



Brigada Eskwela and Disaster Preparedness as an Approach to Pupils' Academic Achievement

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Received 23 January 2017 Accepted 10 November 2017 (*Corresponding Author)

Abstract Brigada Eskwela is a volunteerism program which is annually launched to prepare the public schools for the opening of classes enlivening the spirit of solidarity among the school personnel, pupils, parents, and rural residents. Classroom repair, furniture repainting, and school ground cleaning are some of the Brigada Eskwela activities that are geared towards making schools disaster-prepared, ecologically-conscious, and conducive to learning. Having these annual activities along with the schools' Disaster Preparedness program assures smooth opening of classes because teachers and pupils will no longer clean and set up their classrooms during the first day of school. This study aimed to determine the schools' implementation of Brigada Eskwela and Disaster Preparedness Program in relation to the academic achievement of pupils in Ubay 1, Ubay 2, and Ubay 3 Districts of Bohol. This employed descriptive-normative survey. A total of 45 elementary schools were surveyed including 45 school heads, 422 teachers, and 180 rural residents. The findings showed that the Brigada Eskwela implementation was evaluated "excellent" so with the disaster preparedness as "very high capacity". In turn, these programs had significantly improved the pupils' academic achievement and had raised awareness among the rural residents the importance of culture of safety. School heads played an important role in the implementation of these programs. Their managerial skills potentially affected Brigada Eskwela implementation and disaster preparedness of the schools. It was then recommended that the rural residents may strengthen its disaster preparedness through establishing a Family Disaster Plan to avoid casualties from any hazard and calamity that may occur. Moreover, Brigada Eskwela should also be implemented in the private schools to intensify partnership towards their stakeholders.

Keywords BrigadaEskwela, disaster preparedness, rural residents, volunteerism

INTRODUCTION

Angela (2013) stressed that positive learning environment, either in school or home setting, is important for a child. Healthy and safe learning environment denotes a child-friendly and hazard-free classroom where children feel safe and valued at all times.

Through the spirit of volunteerism and public-private collaboration for Philippine education, the Republic Act 8525, also known as the "Adopt-A-School Act", was crafted in 1998. With the Adopt-A-School Program (ASP), the Department of Education launched the National Schools Maintenance Week in May 2003 and was institutionalized on May 2008 by Department of Education Order No. 24, s. 2008. Dubbed, "Brigada Eskwela", the program enlivened the spirit of volunteerism through bringing together teachers, parents and community members every third week of May to work together in repairing and preparing public schools for the class opening. It is also participated by individual, private organizations, business sectors, local and national government agencies which together share their efforts, time and resources (Vargas, 2016).

On the other hand, Department of Education Order No. 83 or the Disaster Preparedness Measures for Schools mandated public schools to be disaster-resilient by implementing measures for the protection against rains or floods of all school paraphernalia like textbooks, teaching manuals, school records and equipment; designing orientation to all pupils and students on disaster preparedness; conducting of regular disaster drills; properly informing pupils and students on early signs of weather disturbances and their effects; and, observing policies in coordination with the local government units on decisions regarding the suspension of classes during disasters or calamities.

In addition, UNESCO (2013) elaborated three pillars of comprehensive school safety, namely, the Safe Learning Facilities; the school Disaster Management; and the Risk Reduction and Resilience Education. These pillars were adopted by the Department of Education in accord to their Disaster Risk Reduction and Management (DRRM).

Ayeni, et al (2011) concluded that the collaborative effort between the school personnel and other stakeholders is greatly important in the success towards the development of learning infrastructure and environment and to any projects a certain school may implement. After all, the most benefited individuals of such are the children themselves. Hence, it is of great importance to establish a close monitoring and evaluation of all the programs of the Department of Education like the Brigada Eskwela and Disaster Preparedness to make sure that these programs continuously respond to the ultimate goal of the department – the welfare and total development of the children.

OBJECTIVE

The researchers would like to investigate the status of implementation of Brigada Eskwela and Disaster Preparedness programs in public elementary schools. This further evaluated the influence of the school heads' managerial skills towards the implementation of these programs and their impact towards pupils' academic achievement.

METHODOLOGY

This study utilized descriptive-normative survey with documentary analysis. School heads' managerial skills were measured using adopted questionnaires from the study of Timbal (2012). Meanwhile, the Brigada Eskwela and Disaster Preparedness were assessed using the standard checklist issued by the Department of Education. The respondents of the study were all the teachers and school heads of subject elementary schools and selected rural residents of Ubay I, Ubay II, and Ubay III Districts in Bohol. There were a total of 647 respondents, comprising 422 teachers, 45 school heads, and 180 rural residents. The National Achievement Test mean score of the pupils for the school year 2014-2015 was used as basis for their academic achievement.

RESULTS AND DISCUSSION

The Brigada Eskwela program of the Department of Education of the Philippines demands school heads' managerial skills. It became one of the Department's initiatives of enjoining the rural residents and local communities to respond to the needs of public schools in the Philippines. This referred to the advocacy known as National Schools Maintenance Week.

As reflected in Table 1, school heads generally performed 'very often' the managerial skills they possessed in the school operation. In particular, they excelled equally both in conceptual and technical skills. Basically, conceptual skill includes the ability of the school heads in updating and coaching his teachers on recent trends in education; applying logic in effectively solving problems; allocating responsibility for continuous improvement; and flexibly modifying course to suit changing circumstances. Technical skill, on the other hand, is about being computer-literate; regular monitoring and evaluation of school projects; managing people and resources; maintaining order and discipline in school; and identifying smarter ways to do things.

Table 1 School heads’ managerial skills as perceived by the respondents

Parameters	School Heads N=45		Teachers N=422		Rural Residents N=180		Overall		
	WM	DV	WM	DV	WM	DV	WM	DV	Rank
Conceptual Skill	3.40	Always	3.22	Very Often	3.19	Very Often	3.27	Always	1.5
Communication Skill	3.23	Very Often	3.13	Very Often	3.11	Very Often	3.16	Very Often	4
Human Relation Skill	3.28	Always	3.18	Very Often	3.15	Very Often	3.20	Very Often	3
Technical Skill	3.34	Always	3.28	Always	3.19	Very Often	3.27	Always	1.5

Although perceived as ‘very often’ done, it didn’t imply that the school heads’ communication and human relation skills were alarming. Communication skill requires a two-way process, the concept of listening and speaking. Further, it refers to ones’ ability to understand and to be understood by others in the most possible way. Meanwhile, school heads’ human relation skills involve establishing good relationship towards others; understanding the social fabric of the organization; being sensitive to others’ feelings; keeping promises and commitments; and handling difficult people with diplomacy and tact. All these skills are of importance for school leaders to effectively do the tasks expected from them. According to the study of Uko (2015), effective management is a precursor to facilities sustainability, utilization and maintenance as it enhances effective productivity. Hence, it can be said that a school head with good managerial skills could effectively facilitate the schools’ Brigada Eskwela and Disaster Preparedness programs.

Table 2 Respondents’ perception towards schools’ Brigada Eskwela implementation

Parameters	School Heads N=45		Teachers N=422		Rural Residents N=180		Overall		
	WM	DV	WM	DV	WM	DV	WM	DV	Rank
Enrolment Preparation	2.13	VG	2.10	VG	2.06	VG	2.10	VG	5
School Leadership	2.48	E	2.51	E	2.51	E	2.50	E	3
Teachers’ Preparation	2.74	E	2.63	E	2.58	E	2.65	E	1
Learners’ Status	2.48	E	2.65	E	2.61	E	2.58	E	2
Physical Plant/Facilities	2.27	E	2.24	VG	2.20	VG	2.24	VG	4
COMPOSITE MEAN	2.42	E	2.43	E	2.39	E	2.41	E	

As shown in Table 2, the parameters included in the Brigada Eskwela were enrolment preparation, school leadership, teachers’ preparation, learner’s status and physical plant/ facilities. It shows that as far as Brigada Eskwela was concerned, respondents perceived that teachers were more than prepared. This simply unveiled the idea that prior to the opening of classes, all the teaching paraphernalia like lesson plans, teaching manuals, curriculum guides, instructional materials, school register, class records, and even the classroom structuring were ready for use. Furthermore, this implied that teachers were efficient enough to prepare for their assigned tasks as curriculum implementers.

The learners’ status which included the actual attendance of the students per class or the teacher-pupil ratio was excellently facilitated by the schools and their staffs to make sure that quality education in every classroom was maintained. Moreover, the aspect on school leadership was also carried out by the school heads, teachers and stakeholders well. This covered the School Improvement Plan (SIP), Annual Implementation Plan (AIP), Annual Procurement Plan (APP), supervisory plan, calendar of school programs for the entire school year, distribution of teaching loads for teachers, project work and financial plan, advocacy plan, monitoring and evaluation plan, and transparency measures of expenditures.

In consonance, Brigada Eskwela program was also perceived to be of potential help in preparing the school facilities before the classes started. This included the repair of classroom and its furniture, water drainage system and sanitation maintenance, rehabilitation of the school garden, and the like which made the school child-friendly and a zone of peace. Lastly, the program has also showed significant contribution to the schools' enrolment preparation. This finding suggested that the information dissemination pertaining to enrolment including the hanging of streamers, establishing of information action centre and help desks, education caravan, and community immersion; rigid and strict adherence to No-Collection-Policy; family mapping; networking with stakeholders; and soliciting school supplies and uniforms for the less privileged pupils were a contributory factor to increased enrolment.

In the overall, the Brigada Eskwela implementation was rated "excellent". With this, it can be implied that there was a strong partnership between the school and the rural residents. Furthermore, this proved that the objectives of the said program have been achieved through the spirit of volunteerism. This result agreed to the study conducted by Celestial (2015) which stated that Brigada Eskwela was highly implemented by public elementary schools from its pre-implementation to the post-implementation stage.

On the other hand, one of the targets of Brigada Eskwela is to ease the public schools' vulnerability to both natural and human-made disasters. Hence, the Department of Education issued the *Comprehensive Disaster Risk Reduction and Management (DRRM) in Basic Education Framework* under Department Order No. 37, s. 2015 to guide DRRM efforts in the basic education sector towards resilience-building in offices and schools, and to ensure that quality education was continuously provided and prioritized even during disasters and/or emergencies. This framework served as basis towards the attainment of Department's three education outcomes, namely: *Access, Quality, and Governance (AQG)*, and maintained a learner-centered, rights-based implementation at all levels. It set the direction and priority areas for DRRM in the Department of Education while maintaining the prerogative of field offices to decide on what specific activities to undertake depending on their exposure to hazards, available resources and existing partnerships and linkages.

In order to achieve the education outcome as to *Access*, DRRM interventions, policies and mechanisms should be in place to ensure the immediate resumption of classes after the occurrence of any hazard or calamity so that school children will not be hindered from the access of learning services. Meanwhile, even if the concepts on Disaster Risk Reduction (DRR) and Climate Change Adaptation (CCA) have been integrated in the K to 12 Curriculum, the constraints to access, along with the psychosocial condition of school children and teachers, affect the quality of education. Thus, in order to reinforce the education outcome as to *Quality*, there is a need to identify strategies including support materials attuned to the learning needs of children and teaching strategies that could adapt to emergency situations. On the other hand, with the acknowledgement that DRRM is a complementation of infrastructural and non-infrastructural interventions, *Governance* comes crucial in the implementation. This will determine the institutionalization and implementation of systems and protocols that will be issued. In this study, these three education outcomes served as the parameters to evaluate the implementation of the disaster preparedness of the subject schools.

Table 3 Respondents' perception towards schools' disaster preparedness

PARAMETERS	School Heads N=45		Teachers N=422		Rural Residents N=180		Overall		Rank
	WM	DV	WM	DV	WM	DV	WM	DV	
Access	0.90	VH	0.85	VH	0.86	VH	0.87	VH	3
Quality	0.97	VH	0.89	VH	0.88	VH	0.91	VH	1.5
Governance	0.94	VH	0.88	VH	0.92	VH	0.91	VH	1.5
COMPOSITE MEAN	0.94	VH	0.87	VH	0.89	VH	0.90	VH	

Table 3 showcases the status of implementation of Disaster Preparedness wherein both the Quality and Governance got the highest rating. This finding suggested that the teachers, pupils, parents, stakeholders, and the community had the knowledge about disaster management through

regular conduct of evacuation drills like earthquake, fire, tsunami, flooding, and locks down drill. DRR and CCA were also evidently integrated in actual classroom instruction whereby disaster prevention measures were also taught. In addition, as to governance, the schools had strong partnerships with external stakeholders in order to address the DRR and CCA related needs of the school; and a well-organized and capacitated DRRM Committee including the rural residents was created and made functional. Lastly, an existing emergency incident control system that included accessible student emergency contact numbers and school records back-up system was well-established. To sum up, the overall implementation of schools' disaster preparedness was with very high capacity.

Another target of Brigada Eskwela is to achieve higher learning outcomes of pupils through establishing an environment that supports learning. Herein, the study utilized the results of National Achievement Test, a standardized test annually administered by the Department of Education in partnership with National Educational Testing Resource Center (NETRC).

Table 4 National Achievement Test (NAT) mean percentage scores

				<i>n=45</i>
Level	Range	Frequency	Percentage (%)	
Superior	90-100	4	8.89	
Meeting Standard	75-89	33	73.33	
Below Standard	35-74	8	17.78	
Poor	0-34	0	0.00	
Total		45	100%	

Table 4 exhibits the mean percentage scores in National Achievement Test. Clearly, majority of the elementary schools had mean percentage scores categorized as "meeting standard". The NAT results indicated commendable academic performance of the same schools with excellent Brigada Eskwela and very highly capacitated Disaster Preparedness. This implied that Brigada Eskwela and Disaster Preparedness were potential factors that affected the performance of the pupils.

CONCLUSION

In the light of the findings of the study, it can be concluded that the school heads' managerial skills played a vital role in the successful implementation of the different programs and projects of the school such as Brigada Eskwela and Disaster Preparedness, leading to its ultimate goal – the quality and relevant education for the pupils. Brigada Eskwela and Disaster Preparedness did not only make the public schools accessible to all, conducive to learning, ecologically-conscious, and disaster-resilient but also promoted awareness among the rural residents the importance of culture of safety. The rural residents have also shown positive response to the said programs through actively engaging in the planning and implementation. Moreover, these programs, with the help of a committed and skilled school heads as the mediator, have been found out to be potential factors affecting the National Achievement Test (NAT) mean percentage scores of the pupils.

RECOMMENDATION

It is highly recommended that Brigada Eskwela and Disaster Preparedness Programs be implemented in all private schools not only to become disaster-prepared or to increase their pupils' academic achievement but also to intensify the good rapport between the schools and their stakeholders. Also, the rural residents may strengthen their disaster preparedness through crafting a Family Disaster Plan to prevent casualties from any hazard and calamity that may occur.

ACKNOWLEDGEMENTS

The researchers would like to extend so deeply their utmost gratitude first and above all to the Creator for the wisdom and good health, to the BISU officials and the Superintendent of the Department of Education, Division of Bohol for allowing the conduct of the study; to the administrators of the three districts of Ubay, to the respondents for their cooperation in answering the questionnaires, to all people who may not be mentioned but had become an instrument in realizing this humble piece of work, the heartfelt thanks of the researchers go to them.

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