EPIC (Education Priority Compact) Strategy as A Solution for Education of Post-Disaster Refugee Children in Palu City, Central Sulawesi

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Abstract. Disaster victims' children are required to live in temporary shelters provided by Non-Government Organizations (NGOs) and the government. In the first phase, 699 units have been built in 72 locations. The focus of the government in the first three months after the earthquake and tsunami in Central Sulawesi was to rescue the emergency and clean up the area after that the focus then began to shift to improving the economy of the affected area. In handling post-disaster, the government does not prioritize education as its main aspect, so many of the victims of disasters do not go to school until they drop out of school. Focus Group Discussions conducted in several HUNTARA locations in the city of Palu, resulted in education being one of the concerns of the people living in temporary shelters. The community is concerned about the sustainability of their children's school education, due to the absence of educational facilities in the shelter as well as the community's economy that has fallen due to lack of work is exacerbated by the government's lack of attention to the education of children in refugee camps / HUNTARA. These methods are Focus Group Discussion (FGD) that has the main target of refugee communities. On the other hand, researchers also the distribution of questionnaire in several refugee locations in the city of Palu, in order to obtain accurate data for supporting this research. By quantitative SWOT methods and AHP Analysis to determine priorities in determining the EPIC (Education Priority Compact) Strategy which is expected to be one of the solutions for post-disaster education in Central Sulawesi.

1. Introduction

September 28, 2018 was one of the biggest disasters in the world that occurred in Central Sulawesi, Indonesia. Material losses are estimated at around Rp. 18.48 trillion and claimed 4,340 lives [1]. According to the report on the finalization of data and information on the earthquake, tsunami and liquefaction disaster in Central Sulawesi dated December 20, 2018, it showed that 386 schools were affected, 107 schools were severely damaged, 114 schools were moderately damaged, and 165 schools were slightly damaged. As for the condition of students and teachers, 183 students died, 171 students were lost, 22 students were seriously injured, and 27 teachers died, 33 teachers were lost, and 8 teachers were seriously injured [2].

In disaster situations, often education services are not the main concern. Even though, it is very clear, education is the social sector most affected by disasters. Therefore, efforts to pay more attention to the world of education must begin. This can be realized by ensuring there is access and learning environment, sustainability of learning activities, availability of teachers and education personnel,
adequate educational policies accompanied by strong coordination between institutions, community participation and assessment of educational needs, response strategies and monitoring and evaluation [3].

In post-disaster situations, damage to educational facilities and infrastructure including transportation infrastructure as well as situations such as the child's family life and abnormal family of teachers can cause the regular teaching-learning process to cease. In addition, the disruption of the economy due to the disaster also puts children in a vulnerable position to drop out of school. Based on this condition, alternative education programs provided by stakeholders will greatly assist child victims. Emergency school programs, drawing programs, storytelling [4].

Therefore, this research tries to design a new strategy called EPIC (Education Priority Compact) which involves three parties including the Government, NGOs (Non-Government Organization), and the Community. To get a solution for post-disaster education.

2. Literature review

2.1. Post Disaster Education

The low level of education in post-disaster children makes the family a productive place in improving children's education in the aftermath of the term. The term that is often used as a substitute for the designation of the educational environment in the family is "informal education", is part of the path of implementing education in Indonesia, in contrast to formal education carried out in a structured and tiered manner. Non-formal education is held for citizens who need educational services that function as substitutes, additions, and/or complementary formal education in order to support lifelong education [5].

2.2. Fun Learning Method

The world of education is a dynamic world and needs to update new things continuously [6]. Thus was born the fun learning strategy developed by Bobby DePorter by giving positive suggestions. A fun learning strategy (Fun learning) is a strategy used to create an effective learning environment, implement a curriculum, deliver material, facilitate the learning process that results in improved student learning achievement, learning with a fun system is very necessary in the learning process, because it is very helpful for students to be able to make learning materials meaningful, motivate learning, and provide learning satisfaction. Because fun learning will make children feel unburdened and forced to learn [7].

3. Method

3.1. Questionnaire

In this study, researchers used an open questionnaire. Open questionnaire is a questionnaire that gives freedom to the object of research to answer. With the aim that the data obtained is accurate data in accordance with the conditions that occur. The object of this research is the people living in Temporary Shelter (HUNTARA). The number of questionnaires distributed in the community was 213 questionnaires in three Huntara, including: Petobo Huntara, Huntere Lere, and Silae Huntara.

3.2. Focus Group Discussion (FGD)

In this study Focus Group Discussion was conducted in 3 places, namely Pantoloan Village, Petobo Village and Panau Village. The author uses FGD to find out post-disaster education problems that occur in the city of Palu, which later will be the main concern that will be addressed.

4. Results and analysis

4.1. Focus Group Discussion (FGD)

Based on the results of the Focus Group Discussion that the fulfilment of post-disaster education in the Palu area is still lacking. There are three main areas of concern in post-disaster education issues, namely: Pantoloan, Petobo and Panau. In Pantoloan Village, after the disaster, many children dropped out of school, according to Pak Mukades, the head of RT 2 RW 2 Petobo Village that Children in Huntara need
education. In Huntara there are only elementary schools, the other schools are far away. The condition of school zoning also hampered the implementation of post-disaster education as was the case in the Panau village where the community wanted that the government could change the rules related to zoning for schools because currently children living in the Panau village had to go to Kayumalue village. As a result, poor people cannot afford to pay for school and eventually drop out of school.

4.2. Analysis of the description based on the results of the questionnaire

![Figure 1. Comparison of Fun Learning and Formal Methods](image)

The analysis shows that people who live in temporary shelters (huntara) 93% of the people have the view that non-formal education with fun learning methods after disasters is effective to apply, when compared with the application of formal methods in post-disaster education shows that 83% of people who agree with the method.

Other results show that 88% of the community respondents stated that the learning that was carried out was in accordance with the child's developmental age. 84% of the community thinks that it takes more than three months to eliminate trauma after a disaster, vulnerable learning time in a week is obtained that by 51% the public has the perception that four to five times a week is vulnerable time that should be done for learning to fill in the blanks of time.

As with the person in charge of implementing education, about 56% chose the government as an important role in children's education after disasters. 73% of the community stated that there had been a transparency in the administration of emergency education units. 75% of the people think that the stakeholders have provided programs that support education optimally. 56% of the people think that there are enough teachers in the post-disaster period. 51% of the people think that the government does not recruit teachers after disasters. 77% of the community thinks that the community has participated and contributed in the implementation of the education unit. In addition, according to the public perception, 85% of respondents thought that the teaching staff who taught after the disaster consisted of elements of education and psychologists.
From the results of the analysis based on information and data related to education units, students and teachers affected by the disaster, it was found that about 89% of the public thought that they had obtained the data and information after the disaster. 94% of post-disaster children have the same learning opportunities without any difference. 93% access or route to safe learning environments.

The conclusion from the results of the questionnaire distributed to respondents is that the community wants fun learning methods to be applied after disasters before entering the school age of children (formal learning) and in the education process the community thinks it must be distributed according to its age development and the time period needed is more from three months which is done three to four times a week.

4.3. **SWOT analysis**

| EKSTERNAL | OPPORTUNITY | INTERNAL | THREATS |
|---|---|---|---|
| | | | 1. Vulnerable to the child's psychological recovery time |
| **STRENGTHS** | **SO Strategy** | **ST Strategy** | **WO Strategy** | **WT Strategy** |
| 1. Improving the Quality of Post-Disaster Education. | The establishment of cooperation between the government, NGOs and the community in improving the Quality of post-disaster education. | Provision programs stakeholders of from educational local | Conducting recruitment for teachers after a disaster | Conduct training for teachers on psychological recovery of children. |
| 2. Psychological recovery of children after disaster. | | | | |
| 3. Children are motivated to learn again. | | | | |
| 4. The fulfillment of children's education during the reconstruction period | | | | |
| **WEAKNESS** | **WO Strategy** | **WT Strategy** | | |
| 1. Teacher quantity and capacity | | | | |

Based on the analysis table above. SO (Strengths, Opportunity), ST (Strengths, Threats), WO (Weakness, Opportunity), WT (Weakness, Threat) which find external and internal factors indicate that SO strategy is the formation of cooperation between government, NGOs and the community in improving quality post disaster education. The ST Strategy is the provision of educational programs from local stakeholders. WO's strategy is to recruit teachers after the disaster. The WT strategy is the quality of the instructor towards the psychological recovery of children.
4.4. Analisis AHP

| Metode | Belajar sambil bermain | Belajar sambil menyanyi | Belajar sambil berbodong | Belajar sambil mendraw | Belajar sambil mendengarkan lagu | Belajar sambil membaca | Belajar sambil menulis | Belajar sambil melukis | Belajar sambil berdrama | Nilai eigen | Jumlah | Rata |
|--------|-----------------------|------------------------|-------------------------|-----------------------|---------------------------------|-------------------------|-----------------------|-----------------------|------------------------|----------------|--------|------|
| Belajar sambil bermain | 110 | 0,00892 | 0,00892 | 0,00892 | 0,00892 | 0,00892 | 0,00892 | 0,00892 | 0,00892 | 0,00892 | 0,495 | 359 | 0,227 |
| Belajar sambil menyanyi | 0,00909 | 0,00925 | 0,00925 | 0,00925 | 0,00925 | 0,00925 | 0,00925 | 0,00925 | 0,00925 | 0,00925 | 0,504 | 366 | 0,276 |
| Belajar sambil berbodong | 0,00970 | 0,00970 | 0,00970 | 0,00970 | 0,00970 | 0,00970 | 0,00970 | 0,00970 | 0,00970 | 0,00970 | 0,504 | 366 | 0,276 |
| Belajar sambil mendraw | 0,00934 | 0,00934 | 0,00934 | 0,00934 | 0,00934 | 0,00934 | 0,00934 | 0,00934 | 0,00934 | 0,00934 | 0,504 | 366 | 0,276 |
| Belajar sambil mendengarkan lagu | 0,0125 | 0,0125 | 0,0125 | 0,0125 | 0,0125 | 0,0125 | 0,0125 | 0,0125 | 0,0125 | 0,0125 | 0,504 | 366 | 0,276 |
| Belajar sambil mendengarkan lagu | 0,00877 | 0,00877 | 0,00877 | 0,00877 | 0,00877 | 0,00877 | 0,00877 | 0,00877 | 0,00877 | 0,00877 | 0,504 | 366 | 0,276 |
| Belajar sambil mendengarkan lagu | 0,01176 | 0,01176 | 0,01176 | 0,01176 | 0,01176 | 0,01176 | 0,01176 | 0,01176 | 0,01176 | 0,01176 | 0,504 | 366 | 0,276 |
| Belajar sambil mendengarkan lagu | 182 | 729 | 3192 | 2047 | 9734 | 819 | 5785 | 125 | 1 | |

Based on the results of AHP analysis shows that learning while playing is the method most interested by respondents, then learning while singing and learning about religion.

4.5. EPIC (Education Priority Compact) Strategy

The EPIC (Education Priority Compact) Strategy is a new strategy that brings together communities, governments and NGOs to form a synergy in meeting post-disaster education. The government as
stakeholders functions as the party who is fully responsible for the implementation of education. NGOs as subjects directly descend in the intervention of the community in post-disaster fulfillment. Society as a subject and object in the fulfillment of post-disaster education. These three elements are reciprocal in fulfilling post-disaster education.

5. Conclusion
From the results of research conducted in several Temporary Resettlement (HUNTARA) Related to Post-Disaster Education, the authors conclude that Firstly, From the results of the FGDs, it was found that there were still many children who dropped out of school, did not go to school because there were no facilities or because there was a system that made it difficult for them to go to school. It is hoped that this can be overcome immediately so that there are no more children who do not receive education because of the disaster. Secondly, Fun Learning Method is a good method to be applied in the fulfillment of post-disaster education in Palu City. The results of the Questionnaire that was submitted to community respondents living in HUNTARA showed that 93% of the community's opinion chose the Fun Learning method in learning that was carried out post-disaster. Lastly, EPIC strategy can be a solution in handling post-disaster education. A strategy that involves the participation of the Government, NGOs, and the community to work together in meeting the educational needs of the affected location.

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