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IMPLEMENTATION OF SAFETY AND EMERGENCY PREPAREDNESS PROGRAMS IN SELECTED TECHNICAL-VOCATIONAL INSTITUTIONS IN THE PROVINCE OF BULACAN

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Abstract

This study aims to determine the extent of implementation, monitoring and evaluation of safety and emergency preparedness plans of selected technical-vocational institutions (TVIs) in the province of Bulacan in the hope of benefiting them somehow. In addition, it may be used as basis for future development of their facilities to enhance preparedness in case of safety issues such as fire, electrical and machine breakdown and emergency preparedness particularly during earthquakes.

It is common knowledge that schools and government agencies have safety and preparedness plans, and they have documents to prove it, but its actual implementation is something else. How come students do not know what to do when they have an accident in school? How come some school employees are clueless about where to go and what to do during dangerous incidents such as fires and earthquakes? What are the roles of specific personnel in facilitating and conducting drills or evacuation successfully? Such concerns have inspired the researcher to gain insights into these problems and find possible solutions to be of some help to the TVIs in Bulacan.

The respondents of the study are members of both the administrative staff and faculty, support personnel (technicians and utility workers) who have rendered service of one year or more in the school, and college-level students who have been in the school for at least two years.

Introduction

Occupational health, safety and emergency preparedness are significant efforts exerted to protect human life from unnecessary threats. Although it may be perceived as a boring bureaucratic endeavor, it grows from a never-ending struggle to protect life and property. Occupational health and safety practices are implemented not only in the workplace; they must be evident in schools because they are where our learners spend most of their time. The school develops skilled and intelligent young minds that must be assured of safety in the face of impending threats.

Safety is paramount, and schools are expected to be safe at all times for the learners, teachers, and employees. Schools must be prepared for assessments that may be done before, during and after risky or dangerous events. On a broader scale, the government is accountable for the development, validation and implementation of safety policies. Effective governance, anchored on sustainable implementation of the law and sound public policies, is a vital requirement in ensuring the safety and welfare of Filipinos, in protecting their lives, civil liberties, property ownership, and institutional and communal activities. With this mandate, the government must employ time-tested ways to ensure the safety and security of its citizens. Without a doubt, schools and colleges and training centers that equip students with necessary life skills are top priority.

The Philippine educational system consists of specific levels with specific mandates and target orientations. The Department of Education (DepEd) caters to basic 2 education, the Commission on Higher Education (CHED), is the leader in higher education and the Technical Education and Skills Development Authority (TESDA) targets technical education and skills development.

TESDA came to being with the enactment of Republic Act No. 7796, also known as the "Technical Education and Skills Development Act of 1994," which was signed into law by then President Fidel V. Ramos on August 25, 1994. The law is focused on the development of the country's human resources and aimed to encourage full participation and utilization of the industrial, labor and local government units as well as the technical-vocational institutions of the country. TESDA was born through the merging of the National Manpower and Youth Council (NMYC), the Department of Labor and Employment (DOLE), the Bureau of Technical and Vocational Education (BTVE) of the then Department of Education, Culture and Sports (DECS), and the apprenticeship program of the Bureau of Local Employment (BLE) of the Department of Labor and Employment (DOLE).

The merging of the above-mentioned government offices was part of recommendations contained in the 1991 report of the Congressional Commission on Education, which undertook a national review of the state of Philippine education and manpower development. TESDA, which happens to be the happens to be the workplace of the researcher for several years now, is primary concerned to reduce the overlapping or redundant skills development activities initiated by various public and private sectors and agencies and provide national directions for the technical-vocational education and training, also known as TVET. Based on RA 7796, TESDA is mandated to formulate manpower plans for skills development, set appropriate skills and standardized evaluation, coordination and monitoring of manpower policies and programs; and provide policy 3 directions and guidelines for resource allocation for the TVET institutions in both private and public sectors.

As pioneer in the realization of TVET in the country, TESDA carries the weight of the responsibility in producing skilled manpower, concomitant with the primordial need for safety in the training area. Safety

is always part and parcel of training regulations and is infused in the competency-based curriculum. The question is whether its implementation across the board is monitored, and if so, how often and how strict is the compliance of the registered schools.

With regard to government institutions, TESDA and DOLE are the agencies that ensure safety in the workplace and in the schools that offer TVET trainings. It must be emphasized that all of the curricular offerings of TVET are based heavily on application of real-world skills during training. In the private sector, there is a non-profit, national public service organization dedicated to “protecting life and promoting health,” and its members include businesses, schools, public agencies, private groups, labor organizations and individuals. This organization was founded in 1959, known by the acronym as “SOPI” or Safety Organization of the Philippines, which is focused on preventing deaths and injuries at the workplace, homes, communities and roads. SOPI spearheads the national safety movement by promoting safety consciousness and accident prevention

among the citizens. Membership is exclusive but members are entitled to a number of benefits and advantages. It is also an accredited occupational safety and health (OSH) training organization of the DOLE. It also offers a variety of trainings and seminars related to safety, including but not limited to basic occupational safety and health, construction occupational safety and health, fire safety practitioner and emergency management seminar as well as loss control management and safety program evaluation seminar.

Remarkably, TESDA, DOLE and SOPI emphasize the importance of educating learners regarding their safety concerns. They seek to create a mindset of readiness should disasters and accidents strike, and mitigate harm. They may differ on the extent of implementation and monitoring, how they insure that different businesses, workplaces and most especially the schools and training centers that are affiliated with them or are under the jurisdiction of their agency are implementing the programs religiously.

Based on the experiences of the Philippines and specific disaster-hit provinces, it is quite disturbing and problematic to note that even with the countless number of disasters and natural calamities that have hit the nation, the country’s agencies and programs are still in the ‘maturing’ phase of development. With the onslaught of various natural and man-made disasters, why is it that the nation seems largely unprepared in responding to different cases of destruction and restoration?

Without safety and emergency preparedness plan or without its proper facilitation and implementation, greater risk to lives and property is imminent in the face of danger. In the gruesome landslide that hit Leyte in 2006, the researcher painfully realized that 248 people died while they were in a school. This proved to be a case of unpreparedness on the part of the school officials for not having equipped the occupants with the necessary contingent plan for speedy evacuation. They did not have adequate drills that could have prepared them in the face of danger. Calamities may not be prevented or foreseen but a prepared institution could be able to reduce the impact. Data show that the 248 learners and 5 teachers were all trapped inside their school, a tragedy that on hindsight could have been prevented.

As Bautista-Cruz averred in 2007, disasters should be viewed as situations that can be prepared for and interventions can be made in advance to respond to untoward incidents that natural hazards may bring. In this way, terrible harm may be prevented.

In this light, the researcher seeks to assess the existing safety and emergency preparedness plans and their implementation. It attempts to evaluate and expound on gaps if there are since the safety of learners and workers in schools, as always emphasized, is a prerequisite for genuine learning to take place. Knowing that he is safe at all times and is prepared for any impending danger, a person feels comfortable and his mindset is receptive to the teaching-learning process.

Without a doubt, the school is an appropriate setting for learners to learn and develop holistically, acquiring the skills that will prepare them for productive careers in the future. At best, the technical-vocational institutions aim to produce graduates who place high priority on discipline, competencies and skills, respect for the rule of law, sense of responsibility, academic excellence, equity, fairness and justice, in a safe environment that is conducive to acquiring all these virtues.

Being connected to TESDA, the researcher feels a close affinity to technical– vocational institutions implementing the TVET programs.

The “Technical Notes” publication, “Technical and Vocational Education and Training,” a web publication produced in 2013 by UNESCO, highlights the importance of TVET more than ever. It avers that TVET and skills development have never occupied in a higher place in the policy agenda than now. In fact, it is so central to international 6 discussions on education and training. Around the world, it is generally believed that a well-skilled population is the key to a country’s competitiveness and inclusive and sustainable development. Conversely, a poorly skilled population, skills mismatches and gaps translate into high unemployment, particularly for young people with its attendant economic difficulties and political instability. As important as the existence of technical vocational schools is the equality imperative inclusion of safety in their agenda.

A powerhouse of both knowledge and skills, technical-vocational institutions offer both academic requirements and the necessary skill acquisition. More often than not, the benefits also include competency assessment, in which trainees are awarded a certification of national value upon completion of specific competencies. This certification is a strong credential for employment whether in the country or abroad.

The saying “With great power comes great responsibility,” applies to a technical vocational institution. With their power to transform lives through skills development, their responsibility to exercise caution and insure safety is also heightened since learners are not confined to the four corners of the classroom, but are exposed to real-life work environments where danger is possible. Examples are specific machinery, the use of electronic and electrical devices, the manipulation of electricity itself, and the like. As students undergo training, their inadvertent use of machinery and devices may lead to an accident. A natural disaster may occur which could complicate the situation, making these institutions more concerned about safety.

To accomplish this, technical-vocational institutions develop and implement pertinent rules and regulations consisting of principles; code of conduct for learners; roles and responsibilities of school administrators, teachers, non-teaching personnel and support 7 services; consequences for offenses; as well as prevention and related strategies to ensure a safe, secure and healthy learning environment for the stakeholders.

As indicated earlier, the forerunner and innovator of technical education and skilled development in the country is TESDA. It does not only provide skills development, but is also mandated and empowered by law to maintain a system of accreditation, coordination, integration, monitoring and evaluation of formal and non-formal TVET programs (RA 7796). In line with this, TESDA Board Resolution 98-03 was approved establishing the Unified TVET Program Registration and Accreditation System (UTPRAS), which was created to ensure quality of TVET programs and strictly enforce policies and guidelines in the conduct of such. It also seeks to ensure the delivery of quality TVET programs to the public. This mandate has been followed by the public so far, but to what extent is safety and preparedness in the face of emergencies assured? There is another government agency, the Occupational Safety and Health Center (OSHC) of the DOLE, which is tasked to conduct inspection of different manufacturing industries. But the question is: who inspects the schools or TVIs?

Confronted by these arduous challenges; owners and administrators of technical– vocational institutions, apparently relying mostly on their deep-seated values, interests, background, and logistical considerations, overlook a vital aspect of their institutions' survival: an effective safety and emergency preparedness program. This is of paramount importance in light of man-made risks and natural hazards that may occur at any given place and time without warning.

A school's road to development, success and enviable reputation in the community may be seriously undermined by a single emergency such as fire, injury or death caused by lack of dependable electrical and machine safety measures, or natural disasters such as strong typhoons, floods, or earthquake. In a worst-case scenario, these translate to losses that hamper expansion plans and progress. The risk is greater for institutions with higher student population, high rise buildings and a slew of facilities manned by a handful of personnel, most of whom underwent limited training, if at all.

Even though the government has the prime responsibility to manage disasters, still the communities and the institutions therein are in the best position to determine appropriate courses of action. As an integral part of the community and as a second home for students, staff and personnel, it is imperative for the institutions to plan thoroughly and employ appropriate coping mechanisms to reduce the risks and damages that man-made and natural disasters bring about.

Time and again, it has been acknowledged that the Philippines has an adequate number of laws, but the real problem lies in their implementation. Occupational safety and preparedness for disasters are no exceptions. The researcher recognized this much, that even though schools are mandated by law to implement safety and emergency preparedness programs, some actually fail to implement their plans if there are. Regrettably, they are satisfied with conducting occasional drills for documentation in compliance with related requirements.

With this perceived flaw in some cases where the effort is limited to paperwork to be reviewed every now and then for compliance, the current study aims to assess the implementation (or the lack thereof) of any safety and emergency preparedness program in selected technical-vocational institutions in Bulacan. Hopefully, the study will bring about deeper awareness about safety, the most important feature that concerns everyone in their academic institution. Safety is an obligation enshrined among the duties and responsibilities of owners/administrators, and workers and learners alike must be involved in the implementing safety and disaster preparedness even if the possibility of natural disasters occurring is remote. Safety issues must be carefully planned for regardless of the probability of an

accident or a natural disaster, mishaps, man-made disasters and natural disasters do occur at any given time or place, putting people and property at risk.

It is therefore in the best interest of everyone in school to care and inquire about the existence of safety plans and not be satisfied with fire or earthquake drills every now and then. It is also an important task of the duly-constituted safety officer to conduct inspection of facilities regularly ascertain the preparedness of occupants and people around the institution.

Statement of the Problem

The general problem of this study is: “How may the implementation of safety and emergency preparedness plans of selected technical-vocational institutions in Bulacan during the Academic Year 2018-2019 be assessed?”

Specifically, this study seeks answers to the following questions:

1. How may the technical-vocational institutions be structurally and operationally described?
2. How may the level of implementation of safety and emergency preparedness programs of the institution as mandated by the OSHC of the DOLE be described on the basis of:
 - 2.1 safety bulletin boards, posters and signages
 - 2.2 fire safety
 - 2.3 machine safety
 - 2.4 electrical safety
 - 2.5 frequency of drills conducted
 - 2.6 workshop layout
 - 2.7 occupational health and
 - 2.8 provision of first aid
3. What requirements from the omnibus guidelines on program registration under the UTPRAS of TESDA are complied with by the institution?
4. What action plan may be proposed to improve the safety and emergency preparedness program of the institution?

Methods

The study utilized the descriptive method of research that intended to record, describe, analyze, and interpret data from the technical-vocational institutions. The descriptive method of research is a useful instrument and an investigatory study because it affords precise interpretation of findings.

According to Best (1998), descriptive study is applicable to researches that deal with conditions or relationships, opinions and ongoing processes, effects that are evident or trends that are developing. It is

primarily focused on the present, although it considers the past events, influences, and other factors that may affect current conditions.

The method lends itself to the nature of this study on the implementation of safety and emergency preparedness plans or programs of selected TVIs operating in the province of Bulacan. The study was intended primarily to assess the level of execution of such plans or if something was lacking in their implementation, there would be possible suggestions and recommendations based on data obtained from respondents to the survey and guided interviews.

Population and Sample of the Study

The respondents for the survey questionnaire were 41 administrators with varying designations such as school head, school administrator, school director, or college deans of the TVIs in Bulacan. The respondent TVIs were technical-vocational schools in the province of Bulacan selected through purposive sampling.

The considerations for sampling required that the institutions should have been in operation for at least a year and only the main campus would be included in the study; their satellite campuses would not be covered. The institution should have at least 100 learner- trainees currently enrolled during Academic Year 2018-2019 as reflected in their registration records at the TESDA-Bulacan Provincial Office. Their course offerings should have been registered under the UTPRAS of TESDA. For the interview which used guide questions, the target informants were either the school's administrative officer, designated safety officer, or the deputy school head/ administrator. The researcher requested for copies of documents that may support the claims of the informants that formed part of the document analysis of the study.

Research Instruments

The data-gathering instrument was composed of three parts namely: (1) structural and operational profile of the TVIs; (2) level of implementation of the safety and emergency preparedness programs based on the BOSH training framework of the OSHC of the DOLE; and (3) the TVIs compliance with requirements under the omnibus guidelines on program registration under the UTPRAS of TESDA.

The questionnaire focused on the TVIs' building ownership, fire safety certificate, and health services. The UTPRAS guidelines seek to ensure the continuing compliance of the TVIs with the program registration standards of the agency, expand and empower the TVET providers from both the public and private sector, protect the consumers (parents and trainees), and enhance professionalism in the blue-collar sector.

In addition to the survey questionnaire, the researcher interviewed at least one member of the key staff of the TVIs: either the administrative officer, safety officer, or the deputy school head/administrator. Data gathered from the interviews were used to validate the results obtained from the survey questionnaire. Furthermore, the researcher strived to secure copies of documents such as letters, copy of memorandum of agreement, reports, and related papers that could bolster the claims of interviewees.

As stated earlier, the data-gathering instrument was composed of three parts. The first part was the structural and operational profiling of the technical-vocational institutions. This was a survey questionnaire seeking to know how many years the institution has been in operation, type and location of the institution, its total land area expressed in square meters, the population of the institution, which indicated the number of learners, instructors and non-teaching personnel. It also profiled the program offerings or qualifications that were recognized or registered under TESDA, whether or not they were aligned with the concerns of the study. It inquired on existing partnerships and linkages with industries and other agencies, buttressed by memoranda and agreements.

Lastly, the profiling included the number of issues and concerns related to safety and emergency situations that they have experienced within a year and the occurrence of drills conducted within the year. The second part focused on the level of implementation of existing safety and emergency preparedness plan, anchored heavily on the BOSH training framework of the OSHC of the DOLE. The instrument, originally in checklist format, was modified in question form by the researcher in order to quantify efficiently the assessment of technical- vocational institutions in terms of level of implementation. It focused on safety awareness, fire safety/protection, machine safety, electrical safety, frequency of drills, workshop layout, the provision of first aid, and the occupational health program facilitated in their institution.

The instrument included a compliance checklist grounded on the omnibus guidelines on program registration under UTPRAS of TESDA. The UTPRAS guidelines ensure the compliance of the program registration of TVET institutions. This formed part of the questionnaire that was administered by the researcher personally.

In addition to the survey questionnaire, the researcher conducted structured interviews with personnel in charge of school safety and emergency preparedness. Upon the researcher's request, the answers of participants were recorded for the convenient, accurate and unbiased transcription of responses.

Results and Discussion

The general problem of the study is "How may the implementation of safety and emergency preparedness plans of selected technical-vocational institutions in Bulacan for Academic Year 2018-2019 be assessed?" Specifically, this study sought answers to the questions that are detailed one by one. The first question is "How may the technical-vocational institutions be structurally and operationally described?"

To answer this, the researcher surveyed the respondents on a number of determining factors, the first one being the number of years in operation. Out of the 41 respondents, 29 institutions have acquired five years or more of experience corresponding to the number of years they have been in operation. Nine TVIs have been operating for three to four years and three institutions, one to two years.

The second question pertains to the type of institution that the TVIs are categorized under the database of TESDA. Based on the data gathered, 31 TVIs operate as "private TVI," six TVIs fall under the category of "private HEI," three institutions are "public HEI/SUC," and only one is "public TVI."

The third concern is the location of the institution. There are seven TVIs each in the component cities of Malolos and San Jose Del Monte. Two TVI-respondents are from each town of Balagtas, Bocaue, Guiguinto, Marilao, San Ildefonso, and San Miguel. There 94 is only TVI in each of the towns of Bulakan, Hagonoy, Pandi, Paombong, Meycauayan, and Sta. Maria. On the other hand, the municipality of Plaridel is home to three TVIs while six are in Baliuag.

The fourth surveyed factor was the land area occupied by the institution. A total of 14 institutions from the province of Bulacan have total land areas from below 500 square meters and 14 have above 2,000 square meters in extremes. The remaining 13 institutions have land areas from 500 sq. meters to 2,000 sq. meters. The population of the institution comprise the number of enrollees, number of teaching staff and number of non-teaching staff. Firstly, the researcher's tally revealed that 23 institutions currently have 100 to 500 learners, 10 TVIs have 1,001-2,500 learners, four TVIs have 501-1,000, and 2,501 and above. Next is the number instructors: 19 TVIs have 1-9 teaching staff, nine have 10-25, and nine have 51 and above, while the remaining four have 26-50 instructors. Last one is the number of non-teaching staff. Data show that 24 TVIs have 1-9 non-teaching staff, and 10 institutions have 10-25 members. Five schools have 26-50 personnel, while the remaining two institutions have 51 or more employees.

The next surveyed factor concerns the technical-vocational programs registered under TESDA. Based on the collected data, only one technical-vocational institution offers qualifications such as 2D Animation NC II and NC III, 3D Animation NC III, Barista NC II, Barangay Health Services NC II, Carpentry NC II, Domestic Works NC II, Food Processing NC I, Healthcare Services NC II, Japanese Language, Local Tour Guiding Services NC II, Motorcycle/Small Engine Servicing NC II, Masonry NC II, 95 Pipefitting NC II, Plumbing NC II, Pharmacy Services NC II, Refrigeration and Airconditioning Servicing NC II, Technical Drafting NC II, and Travel Services NC II.

Meanwhile, a total of three schools offer Automotive Servicing NC II, Driving NC II, Electronic Products Assembly and Servicing NC II, Food Processing NC II, Gas Metal Arc Welding NC II, Hilot-Wellness NC II, and Shielded Metal Arc Welding NC I. Similarly, three schools offer Caregiving NC II, Dressmaking NC II, Electrical Installation and Maintenance NC II, Gas Tungsten Arc Welding NC II and Hairdressing NC II.

Four schools offer Events Management Servicing NC III, and Programming NC II while five offer Cookery NC II, and Front Office Services NC II. There are eight schools that offer Bartending NC II and nine offer Computer Systems Servicing NC II, and Shielded Metal Arc Welding NC II. Further, 10 schools offer Bread and Pastry Production NC II while 12, 14, and 15 TVIs listed Visual Graphic Design NC III, Housekeeping NC II and Bookkeeping NC III, respectively. Eighteen schools offer Food and Beverage Services NC II, the qualification offered by the highest number of schools included in the survey.

Following this concern, the researcher profiled the existing partnership or linkages with industries and related agencies. Based on the data, 18 institutions have partnerships or linkages with local government units, nine partner with companies/enterprises, three link up with non-government organizations and one has partnership with national government agency.

The last area of concern was the number of issues and concerns pertaining to safety and emergency situations that schools confronted in a year. According to the generated data, 39 institutions estimated to have faced 1-5 issues and concerns pertaining to safety 96 and emergency situations while only two TVIs faced up to 6-10 concerns in a span of one year.

The second specific question was: "How may the level of implementation of safety and emergency preparedness programs of the institutions as mandated by the OSHC of the DOLE be described?" These criteria are based on the BOSH framework standards of DOLE and are answered one by one. The first standard pertains to the use of safety bulletin boards, posters and signages. Based on the data, administrators of TVIs "Much Implemented" the standards: "there are safety and emergency preparedness related posters," "there are hotlines or contact numbers of offices, agencies or units that could be alerted in case of emergency," "there is a logbook or safety data sheets used to monitor incidence or occurrence of safety and occupational health issues," "safety is being promoted in all training activities and workshop areas" and "there are appropriate signage pertaining to locations, directions, and safety of people."

The second standard focused on level of implementation of safety and emergency preparedness program in terms of fire safety. Based on responses of the TVIs, the standards are "Very Much Implemented:" "certificate of fire safety is renewed every year at the Bureau of Fire Protection," "appropriate and adequate fire extinguishers are functional, fully-charged and kept in designated areas when not in use," "portable fire extinguishers are installed properly in strategic locations readily accessible in the event of fire," and "fire exits are available and unobstructed and there is an automatic sprinkler system." The remaining standards are "Much Implemented:" "there is a functional fire alarm system," "firefighting facilities are available such as water, hydrant, and hose placed in strategic locations," "there are firefighting equipment inspection tags or labels," "there are firefighting equipment location signs or posters," "emergency exits are provided in every floor or levels of the school buildings," and "stairs, platforms and stairways used as fire exits are made of incombustible materials." Overall, the standards are "Much Implemented."

The third standard is about the level of implementation of safety and emergency preparedness program in terms of machine safety. The administrators reported that the following standards are "Very Much Implemented:" "machines and equipment are properly 'guarded' - shielded, fenced or otherwise protected according to their needs, to prevent accidents," "machines and equipment are regularly inspected and maintained to sustain their usefulness and efficiency," and "the electrical connection of machines and equipment has a functional shut-off switch to be used in case of emergency such as power outage, lightning strikes, etc." The remaining standard "warning signs are installed near the machines that pose potential hazards or danger to people" is "Much Implemented." The overall rating is "Much Implemented."

The fourth standard concerns the level of implementation of safety and emergency preparedness program in terms of electrical safety. The only standard claimed to be "Very Much Implemented" is the first item, "safe work practices are always observed." The remaining standards, "location plan and electrical layout are available and kept in a secure place," "convenience outlets/plugs are maintained," "there are no flickering lamps/lights in the workshops and training areas," "heavy duty extension cords are available and well-kept," "an efficient disconnection and grounding system is installed" and "electrical installation and lighting system is periodically checked and maintained by skilled 98 technician/s" are all assessed as "Much Implemented." The overall judgement is "Much Implemented."

The fifth standard pertains to the level of implementation of safety and emergency preparedness program in terms of drills or activities related to safety and emergency preparedness. As evaluated by the respondents, the standards "training-seminar on BOSH for safety officers" and "training on basic first

aid and cardio-pulmonary resuscitation” are “Implemented” while the remaining standards “fire safety and protection drill”, “earthquake response and evacuation drill” and “seminar on school-based DRRM” are “Much Implemented.” This is also the overall interpretation.

The sixth standard concerns the level of implementation of safety and emergency preparedness program in terms of workshop layout. All of the standards and even the overall mean judgement are “Much Implemented.”

The seventh standard refers to the level of implementation of safety and emergency preparedness program in terms of occupational health. All of the standards in this category are adjudged as “Much Implemented.” This is also the final verdict.

The last standard concerns the level of implementation of safety and emergency preparedness program in terms of the provision of first aid. Based on the generated data, the standard “there is a designated ‘first aider’ (trained and duly certified by the Philippine National Red Cross or by any of its accredited groups)” was “Implemented” while the remaining standards, “first aid treatment is provided in case of injury or sudden illness suffered by the trainees and staff” and “first aid cabinet/kit is available in strategic areas within the institution” are “Much Implemented.” This is also the final rating.

The third specific question posed in Chapter I was: “What requirements from the Omnibus Guidelines on Program Registration under the UTPRAS of TESDA are being complied with by the institution?” This aimed to assess the compliance of the TVIs with requirements from the Omnibus Guidelines on Program Registration under the UTPRAS of TESDA.

The results gathered indicated that 40 of the total number of respondents were found to be compliant while only one TVI was not. The schools were found to comply with the following requirements: (1) Proof of building ownership or contract of lease, (2) Current fire safety certificate, and (3) Health services are available to the learners. In the absence of a service provider in the vicinity, a pertinent document attesting to a contracted or outsourced provider for this purpose must be made available.

Finally, the last specific problem posed in the first chapter sought an action plan in interrogative form: “What action plan may be proposed to improve the safety and emergency preparedness program of the institution?” An action plan for the purpose has been presented in the preceding chapter and hopefully, the technical-vocational institutions involved will concur with its content and hopefully, too, the output of the study will benefit them in many ways and contribute to their welfare.

Conclusion

Based on the findings of the study, the following conclusions are hereby drawn:

1. The technical-vocational institutions’ structural and operational profiles are deemed “average” and their facilities are compliant with basic requirements according to government standards. It can be gleaned from the data collected in the previous chapter that their profiles are not that simple and not exactly large-scale.

2. The level of implementation of safety and emergency preparedness programs of the different technical-vocational institutions as mandated by the OSHC of the DOLE in terms of safety bulletin boards,

posters and signages, fire safety, machine safety, electrical safety; occupational health services, personal safety of trainers and trainees, frequency of drills or activities pertaining safety and emergency preparedness conducted within a year, workshop layout and provision of first aid is assessed by school administrators as “Much Implemented.”

3. Almost all of the respondent technical-vocational schools (40 out of 41) are compliant with the requirements from the omnibus guidelines on program registration under the UTPRAS of TESDA. The requirements are about building ownership, fire safety, and health services. The schools have pertinent documents and certificate of registration of their program offerings.

Recommendations

On the basis of the findings and conclusions of the study, the following recommendations are hereby put forward:

1. Even though majority of the respondent TVIs adhere to standards in implementing their safety and emergency preparedness plans, it is recommended that each institution should come up with a simpler but precise safety and emergency preparedness plan, one that is documented and tailor-fit to meet their specific requirements but is easy for safety personnel to understand and execute. The strategic plan should consider the structure, financial requirements, staffing pattern, program of activities as well as monitoring and evaluation.

2. As survey data and interview results reveal, only a handful of schools have a duly-designated safety officer. An employee performing other assignments or posted at a different station is assigned to handle safety and emergency cases. With the inherent weakness of this supposition, it is hereby recommended that all TVIs hire or designate a safety officer. He should undergo relevant trainings and seminars such as but not limited to: basic occupational safety and health, firefighting, basic life support, first aid application and cardio-pulmonary resuscitation, disaster risk reduction and management.

3. Corollary to recommendation no. 2, the TVIs must allocate a budget to sustain their safety and emergency preparedness programs. Apart from fire extinguishers and firefighting tools and equipment, adequate funds should be available to defray expenses on emergency kits, trainings, seminars and workshops for the staff and trainees; emergency drills, signages, and incidental expenses that may be incurred.

4. For good measure, the TVIs must forge partnerships with agencies mandated to oversee safety and emergency preparedness such as the local disaster and risk reduction and management office, the office of civil defense, bureau of fire protection branch office, OHSC of the DOLE, and Red Cross. These entities are more than willing to partner with schools in insuring safety and emergency preparedness.

5. It is recommended that the provincial office of TESDA develop competency based learning materials to optimize existing provisions in its training regulations entitled: ‘Practice Occupational Health and Safety Procedures’ that TVIs must teach to their trainees. This may be done in cooperation with experts from provincial, city or municipal DRRMO and the OCD, two of the government agencies mandated by law to coordinate with learning institutions to develop the materials.

6. As a matter of policy, it is also recommended to the provincial office of TESDA to include the development of CBLMs among guidelines of UTPRAS that TVIs must comply with.
7. Administrators must be in the priority list of staff to be trained in disaster risk reduction and management to enhance their awareness, knowledge and attitude towards the importance of safety and emergency preparedness. With such training, they will be able to view DRRM efforts in the long-term and cascade the strategies to their staff and constituents for implementation.
8. Technical-vocational institutions that participated in the study will do well if they adopt the herein proposed action plan, or portions of it, to improve implementation of their safety and emergency preparedness plans. The TVIs still without such plans must fill and use it in developing their own documented plan as a matter of urgent concern.

References

- Basic Occupational Safety and Health (BOSH) Training, Let's Go for Zap! OSH Training Module. Occupational Health and Safety Center, Department of Labor and Employment.
- Basic Occupational Safety and Health (BOSH) Training, Let's Go for Zap! OSH Training Module. Occupational Health and Safety Center, Department of Labor and Employment.
- Best, J. & Kahn, J. (1998) Research in Education, 8th Edition. <http://ww2.odu.edu/~jritz/attachments/reined.pdf>
- Calmorin, M.A. & Paler – Calmorin, L. (2007) Research Methods and Thesis Writing, Electronic Book, Second Edition Halperin, S. (2013) Development Theory, Encyclopædia Britannica. <https://www.britannica.com/topic/development-theory>
- Department of Education. Deped Order 21. S. 2015
- Department of Education. Deped Order 21. S. 2015
- Morales, Y. (2017) DILG: More Preparations needed for the 'Big One'. <http://cnnphilippines.com/news/2017/05/06/More-preparations-needed-for-big-one.html>
- NDRRMC Local Disaster Risk Reduction and Management Plan Formulation Training Manual (2013)
- Nguyen, V. H. & Muller-Marin, K. (2015) Assessment and Preparedness Toolkit. MOET, INEE and UNESCO, Vietnam. <http://unesdoc.unesco.org/images/0024/002445/244511e.pdf>
- Occupational Safety and Health Standards (as amended, 1989) DOLE, May 2016. Rule 1200 – Machine Guarding, pp. 97 – 106
- Occupational Safety and Health Standards (as amended, 1989) DOLE, May 2016. Rule 1210 – Electrical Safety, pp. 108 – 110
- Occupational Safety and Health Standards (as amended, 1989) DOLE, May 2016. Rule 1940 – Fire Protection and Control, pp. 147 – 157

Occupational Safety and Health Standards (as amended, 1989) DOLE, May 2016. Rule 1960 – Occupational Health Services, pp. 169 – 178

Oreta, W.C. (2010) Guidance Notes: School Emergency and Disaster Preparedness. UNISDR Asia and the Pacific 2010. https://www.unisdr.org/files/15655_1_msshguidenotesprefinal0313101.pdf

Project Team at Emergency Management Executive Academy (2017). “The Ongoing Quest to Assess & Measure Preparedness” <https://www.domesticpreparedness.org/preparedness/the-ongoing-quest-to-assess-measure-preparedness/>

Republic Act No. 10121 or the Philippine Disaster Risk Reduction and Management Act of 2010 Occupational Safety and Health Standards (as amended, 1989) DOLE, May 2016. Rule 1080 – Personal Protective Equipment and Devices, pp. 34 – 38

Ross, K. N. – UNESCO. (2005) Quantitative Research Methods in Educational Planning – Module 3. “Sample Design for Educational Survey Research” <http://unesdoc.unesco.org/images/0021/002145/214550E.pdf>

TESDA Board Resolution No. 98 – 03, Amended Omnibus Guidelines on the Program Registration under the Unified TVET Program Registration and Accreditation System (UPTRAS)

TESDA Omnibus Guidelines on the Unified TVET Program Registration and Accreditation System (UTPRAS). http://tesda.gov.ph/uploads/file/issuances/omnibus_guide_2007.pdf

UNESCO (2013). Education Sector Technical Notes – Technical and Vocational Education and Training. <http://unesdoc.unesco.org/images/0022/002221/222129e.pdf>