized professions. They must receive ongoing training even they are already teaching (Kelly.M, 2019). Teacher training is important for teacher professional development if teachers do not get training opportunity they will feel bore from their profession and they are unable to solve new challenges and difficulties of their profession. Training related to subject help teacher to update about their subject, teaching methodology and students need. Teacher training also play important role for effective classroom management skills, trained teacher knows the strategies to catch the attention of students while using different teaching aids.

### **Objectives**

- i. To prepare a module for training in-service primary school teachers for disaster awareness and preparedness with the use of ICT.
- ii. To provide training to in-service primary school teachers for disaster awareness and preparedness with the use of ICT.
- iii. To assess the effectiveness of training workshop to create awareness and prepare them to cope with natural disasters using ICT.

### **Literature Review**

Pakistan Poverty Alleviation Fund, 2015 define disaster as, the destruction of a community in which whole the system of that society destroys including societal life, educational life, and a

financial, natural, and artificial habitat which paralyzes catastrophe-affected communities. Disaster education can be helpful to overcome disaster destruction in any community. Disaster education is a behavioral, cognitive, intellectual, observational, and perceptual change of children toward preventative disaster strategies. United Nations Children's Fund (2011).

### **Teacher Training for Natural Disaster**

It is observed that, without training, teaching does not give effective output so, too aware and prepare students about natural disaster teacher training is necessary. Kariadi et al. (2020) stated that, during disaster children do not understand what is going on and what should they do in this situation so, disaster awareness and preparedness necessary for teachers to teach children which is not possible without teacher training.

Shah et al. (2021) explored that, when different types of disaster, natural or man-made, occur individual have opportunity to save himself or other surround them if knows the safety rules and skills and teachers are a person who have good chance and responsibility to provide awareness about disasters and train students for disaster preparedness so, children can save their lives during disaster even in the absence of their guidance. In addition, they described that, classroom is right place, teachers are right person and teaching are right technique to aware and prepare students about disaster risk management. Most of the children are not prepare for disasters because of lake of training among the teachers and school staff so, critical training is important to teach student and teacher to deal disaster challenges.

Above discussion indicated the importance of teachers and teacher training for disaster awareness and preparedness, now, will discuss about teachers training practices of different countries on disaster awareness and preparedness. Japan is at the top of list for earthquake and they aware and prepare people for disaster at school for that purpose provide training for pre-service teachers and re-train in-service teachers. Following are the characteristics of teacher training program of Japan. 1) school provide disaster education and safety education seminar in which pre-service teacher has to take these courses and in-service teacher has to re-train after five

year. 2) teachers who are on special position (head of sanitary, health care and disaster prevent) have to attain out of campus professional training about earthquake disaster and other. 3) teachers have to take regional disaster management courses like fire bureau lecture and regional disaster drill etc. 4) Teachers have to take the lecture on disaster management instrument. (Hsu, 2007).

If we talk about USA every state of USA has firefighting and disaster management courses and credit which is planned by Federal Emergency Management Agency (FEMA) and school management have to assign courses to teacher and faculty to take disaster rescue courses and obtain credit and then they can get licensing.

In Australia, Emergency Management Australia provides disaster management training for teacher and student in campus and they provide teaching material and design activities about disaster prevention which is important for institution. (Hsu, 2007). On the bases of teacher training of different countries discussed above Hsu, purposed teacher training system for Taiwan about disaster management which is consist of two level one is county level and second is campus level. County level training is for ten days and three days for campus- level topic include related to earthquake, typhoon, floods and slope land while addition things in campus level is disaster plan for campus and use of instrument for disaster management. (Chen et al., 2012).

In Turkey there are no specific courses for pre-service teachers about disaster risk reduction. But after appointment as a teacher they have to participate in the first years' candidacy training program. This program consists of variety of courses, seminar and including "Disaster Education". Teacher of the seminar are mostly head of education institution who are not train for disaster training and have not any certificate on disaster education (Gökmenoğlu, Sönmez, & Yavuz, 2021).

While if we talk about teacher training about disaster risk reduction of Pakistan, there are no compulsory courses and certificate for both pre-service and in-service teachers but based on volunteer of teachers and school management. (Shah et al., 2018). Furthermore, in Pakistan books of different level have topics or chapters on disasters but teachers are not provided teacher guide line and training which help them how to

teach and what types are material are appropriate for to teach topics like disasters. (Tanveer & Mashhadi, 2020). Seyihoglu et al. (2021) suggested that during training about disaster management should focus on teacher's decision-making skills which would be helpful during disaster to take right decision.

Ghoorchian (2006) & Mulyasari et al. (2011), discovered different methods to train teachers about disaster risk reduction which are group discussion method, demonstration method, conference method, role playing and learning by doing. These methods are effective but due to the growing trend of ICT in teaching and learning which are discussed above, researchers develop module for providing training on use of ICT for disaster awareness and preparedness.

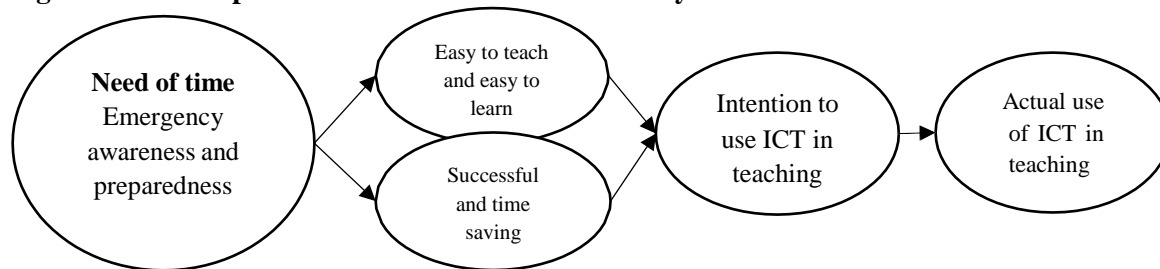
### **Theoretical Framework**

TAM was taken as a theoretical framework for the current study. After an in-depth study of the TAM model researcher found that this model supports the current study because the main objective of this study is to provide training on the use of ICT for enhancing natural disaster awareness and preparedness for primary school teachers and to find out its effectiveness. According to this model external variables like professional demand, subject requirement, and need for time provoke the individual to integrate ICT because the uses of ICT are easy to teach, easy to learn, useful, successful, and time-saving which helps the individual to attract attention toward use of ICT then they make intention then move toward actual uses of ICT in teaching.

In the current study use of ICT for enhancing natural disaster awareness and preparedness. Use of ICT for natural disaster preparedness and awareness is a subject requirement and need time these variables motivate primary school teachers to integrate ICT to teach a topic like awareness and preparedness about the natural disaster because using ICT is easy to teach for teachers and easy to learn for students at primary level.

If teachers want to prepare students for natural disaster through the drill method then it is time-consuming as well as may cause injury so, due to its usefulness teachers make the intention to use ICT to teach topics related to disasters then will move towards its actual uses of ICT to prepare and aware student about Disaster Management.

Figure 2.2: Conceptual Frame Work of Current Study



**Research Methodology**

**Participants of the Research:**

In-service primary school teachers of the most disaster effected sub-district of Skardu Gilgit Baltistan was the population of this study.

**Sampling**

Purposively selected the sample of study According to Cohen et al. (2007) this type of sampling used when respondents are going to satisfy your need and more knowledgeable about your research problem (pg.134).

**Research Approach**

Qualitative research approach was used. Researcher prepared a training planner for in-service primary school teachers utilizing ICT for disasters preparedness and awareness and focus group discussions were conducted with in-service primary schools teachers after training workshop on the application of ICT for enhancing disasters awareness and preparedness among in- service primary school teachers.

**Procedure of Study**

To conduct this research, first provided participants a questionnaire to assess their knowledge, awareness and preparedness level about natural disaster. On the bases of result

planned module for training workshop. A workshop lasting four days associated to natural disaster preparedness and awareness with the usage of ICT (digital content videos and games) was conducted. In this workshop in-service primary school teachers educated basic introduction of natural disaster, types of natural disaster, symptom, causes and sign of flood, earthquake, landslide and heavy snowfall and digital content, awareness about natural disaster by using videos and preparedness about natural disaster by using learning games. Participants in the workshop had a focus group discussion following the session. The goal of the focus group discussion was to learn about the workshop from the perspective of teachers who are in service at primary level.

Training workshop planner was validated by one professor and three primary school head teachers. And they approved this workshop is fruitful for in-service primary school teachers. Introduction of digital content was added in workshop because one of head teacher suggested it.

During workshop in-service primary school teachers suggested workshop should be online. Because teachers were full time engaged in school works and second time in cultivated fields up to dusk i.e. harvesting of wheat crop and cultivating new crops.

Figure 3.3 Using video during workshop



Figure 3.2 During online workshop



Table 3.3: Workshop Planner

Sr. No.	Presentation Title (Themes)	Objectives
1	Basic Introduction of Natural Disaster and Digital content (Educational Website, Videos and Games)	<ul style="list-style-type: none"> <li>Introduce natural disaster &amp; its types, causes, sign and symptoms of (flood, earthquake, landslides and heavy snow fall).</li> <li>Introduce, digital content like educational website, videos and games.</li> <li>Searching of relevant websites for information on natural disasters.</li> </ul>
2	Awareness about Natural Disaster by Using Videos	<p><b>Pre- disaster awareness:</b></p> <ol style="list-style-type: none"> <li>Knowledge of the risk and warning signs flood, earthquake, heavy snowfall and landslides specific to that region.</li> <li>Awareness about disaster planning at individual level.</li> <li>Knowledge about disaster supplies kits.</li> </ol> <p><b>During disaster awareness:</b></p>



		<ul style="list-style-type: none"> <li>• How to respond according to the types of disaster and put on your plan in your action?</li> <li>• Follow the direction of local official and carry disaster supplies kits.</li> <li>• How to take care of each other?</li> </ul> <p><b>Post-disaster awareness:</b></p> <ul style="list-style-type: none"> <li>• Awareness about how to care oneself and others from around debris?</li> <li>• Stay calm and check on your neighbors.</li> <li>• Repair damage properly.</li> <li>• Take steps to prevent or reduce future lose.</li> <li>• Presenting different videos related to natural disaster in which demonstration for awareness and guidance for evacuation to safe place will be involved.</li> </ul>
3	Preparedness for Natural Disaster by Using Games	<p><b>Preparedness for before disaster:</b></p> <ul style="list-style-type: none"> <li>• Prepare for identification of warning sign about floods, earthquake, landslides and heavy precipitation of local region.</li> <li>• Prepare for quick response according to the types of disasters.</li> <li>• Prepare planning and communication for disaster.</li> <li>• Preparedness to use disaster kits.</li> </ul> <p><b>Preparedness for during disaster:</b></p> <ul style="list-style-type: none"> <li>• Prepare individual to take care each other during disaster</li> <li>• Prepare to avoid to go damaging area.</li> <li>• Prepare to reach safe place.</li> </ul> <p><b>Preparedness for after disaster:</b></p> <ul style="list-style-type: none"> <li>• First aid training.</li> <li>• Be careful around debris and safety hazard.</li> <li>• Repair damage properly.</li> <li>• Take steps to prevent or reduce future lose.</li> <li>• Presenting different games related to natural disaster in which demonstration preparedness and alertness for evacuation to safe place will be involved</li> </ul>
4	Feedback and Focus Group Interview	<ul style="list-style-type: none"> <li>• Provide feedback sheet to know the strength and weakness of training workshop.</li> <li>• Focus group interview.</li> </ul>

**Data Analysis**

Data was collected through focus group discussion from in-service primary school teachers who attained training workshop. Focus group discussion was recorded and transcribed. Technology Acceptance Model (TAM), provided support for the theoretical framework. Using the

TAM model's components perceived utility and ease of use as well as its two subcomponents behavior intention and external variable the theme of data analysis was created. The analysis's primary theme and supporting themes are covered in Table 5.1 below.

**Table 5.1: General Themes and Sub-themes**

Sr. No	Themes	Sub themes
1	Perceived usefulness	1. Time-saving 2. Professional development
2	Perceived ease-of-use	• Easy to teach and learned • Effortless
3	External Variable	• Professional demand • Limited network connection
4	Behavioral goal	3. Intent to learn 4. Intent to use

The comprehensive description of themes and sub themes are as follows:

**Perceived Usefulness**

Perceive usefulness is a teacher’s own choice to use technology to enhance their teaching performance. According to TAM theory Perceived usefulness means if teachers think that they don’t need to change their practices then they will not use technology in their practices while if they think it will be useful to teach the complicated concept and helpful for students to understand a concept. (Cox, Preston & Cox, 1999).

Teachers and students can benefit greatly from the usage of digital resources in the classroom, such as games and movies. For efficient instruction and learning, educators need to be proficient in ICT. Perceived useful depend on the teacher’s acceptance and rejection of ICT in their teaching profession for professional development. Perceived usefulness will be greater if teachers more likely will be adopted ICT. The theme further divided into sub themes time-saving and professional development which are being discussed below.

**Time Saving ‘**

The use of videos and games in classroom are safe and time saving specially while teaching practical concept awareness and preparedness about natural disaster. Train children and disseminating information about natural disasters is a critical task because if we train them in a real situation then it is time-consuming, expensive and may injure trainees during training. (Almeida et al., 2014). During focus group conversation most of the participant said that use of videos and games in classroom while teaching difficult and practical concepts are safe and time saving. One of the Participant said that

“Use of videos and games as a teaching aids are safe and time saving specially giving awareness and preparedness about natural disaster because awareness and preparedness of children in disaster affected area are time consuming and may be injured children so videos are best for awareness and games are best for preparedness of children about natural disaster” (Participant C from group conversation)

Primary school teachers in training found this course on using ICT to improve preparedness and awareness for disasters to be very helpful. They learn how to use videos and games in class to aware and prepare students about natural disaster and save their time.

Primary school teachers who are in service provided feedback on the workshop's use under this heading. A large number of participants agreed that using games and videos to educate the notion of natural disasters is both time- and safety-efficient.

**5.2.3 Professional Development**

Professional development is gaining new skills and experiences during professional life which depend on individual quality of performance. For quality education teachers should integrate ICT in their teaching it helps them for their professional development and their student’s achievement. Most of in-service primary school teachers approved that use of digital content (videos and games) would be helpful for their professional development. One participant shared that use of videos and games in classroom while teaching difficult concept make a teacher prominent one in school. For better implementation teachers should have command on the use technology. A teacher commented that.

“It is reality that use of technology in classroom is helpful for teacher’s professional development because ten standards for teacher professional development also focus on the use of ICT. So, the use of games in classroom not only help teachers to better their teaching but also help students to learn difficult concept in enjoying way” (Participant E, focus group discussion).

ICT improves teachers' understanding of contemporary technology. It supports students' success and develops teachers. Another participant mentioned during the focus group discussion that this program teaches them how to use games and movies in the classroom to teach practical concepts like awareness and readiness for natural disasters. It significantly broadens their expertise and will contribute to making their instruction engaging.

According to this theme the vast majority of focus group participants discovered that using ICT in the classroom helps teachers develop professionally and improves their job performance.

#### **Perceived Ease-of-Use**

Teachers who believe that using technology is not difficult to understand are said to have a perceived ease of usage. It depends on teacher’s insight that use of technology require less effort and free from maximum effort. It also depends on teachers’ skills, abilities, knowledge and readiness about the use of technology. Adaptation of technology in learning and teaching process are directly depend on the intention of perceived ease of use. If teachers think that technology is easy to learn, easy to teach and effortless then they will adopt technology and use in their daily practices. If they think it is difficult to use then they will not adopt technology. It also depends on that teacher understanding that use of technology is fruitful for teaching. If teachers have knowledge about the use of technology then they will use in the classroom according to the concept. This theme further divides into sub-themes easy to teach, easy to learn and effortless.

#### **Easy to Teach and Learn**

The use of videos and games at the primary level is very important as a teaching aid because it is easy for teachers to teach difficult concepts and for students to understand difficult concepts. The majority of focus group participants concurred that

using games and videos to teach challenging subjects requires less work from teachers. Primary school teachers who are in service found this course useful in learning how to use games and videos in the classroom to raise students' awareness of and readiness for natural disasters. According to Participant G in this modern era, teachers should know the use of technology because it is the need of time. Children play games for the sake of entertainment if teachers use them for learning purposes then it will be easy for teachers to teach with enjoyment. During the focus group discussion participants commented.

“In the 21<sup>st</sup> century, there should be teacher training workshops on the use of ICT especially in remote areas where learning opportunities are not available. Teachers are not aware of the use of games and videos as teaching aids. It is essential to realize teachers that the use of technology in the classroom is helpful for them to teach difficult concepts and easy for students to understand difficult concepts.” (Participant E, focus group discussion).

Teachers are not given the chance to learn how to integrate technology into their lessons. They wish to understand how to use games and videos to facilitate teaching and learning. Participant D of focus group discussion said that use of videos and games while teaching awareness and preparedness about Natural disaster are easy because teachers do not need to create real situation which are mostly difficult for teacher.

Under this theme most of the participants found that the use of videos and games are easy for teachers to teach and easy for students to learn difficult concepts. They want such type of platform where they get opportunities to learn more about ICT.

#### **Effortless**

ICT plays important role in learning and teaching process. Teachers can get benefit from videos and games which helps teachers to make teaching effortless. If they have knowledge and practices about use of ICT then it will be comfortable and effortless. Most participants of focus group shared that if teacher have knowledge about use of ICT then they do not need more effort to teach difficult concept. Focus group participant commented.

“If in-service primary school teachers use videos and games while teaching awareness and



preparedness of Natural disaster then they do not need to bring students in disaster effected area they do not need to do more effort". (Talk in the focus group, participant C).

Primary school teachers who are in service do not utilize ICT because they think that use of ICT in their teaching need more effort after workshop they realize use of ICT is effortless in classroom. Under this theme most of participant found the use of videos and games in classroom are more comfortable and effortless than teaching in creating real situation.

### **External Variable**

External variable directly influences the teacher's acceptance and rejection of technology in their teaching. External variables may be inhabited or motivate teachers to use specific technology in their teaching. Teachers may face many challenges while using technology like lack awareness about ICT and limited networking but need of time and other many variables provoke teachers to use ICT in classroom. This theme has further subtheme like limited network connection, professional demand and need of time.

### **Limited Network Connection**

Technology integration are necessary in primary school. It helps teacher to increase their professional abilities and skills. It also helps student to develop understanding, creativity and mental abilities. For better use of ICT good internet connection is require in primary schools. The use of ICT in Skardu's primary schools' teaching and learning processes was hampered by a slow network connection. Many focus group participants stated that because their institutions lacked internet access, they had to use their own internet data for instructional and learning purposes. A participant made a comment during the discussion in the focus group.

"There is computer lab in our schools but due lake of training and limited internet facilities we cannot get benefits from it so, government should provide internet facilities and training programmed for primary school teachers who are in service". (Participant D, focus group conversation).

In the course of focus group discussions, the researcher investigated the reasons that prevent primary school teachers who are in service from using ICT in the teaching and learning process,

including the lack of training workshops and restricted network connections. Although they have a computer lab, they are ill-equipped to use it for instruction. Teachers wish to include ICT into their lessons.

Under this theme, the researcher discovered that teachers' use of ICT for teaching and learning is hindered by their poor internet connections.

### **Professional Demand**

ICT is necessary for ongoing professional development of teachers. In ICT became important part of teacher profession after ten standards. So, ICT is a professional demand of teaching. Teachers need to be trained in order to integrate ICT into teaching and learning effectively. Most of focus group participants agreed ICT is important component of teaching and learning process. It's a demand of teaching profession. Participant D of focus group discussion commented.

"ICT is 21<sup>st</sup> century skills which is important for teacher to learn and teach the use of ICT in classroom. But in our area (Skardu) there are limited training for teachers regarding to the use of ICT in classroom so, teachers cannot use ICT in classroom even they know that use of ICT is a demand of teaching profession". (Participant D, of focus group)

Within-service Primary school teachers are aware of the value of using ICT in professional demands and teaching and learning processes, but they lack the necessary training to effectively use technology into their lessons. Participant B revealed that without ICT effective teaching is not possible but due to lake of teacher training teacher cannot make it part of their teaching. This workshop about use of ICT to enhance awareness and preparedness about Natural disaster was first training workshop of my five-year teaching profession.

Under this theme in-service primary school teachers are agreed that ICT is their professional demand but due to lake of training they cannot unable to use ICT in their classroom,

### **Behavioral Intention**

Behavioral intention is attitude of individual where individual choice the task and act on it. Individual intention to use directly effect on the actual use. Use of ICT in teaching and learning process are behavioral intention which depend on

knowledge, readiness and willingness of teachers to use it in classroom. Behavioral intention of primary school teacher of district Skardu are learn use of ICT in Natural disaster awareness and preparedness. The two sub-themes of intention to use and intention to learn that further subdivide this theme are covered below.

### **Intent to Learn**

Primary school teachers who are entering the teaching profession would like to know how to incorporate games and videos into their lessons on natural disaster awareness and preparedness. This is a positive behavioral purpose. Most of focus group participants were highly motivated to learn Natural disaster awareness and preparedness while using videos and games. During focus group discussion one of participant reported.

“As a teacher I always belief on learning to teach. I want to learnt new teaching strategies which make my teaching effective. Which make teaching easy for me and learning easy for my students specially teaching practical topics like awareness and preparedness about Natural disaster”. (Participant D, of focus group conversation)

Within service primary school teachers learn how to practice videos to give awareness about Natural disaster and use games to prepare students about Natural disaster. They want to learn more about use of games to teaching other topics but due to lake of time learn it uses in Natural disaster. Focus group participant F, said that, in this workshop she learnt new strategy to teach awareness and preparedness about Natural disaster if we get opportunity to learn use of technology to other difficult topic then I must attain that training workshop.

Under this theme researcher found that, in-service primary school teachers have intention to learn ICT and use it in teaching and learning process. They are willing to learn more about ICT.

### **Intent to Use**

After this workshop in service primary school teachers are highly interested to use videos and games while teaching Natural disaster awareness and preparedness Most of focus group participant said that they will use videos and games in their upcoming teaching and learning process. One of focus group participant commented that

“I learnt use videos and game while teaching Natural disaster awareness and preparedness which are practical and lifesaving topic. Without videos and games at primary level teachers can not properly aware and prepare children about Natural disaster so, I will use it in my future teaching”.

By using videos and games in classroom teachers can make their teaching effective and interesting. It is helpful for teachers to teach different skills. Participant E, stated that I will use videos and games in future after this workshop I realized that videos and games help teachers to develop cognitive, effective and psychomotor skills of students.

In-service primary school teachers learnt use of videos and games to aware and prepare about Natural disaster. They show readiness to use videos and game in their teaching to make it more effective and interesting for students.

Primary school teachers who are in-service are strongly motivated to incorporate games and movies into their lessons under this theme. They demonstrate a constructive desire to use technology to enhance the effectiveness and interest of teaching and learning.

### **Finding and Recommendations**

The findings demonstrated that perceptions of new technology's value and usability determine whether it is accepted or rejected. Perceive useful and perceive ease to use has effect on teachers' adaptation of ICT. If ICT is useful and easy to use for teachers then they will be adopted. Qualitative data of the study revealed that, most of the research participant found the workshop on use of ICT for enhancing natural disaster awareness and preparedness was effective. And use of videos and games are useful for their teaching and learning.

On the base of result researcher found that there are need to conduct face to face training programs for in-service teacher on different topics of related to teaching profession like use of technology in classroom and classroom management etc. Availability of teachers were limited due to full time engagement in school works and filed work so, future teacher training should conduct during summer or winter vacation.

In future if researchers want to conduct research on this types of topic then they can maximize the participants, can involve different government and non-government institution to make effective training work shops.

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