CHAPTER – III

REVIEW OF RELATED LITERATURE

3.0 OVER VIEW

A systematic review of literature includes research journals, books, dissertation, thesis and other sources of information for the problem need investigation and crucial planning. John W. Best (1977) says “Extensive use of the library and investigation of related literature are essential in preparing graduate term papers, seminar reports, in planning and carrying out the kind of searching involved in special field problems, theses and dissertation.

A familiarity with literature in any problem helps the student to discover what is already known, what others have attempt to find out, what methods of attack have been promising or disappointing and problems remain to be solved.

Hence the Investigator made an attempt to collect as much information as possible on scientific attitude to make the study meaningful.
3.1 STUDIES ABROAD:

3.1.1 RELATED STUDIES ON DISASTER:

Ayyagari, Ramakrishnan, Tyks. and Jonathan .(2012) “Disaster at a University: A Case Study in Information Security” Security and disaster training is identified as a top Information Technology (IT) requires the skill that needs to be taught in Information System (IS) for the curriculum. Accordingly, information security and privacy have become core concepts in information system of education. Providing IT security on a shoestring budget is always difficult and many small universities are challenged with balancing cost and effectiveness. Many colleges and universities have additional security challenges, such as relaxed work environments, less formalized policies and procedures, and employees that "wear many hats." Therefore, it is not surprising to note that majority of data breaches since 2005 occur in educational setting. So, it is imperative that this segment (i.e., educational settings) be represented in classroom discussions to prepare future employees. To this end, we present a case that addresses a data breach at a university caused by security policies and includes an element of social engineering. The data breach at the university resulted in a number of students' losing personally identifiable information. The resulting aftermath placed a significant financial burden on the university as it was not prepared to handle an information security disaster. This case can be used as a pedagogical tool as it uniquely captured a data breach in a university setting.
Readers of the case will identify that at the management level the case raised a number of issues regarding the security culture at the university and management of security function. The case also highlights the issues under lack of training and access control.

Boon, Helen Joanna, Pagliano, Paul, Brown, Lawrence, Tsey, and Komal. (May 2012) The study conducted on “An Assessment of Policies Guiding School Emergency Disaster Management for Students with Disabilities in Australia”. The investigation report on recent weather related disasters (i.e., floods, fires) had its impact in Australia potentially increased the frequency and severity as a result of predicted climate variability. The dearth of literature pertaining to school emergency response planning for vulnerable students with disabilities (including those with intellectual disabilities) when such disasters occur and the lack of evidence-based support for school guidelines addressing the need of such students led the authors to investigate the presence and extent of governmental policies and guidelines underpinning disaster management in schools in Australia. In the absence of routine policies and procedures, students with disabilities may be placed at risk to ill-advised evacuation efforts or neglected during severe emergencies. The study's results indicate that insufficient consideration has been given to the emergency preparedness planning and management with respect to meet the needs of vulnerable students with disabilities. The findings suggest
that disaster preparedness is under resourced and possibly neglected. Although the particular needs of vulnerable students with disabilities are briefly noted in the various state governments' education policies, they have not been systematically considered in the context of overall disaster planning for Australian schools, with the ambiguity of student characterization terms such as "special needs" adding to the problem. The study also scrutinized the terms with respect how they might impact school plans that relate to emergency management. The authors conclude that processes already embedded in local schools for students with disabilities may be possible vehicles to appropriate statewide emergency management planning. They recommend that education authorities worldwide review current emergency management policies in a consultative manner with schools, researchers and first responders. So as to minimize risk for students with disabilities in natural disaster emergencies.

Barnes, Jill, M. (2011) “Five Essential of Emergency Planning”, Principals and other administrators seem to be perpetually overworked. There is always something that still needs to be done at the end of the day, and it is easy for disaster planning and preparedness to keep slipping to the bottom of the list. However, disaster preparation is essential, even when planning for the unknown. At some point in every school administrator's career, there will be some kind of emergency incident--and they will be in charge. This article discusses five items that will help ensure that administrators are ready: (1) Vulnerability assessment--
How to tell what the hazards are; (2) School all-hazard plan--What to do in emergency situations; (3) Know your school population--Who has special needs during a disaster?; (4) A well-stocked school--What to have on hand and where; and (5) Organizing in a disaster--Who should do what?

Boon, Helen, Lawrence, J., Tsey, H., Komla Speare, Richard, Pagliano, Paul, Usher, Kim, Clark, Brenton. (2011) School Disaster Planning for Children with Disabilities: A Critical Review of literature” Human systems have to adapt to climate change and the natural disasters predicted to increase in frequency as a result. These disasters have both direct and indirect health effects. Certain groups, the poor, the elderly, children and those with disabilities are set to be more seriously impacted by disasters because of their greater inherent vulnerability. Adaptation to the health impacts of disasters requires the cooperation and input from all sectors of government and civil society, including schools. This critical literature review examined the body of peer reviewed literature published in English addressing school disaster planning policies with a particular focus on children with disabilities. Results show that children and youth with disabilities are especially vulnerable to disasters because of socioeconomic and health factors inherent to disabilities. While schools in the U.S. have policies to deal with disasters, these policies are neither comprehensive nor inclusive. The empirical evidence base from which they are developed is severely limited. No publications are identified that represent the current disaster planning of schools in
countries like Australia, the UK or Canada. Recommendations for future research are outlined to bridge knowledge gaps and help establish appropriate and inclusive school disaster policies for children with disabilities.

Nastasi, Bonnie, K., Jayasena, Asoka, Summerville, Meredith, Borja, Amanda, P.(2011) conducted a study on “Facilitating Long-Term Recovery from Natural Disasters: Psychosocial Programming for Tsunami-Affected Schools of Sri Lanka”. This study finding of a school-based intervention project conducted in the Southern Province of Sri Lanka 15 to 18 months after the December 2004 Tsunami. The work responds to the need for culturally relevant programming to address long-term psychosocial recovery of children and adolescents affected by large scale disasters. Program developers used a participatory action research process to adapt and implement a school-based program previously tested with the general population of Sri Lankan students. Qualitative analysis of student products (e.g. Eco maps, stories, text) was used to determine whether the program provided a context to address both tsunami-specific stressors and non-tsunami (but developmentally and contextually relevant) stressors for students in grades 5, 7, and 9. Findings indicated that program activities differentially elicited identification and discussion of stressors related to tsunami experiences and to "normal" culturally-relevant developmental challenges. The feasibility of combining a recovery focus with universal school-based mental health programming thus holds promise for extending crisis
intervention and disaster response models to include long-term psychosocial recovery and for the role of school-based mental health professionals in these efforts.

Rabinson, and Geary Lynn. (2011) conducted a study on “Disaster Preparedness for University / Community Transit System Public transportation”, with its open access, creates an opportunity for mass of people were upset while using transit services during human-made or natural disasters. This dissertation reviews the body of academic and professional literature and recent disaster events to characterize the current state of preparedness for disasters affecting transit systems in the United States, focusing on institutions of higher education, other post-secondary educational institutions, and the university/community transit systems providing services to these institutions. The nature of threats is examined, and institutional issues are explored to discover the level of disaster preparedness of university/community transit systems, and their ability to participate in the planning and organization, purchase of equipment, and training exercises for disaster events. To identify potential gaps in disaster preparedness within university/community transit systems, multiple research objectives were developed: review international and national disaster events emphasizing on preparedness planning for transportation systems; examine federal disaster preparedness requirements to find any proscribed plans transportation systems used; and determine how
disaster preparedness planning is used in university/community transit system operations to support post-secondary institutions of higher education during a disaster. The research question for this study is "how universities and communities plan for using or protecting the transit systems and assets in disaster events?" Hypothesis for this research is that university/community transit systems do have appropriately prepared emergency operating plans. A qualitative document analysis was conducted on university transit systems emergency operations plan documents and a quantitative survey was subsequently conducted with emergency managers working for, or transit system operators providing transit services to, post-secondary institutions of higher to determine if the university/community transit systems did or did not have an emergency operations plan. Analysis of the survey results shows that university/community transit systems do not comply with the National Incident Management System, and do not have appropriately prepared emergency operating plans. It is recommended that all other post-secondary institutions of higher education, and transit organizations should develop comprehensive and holistic emergency operations plans.

natural disaster face the multifaceted challenge of significantly changing needs of their various stakeholders, limited, ambiguous and even incorrect information, and highly compressed time limitations. Yet the performance of this organization in these high velocity environments is critical for the lives and welfare of disaster victims. This research suggests the relief organizations that possess a dynamic capability to proactively form temporary networks are better suited to respond to crises. Further, the study identifies antecedents of such a temporary network development capability (TNDC), specifically prior network experience, swift trust, prior crisis experience, a generalist strategy, organizational humility, minimal political behavior, reputation and legitimacy. In addition, the study demonstrates the relationship between TNDC and organizational performance, along with the moderating impact of factors in the external environment and internal resource availability on this direct relationship. Building on the foundation of extant literature in the areas of inter organizational networks and dynamic capabilities, the study begins with a qualitative analysis to develop a theory to support TNDC. Semi-structured interviews were conducted with relief organizations in the US Gulf Coast after Hurricane Katrina and in Banda Aceh, Indonesia after the Asian Tsunami. Interview responses are coded to develop a model which could be further analyzed. From the extant literature and results of the qualitative study, a survey instrument was developed to measure the relationship between various antecedent factors and TNDC, as well as between TNDC and organizational performance. The pilot study ensured reliability and validity and then submitted to
relief organizations involved in disaster relief activities to evaluate the nature of the hypothesized relationships.

Shiwaku koichi, Shaw, Rajib, Kandel, Ram Chandra, Shrestha, Surya, Narayan, Dixit, Amod mani. (2007) conducted a study on “Further Perspective of School disaster education in Nepal”. The methodology adopted for the study was survey method. The sample was selected for the study was six selected schools in Kathmandu Nepal. The main objective of the study is to identify the various factors that influence in enhancing students awareness and to promote the actual action for disaster reduction. To identify effective educational factors at each level different awareness have been established. The results showed that current school disaster education raise risk perception among lectures and it does not help the students to know the importance of pre-disaster measures and to take actual action for disaster reduction.

Fatma Ozmen. (2006) conducted a study on “The level of preparedness of the school for disasters from the aspect of the school Principals”. The main objective of this study is to determine the level of preparedness of primary schools towards prospective earthquake. The findings revealed that level of preparedness of the schools are not so well for prospective disasters. The school principals are
not so effective in achieving high level preparedness and for prospective earthquake.

Kazuko Tanaka. (2006) conducted a study on “The impact of disaster education on public preparation and mitigation for earthquake: a cross country comparison between Fukui, Japan and the San Francisco bay Area, California, U.S.A” This study was conducted to draw answers for the following questions in Fukui, Japan and the San Francisco bay area, California, USA. What types of education are the most suitable for people to undertake proper activities to get ready for the future earthquake? How does disaster education enhance people’s readiness? In disaster education possible to motivate people to understand activities? And do cultural differences indicate that different ways if disaster education is necessary to be understanding for the public? Questionnaire survey is conducted in both seismic areas. The major findings are American respondents show relatively good readiness whereas in Fukui the readiness is slightly higher. In both areas, respondents with disaster education are more ready than respondents without disaster education, but the enhancement is not so significant. Printed materials for American respondents and educational sources for Fukui respondents are effective approaches. The improvement in readiness regarding social activities and educational sources can be achieved through educational information such as awareness of disaster, knowledge about neighborhood and part earthquake
experience various types of disaster education should be readily available at accessible places to the public.

Kuwasawa Noriyuki, Knanai Masanohu, Hosoi Kyohi, Katada Toshitaka. (2006) conducted a study on “The effect of disaster education considering decision making evacuation from a tsunami” survey was conducted to know about actual situation of residents evacuation from tsunami. A prediction model about decision making evacuation from tsunami and research measures to minimize the calamities by tsunami. The calculated casualties by wing tsunami comprehensive scenario simulator under those measures have done. As a result the tsunami disaster consciousness of residents influenced the decision making evacuation from tsunami. It developed many casualties decrease if they urge residents to improve their consciousness by disaster education.

Moazzam, Omar Masood Khan. (2006) conducted a study on “The role of GIS and Public Awareness for Disaster Management.” For the past few years there is an increasing number of disasters with a large number of victims and significantly social and economic loses. This study emphasizes on the awareness of the disaster and the analytical capabilities of GIS. To bring about mass participation in disaster management awareness of the disaster is the only effective way. In this paper the proposed GIS based programme will help to improve the currently practical disaster management programmes and of implemented properly
Shiwaku. (2006) Hyogo Prefectural Maiko High School has established the Environment and disaster Mitigation course (Which is referred as EDM course). This course was designed to teach about disaster management for high school students since 2002. This study attempts to investigate the classes and activities of EDM course. The research consists of an introduction of the classes in the EDM course and the comparison of the student’s awareness towards earthquake disaster with other schools. The survey method is adopted for this study and a questionnaire used in collecting data regarding the understanding features of environmental disaster mitigation course and also to grasp the differences of awareness. It was found that the roles of EDM course are to raise student’s awareness to make sustainable disaster management and to expand student’s interest and also to disseminate to student family.

Tetsushi Kurita, Akiko Nakamura, Miki kodama, Sisira, R.N. (2006) conducted a study on “Tsunami public Awareness and the disaster management system of Sri Lanka”. A survey was conducted to asses and evaluate the disaster management system and capacity of a local community to respond to natural disasters and to propose a strategy for the dissemination of tsunami knowledge while raising public awareness of tsunami disasters. The
survey results indicate that 90 percentage of residents lacked tsunami knowledge prior to the 2004 tsunami. 30 percent of the school children do not know about the causes of tsunami and 90 percentage of the school children have interest in learning natural disaster but they are not provided with disaster education. Audio-visual means are thought to be the most effective tool for disaster education. Seminar and training on natural disaster are not conducted among general officials other than the military and police, TV and radio broadcasts are effective tools for disseminating disaster warnings to residents. The recommendations for this study are to promote disaster education at the school level implement community level public awareness programme enhance the information management systems and improve coordination mechanisms with in the disaster management system.

**Lidstone, John,G. (2005)** conducted a study on “Teaching for disaster mitigation in a time of terrorism”: can the lessons from natural disaster be applied to the new world order? It seems to have little guidance on the nature of effective public education in terrorist – induced disasters. This paper attempts to draw out some lessons from our previous experience in natural disaster public education both generally and at school level. It suggests that a terrorist initiated disorder is qualitatively different from natural and accidentally human induced disasters. To achieve its aim of mitigating such disasters and to maintain credibility with the public, the disaster management community may have to
broader its approach to school education, distance from its political masters and become more politically aware.

Dale Dominey- Howes and Deanne Bird. (2004) conducted a study on “Tsunami Public Awareness and its role in Risk Education”. The 2004 Indian Ocean tsunami affected in a large magnitude and the destructive tsunami occurred in areas closure to Australia. Survey method was adopted for this study. A questionnaire was designed to collect data from the general public and coastal council professional officers. The result shown that little has been learned by the public and coastal council professional officers since the December 2004 Indian Ocean tsunami disaster. To summarize, that the study reveals what the public knows and does not know with respect to tsunami importantly. The suggested recommendation of the study is to assist responsible organizations in thinking about risk mitigation.

Peter R.J.Trim. (2004) Formulated a study on “A integrative approach to disaster management and planning”. The frequency of major disaster both manmade and natural occurs due to increase in world’s population. A holistic setting is needed for disaster management and planning and shared responsibility is viewed as new initiatives in disaster management. The further attention is needed for the concept of community policy. The local community leaders need to be consulted during the disaster limitations and containment stage. It is essential,
Rajib Shaw, Koichi Shiwaku, Hirohide Kobayashi. (2004) emphasized a study on “Linking experience, education, perception and earthquake preparedness” survey method was adopted to study the awareness and impact of earthquake, experience and education. The sample taken for the study includes 1,065 high school five grade students from five prefectures of Japan. The major finding showed that earthquake experience is not the prime factor to enhance awareness. School education can provide useful information as the knowledge base for earthquake. In school education there are many active ways for disaster education they are through conversation, experiencing and visual aids and they are found to be more effective. The major suggestion is to couple school education with self, family and community education can help a student to develop a “culture of disaster preparedness” which will urge them to take right decision and action when they become adult.

Marla Perez, Lugo (2001) suggested a study on “The mass media and Disaster awareness in Puerto Rico: A case study of the floods in Barrio Tortugo”. In most of the literature, it was mentioned that media plays a vital in creating awareness on disaster and risk. But in case study of a flood in a rural community in Puerto Rico, this model is inefficient in explaining how disaster awareness is created and how this relates to effective disaster mitigation. The
finding suggests that the literature fails to recognize the important factors of vulnerability to hazards. Important factors such as community leaders and the action of other groups and institution that have indirect impact in generating awareness on disaster is neglected.

3.1.2 RELATED STUDIES ON MULTIMEDIA:

Mikinnon and Sinclair. (2007) conducted a study on the “Attitude of students towards the use of technology” the main aim of the study was to find the attribute of students towards technology. From the study it was found that the students had positive attitude towards the use of technology.

Nhu, B.H. and Soubakeavathi, R. (2006) conducted the study on “Evaluation of computer assisted language learning software on the learning of English prepositions”. The main aim of the study was to evaluate the effectiveness of a Computer Assisted Language learning lesson compared to the conventional lesson. The samples taken were students in the Malaysian school. The methodology adopted for the study was experimental method. The findings revealed that the students who learned through conventional lesson performed better than the students who learned through Computer Assisted language lesson. It was also found that the students in the conventional group showed great improvement from pretest to post than the students in the Computer Assisted Language lesson group.
Whitely Michael. (2006) conducted a study on “The impact of multimedia learning on students’ perception of cross – community initiatives, further orientation regarding peace and social distance between groups. The samples taken for the study was 522, 5th grade students in 12 catholic and protestant schools from the North Eastern board of Education in Northern Ireland. The Samples were selected using stratified random sampling. The experimental method was adopted for this research. In this study, the instructional multimedia presentations and co-operative technology (IMPACT) conference was created. The finding revealed that there was a significant effect of the IMPACT conference on the participants in the areas of cross community cognition and further orientation. Also it was found that there was no significant effect of the IMPACT conference in the factor of social distance.

Parcel. (2005) has taken an attempt to study “The effectiveness in the use of multimedia in probing the answer from the students. The study was conducted through online tutorial. The sample taken were 147, 5th grade students from various elementary schools. The findings showed that the there was a significant difference between the control group and experimental group in answering to the probed questions. Also it revealed that the use of multimedia the probing questions was effective.
Wegeriff, R. (2004) conducted a study on the “Role of educational software as a support for teaching and learning conversations”. The main aim of the study was to study the dual nature of computers {Machine (objects) and people (subjects)} within educational conversions. The samples taken for the study were 119 children in the age group 9-10. The methodology adopted for the study was experimental method. The findings revealed that this approach showed a significant learning gains within the normal curriculum. It also showed that pedagogy along with software design can explain the ambivalent nature of computer and serve them as both interactive agents and passive learning environment.

Asan, A. (2003) conducted a study on “School Experience course with multimedia in teacher education”. The main of the study was to study the interactive and self-paced multimedia tutorial programme that provides pre-service teachers with a complete range of school system and teaching strategies. The finding revealed that, there was a positive difference in the school experience course over participants in traditional lecturing who used multimedia tutorial. Also the pre service teacher whom participated in the multimedia group responded positively to this approach. Hence it was found that using multimedia in teacher education enriches the learning in pre service teachers.
Lehrer, R. (2003) Studied the distinctive differences that existed in the ways that students retained the gathered information using multimedia and traditional method of instruction. The samples taken for the study was eighth grade students. The findings revealed that, the students who learned using multimedia had a long lasting connection with the material while students who learned through traditional method had little or no retention of the material. It was also found that the level of student engagement was higher among the students with both high and low abilities.

3.2 STUDIES IN INDIA:

3.2.1 STUDIES SUPPORTED IN DISASTER:

Rao, D.P. (2009) Disaster management With the tropical climate and unstable landforms, coupled with high population density, poverty, illiteracy and lack of adequate infrastructure, India is one of the most vulnerable developing countries to suffer very often from various natural disasters, namely drought, flood, cyclone, earth quake, landslide, forest fire, hail storm, locust, volcanic eruption, etc. Which strike causing a devastating impact on human life, economy and environment, Though it is almost impossible to fully recoup the damage caused by the disasters, it is possible to (i) minimize the potential risks by developing early warning strategies (ii) prepare and implement developmental plans to provide resilience to such disasters (iii) mobilize resources including communication and telemedicine services, and (iv) to help in rehabilitation and
post-disaster reconstruction. Space technology plays a crucial role in efficient mitigation of disasters. While communication satellites help in disaster warning, relief mobilization and telemedicine support, earth observation satellites provide required database for pre-disaster preparedness programmes, disaster response, monitoring activities and post-disaster damage assessment, and reconstruction, and rehabilitation. The article describes the role of space technology in evolving a suitable strategy for disaster preparedness and operational framework for their monitoring, assessment and mitigation identifies gap areas and recommends appropriate strategies for disaster mitigation vis-à-vis likely developments in space and ground segments.

Devi, S. (2008) conducted a study on “Awareness on tsunami and need for disaster management education in Kanyakumari”. The methodology adopted for the study was survey method. The samples selected for the study was 100 IX standard students studying in tsunami affected areas in Kanyakumari. The finding revealed that in order to prevent tsunami like mangrove forest should be planted along the seashore. Further, if tsunami warning is given people can save themselves and their possessions.

Balaji, Sankar, Karthi. (2007) Disaster management has been the hot topic in recent times. A lot many management techniques have evolved through various discussions. All the management techniques that are being developed are understood by, and confined to the intellectual community and hence lack mass
participation. Awareness of the disasters is the only effective way in which one can bring about mass participation. Hence, any disaster management is successful only when the general public has some awareness about the disaster. In the design of such an awareness program, spatial data becomes imperative and for the analysis of the spatial data and the representation of the results in spatial format, a Geographical Information System (GIS) becomes the obvious and effective choice. The usage of the spatial system provides the advantages of emphasis on the areas or locations which need more attention. This paper aims at providing a methodology of designing a GIS based awareness program for earthquake, flood, landslide, drought, diseases and other natural and manmade disaster management. Further, the paper discusses the use of GIS to decide upon the better ways of creating awareness on the various factors mentioned above. The methodology suggested is in the Indian context emphasizes the role of zonation, literacy and media usage. It involves the use of maps showing Earthquake zonation, flood risk area zonation, landslide zonation, drought zonation, disease prone area zonation, land use, literacy rate, population density, media usage, occupation of people and rainfall. These maps which are input to GIS result in an analytically derived awareness program, which is then compared with a successfully operating awareness program. Such a comparison is also an indicator of the outcome of the awareness program. In conclusion, the proposed GIS based awareness program would improve the currently practiced disaster management programs and if
implemented, would result in a proper dosage of awareness and caution to the general public, which in turn would help the activities of disaster management.

Sasmita Misha. (2007) conducted a study on “Do lesson people learn determine disaster cognition and preparedness? The aim of the study is to examine whether the disaster experience and education through risk perception initiate flood and heat wave preparedness. For this study data was collected from 100 people from the flood and heat wave affected areas in Orissa. The finding revealed that people with disaster experience and education are prepared to face flood and heat wave. It is also found that more the disaster experience and education more they perceive the risk of flood and heat wave. The finding also revealed that found to be the mediator between disaster experience, disaster education and flood preparedness.

Gomathi (April 2006). It has been found out how vigorously Nagapattinam district was affected by the December 26, 2004 tsunami, in particular the agriculture land at Naluvadanpatty in the district. Further on nothing the women’s mental status; the investigator explained the important of giving proper counselling and guidance.

Venkat Reddy, D. (2006) Earthquakes, oceans, tsunamis and coastal zones a, typical analysis. The Japanese characters for tsunami mean, "harbor wave," and many people commonly refer to them as tidal waves, but in reality tsunamis have little to do with tides. They are creatures of the open ocean, train of giant
waves that can travel for thousands of kilometers across the sea and still pack enough energy to smash towns and drown the unwary. The existence of ancient marine sediments on land is geologically, evidence that the continents of the world once were largely submerged beneath the sea. The continental seas and the coastlines of the world have fluctuated greatly in the past and time after time the marginal seas grew and shrank with periods of the order of millions of years. In this paper an attempt is made on cause and effects of tsunami, tsunami warning system, preparedness and warning system of tsunami, coastal zone management.

**Gomathi (March 2005)** if warning had been given, the destruction would have been made least during the December 26, 2004 tsunami prior to tsunami water engulfment took place. As there was no prior knowledge on its us faced a lot of loss. There are many information that shows even the animals could realize the change on land. In some countries, as there are tsunami warning centers, that avoid the destructions due to tsunami.

**Sri Sai Lakshmi (April 2005)** the investigator has collected data in the tsunami victims. In that the children who have lost their parents, the helps got by those children. Experience of eye witness of disaster and who of the children needed guidance and counselling were taken into account and guidance was given to the needy.

**Udhyakumar (2004)** conducted a study with the aim to provide awareness programme about disaster. The study highlights the pecuniary steps to escape and
overcome the disaster. The finding revealed that awareness on disaster education was achieved.

**Rannveig Bremer, M.D (2003)** conducted a study on “Policy Development in disaster preparedness and management: lessons learned from the January 2001 earthquake in Gujarat, India”. This study identifies how assigned indicators are used to measures the level of health care which may improve disaster preparedness and management thereby reducing human suffering. The disaster relief provided to the disaster affected population of Gujarat was evaluated. The cause for vulnerability such as climate, geography, culture, religion, gender, politics and economy was studies. The level of public health and health care services provided by the primary health care system advocated by the world health organization were estimated and possible methods for improving disaster management were suggested. Major relief organizations representatives were interviewed on their relief policies. Measures to improve relief and policies were formulated in different aspects of public health primary health care. The quality of relief measures provided to disaster victims can be reduced for the following reasons 1) Proper public health indicators had not yet been developed 2) lack of efficient coordination 3) over estimated or partly irrelevant, insufficient relief was provided 4) because of bureaucracy relief was delayed 5) policies on the delivery of disaster relief had not been developed.
3.2.2 STUDIES CONDUCTED ON MULTIMEDIA:

Kalaivani, K. (2013) conducted a study on “Effectiveness of e-content and Language Games in Teaching Grammar in School at Karur District – An Experimental Study”. The methodology adopted for the study was experimental method. The sample selected for the study was 100 VIII standard students. For this study the e-content developed and validated by the investigator was used for teaching the sample. The findings revealed that e-content was effective in teaching at VIII standard students. It was also found that e-content teaching was more effective than the normal method of teaching.

Amutha, S. (2007) conducted a study on “Development and validation of e-content on doing for higher Secondary biology students”. The methodology adopted for the study was experimental method. The samples selected for the study was 30 higher Secondary students studying biology. For this study the e-content developed and validated by the investigator was used for teaching the sample. The findings revealed that e-content was effective in teaching commerce at higher Secondary level. It was also found that e-content increases the performance of the students.
Felix, A. (2007) conducted a study on “Development and Validation of e-content on DNA technology in Bio-Technology”. The methodology adopted for the study was experimental research. The samples taken for the study was 27 PG students studying Bi – Technology. The findings revealed that e-content was effective in teaching Bio – Technology and also increases the performance of the students.

Jayakumar. (2007) conducted a study on “Development and validation of e-Content on transport for the Higher Secondary Commerce students”. The methodology adopted for the study was Experimental research. In this study 29 Higher Secondary students studying Commerce were selected on a sample. The major findings of the study reveal that e-Content was effective in teaching Commerce Secondary level e-Content which is true.

Karthic, M. (2007) conducted a study on “Development and validation of e-Content on pearl Harbour Incident for the Graduate level History students”. Experimental research method was adopted in this study. In this study 25 graduate students studying History were selected on a sample. E-Content developed and validated by the investigator was used for teaching the sample. The major findings of the study reveal that e-Content was effective in teaching history at tertiary level. The e-Content which is turn in the form of SLO increased the performance of the students.
Karthikeyan. (2007) conducted a study on “Development and validation of e-content in Tamil at secondary level”. The Methodology adopted for the study was experimental research. In this study 20 students from IX standard were selected as sample. E-content is developed and validated by the investigator was used for teaching the sample. The major findings of the study revealed that, there is a significant mean difference between the achievements of Pretest and Post-test, there is no Significant Mean difference between the achievement of rural and urban students.

Muthamil, S. (2007) conducted research on “Effectiveness of Computer Assisted Instruction in Biological Science at Higher Secondary Level”. Experimental method was adopted for the study. The major findings of the study are ‘e-content makes the teaching learning process more effective’ and e-content enhances the achievement of the students in the particular subject’.

Rekha, N. (2007) conducted a study on “Development of Power point based learning package for 11th standard students in Botany and its effectiveness”. Experimental method was adopted for the study. The samples selected for the study was 40 XI standard students. The investigator also used the achievement test as a tool. The pretest conducted for experimental groups and control groups lecturing method revealed that there is no significant difference between the two groups. The post test conducted after using the power point package indicated that there was a better understanding of the particular topic
among the experimental groups. But in case of controlled groups who were taught using lecture method there was no improvement between pretest and posttest. The results also revealed that teaching through power point was more effective than traditional chalk and talk method.

Thunmathi. (2007) conducted a study on the “Effectiveness and validation of self learning software package in learning Physics for XI standard students”. The methodology adopted for the study was experimental method. The samples taken for the study was 40 higher secondary students. The finding revealed that the self-learning software package in learning physics was effective than the conventional method. It is also inferred that the level of learning physics among the students undergoing computer classes and those who are not undergoing computer classes are same.

Anil, Tanaji patil .(2006) conducted a study on the “Development of Multimedia Instructional system for Computer Education”. The methodology adopted for the study was experimental method. The samples included the B.Ed students. The finding revealed that, teaching computer education in B.Ed colleges at this present setting was found to be unsatisfactory. It was also found that there is no significant difference between the performance of the experimental groups and control groups in their pretest. But there was a significant difference in the post test. It was also found that there is a significant difference between gains in achievement in terms of scores in pretest and posttest.
Johnson. (2006) conducted a study on “Developing and validating a multimedia package in teaching electronic for higher secondary students.” The methodology adopted was experimental method. The finding reveals that there was no significant difference the experimental groups and control groups in their pretest scores. It is also found that there is significant difference between the experimental groups and control groups in their posttest scores. There is significant difference between the pretest scores and post test scores of control groups and also experimental group.

Jeya kumar Rathod .(2005) conducted a study on “Development and implementation of an IT based instruction package for English Grammar to Gujarati medium students of standard VIII of Jamnagar city”. The main objective of the study was to develop an IT based instructional package to study the achievement of the students and know the reaction of the students towards the package. The samples taken were 100. The samples were selected using random sampling technique. The methodology adopted was experimental method. The finding revealed that the developed IT based instructional package was found to be effective for teaching English grammar. It was also found that there is a significant difference in the gain mean scores of the experimental group and control group. Also it was found that the students had positive reaction towards the developed IT based instructional package.
Sharma Sunita. (2005) conducted a study on “Effectiveness of an instructional package in Environmental studies among students of standard VII”. For the present study the investigator developed an instructional package for standard VII to determine the effectiveness of the package in promoting better understanding of the environment. The methodology adopted was experimental method and case study method. The tools adopted were pretest, posttest and structured interview schedule. The experimental design adopted for the study was single group pretest – treatment – posttest design. The findings revealed that the students had an increased sensitivity towards environmental concerns and a better understanding of the environment.

3.3 SIGNIFICANCE OF THE REVIEW OF RELATED STUDIES:

It revealed that studies in abroad and India were focused on similar issues concerned about disaster management. From the studies reviewed, it is evident that for the present scenario it is a need for the teachers working in schools near coastal areas to learn and train on disaster management skills.

From the reviews of the past studies, the investigator got an insight in developing a package regarding disaster management with more concern towards public in safeguarding them against disaster management. By analyzing the reviews the investigator has planned to prepare the multimedia package in an effective way. Hence this study would definitely create an awareness in sensitizing the coastal area teachers in the issue so, called disaster management. In this
context, the present study is an attempt to bridge the existing gap found in the earlier studies and it helped the researcher to initiate the further research study.

3.4 SUMMARY OF LITERATURE REVIEW:

The investigator has reviewed 46 related studies. Out of 46 studies, 26 reviews are on disasters and 20 on e-content which includes both studies in India and abroad. Most of the studies focused on disasters, public awareness and disaster management studies. Mostly the related studies focused on e-content preparation, Computer Assisted Learning, Effectiveness of Computer Assisted Instruction and Effectiveness of Computer education. Disasters related studies are conducted on tsunami and earthquake. Related studies have focused mostly on computer related education and the investigator has identified the research gap. As far as the investigator reviewed the related studies, it was found that not even an attempt is made in developing multimedia package on disaster and management for primary school teachers. Hence the investigator has developed and tested multimedia package on disaster management among the primary school teachers.

The next chapter explains the methodology and preparation of multimedia package in the study.