

## Employing Food Bank in Civic Education as a Pedagogical Tool in Project-based Learning

Yayuk Mardiaty<sup>1</sup> & Katarina Leba<sup>2</sup>

### Abstract

The purpose of the study is to employ food bank in civic education as a pedagogical tool in project-based learning. Two classes of undergraduate students enrolled in required general civic education course in the odd semester of 2017 in the University of Jember participated in food bank project to help tackle impoverished community of Garahan village, Jember, East Java. The study employed qualitative research method. To implement food bank in civic education this research assessed and engaged students into seven essential components of Larmer and Mergendoller's meaningful projects; A Need to Know, A Driving Question, Student Voice and Choice, 21st Century Skills, Inquiry and Innovation, Feedback and Product, and A Publicly Presented Product. After investigating poor households, students planned and organized fundraising strategies in order to buy a large quantities of non-perishable food so that it looks like a bank to be distributed to those who were in need. Classroom components of the project included assigned readings on poverty, small groups discussion, and writing reflective journals. Students culminated the project publicly in a showcase. The result indicated that food bank project is effective civic pedagogical skill.

**Key words:** *Civic Education, Food Bank, Pedagogy, Poverty, Project Based Learning.*

### Introduction

The current available national and regional data on poverty in Indonesia show that in February 2017 more than 27.7 million people, or 10.7 percent of Indonesia's population, earned an income at Rp344,809 (\$24.8) a month (Badan Pusat Statistik, 2017). Poverty in East Java alone, especially in Jember district constitutes 11.28 percent of Jember's population (Badan Pusat-Statistik, 2015). Interventions to eradicate poverty supported by government, non-governmental, and religious organizations have used such such programmes as rice for the poor (Ind.*raskin*) and conditional cash transfers (Ind. *bantuan langsung tunai*) (Kozak, Lombe, & Miller, 2012). However, studies found that such interventions are only one step in reaching Millenium Development Goal (MDG) #1.

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<sup>1</sup>Yayuk Mardiaty, University of Jember, ymardiaty@gmail.com

<sup>2</sup>Katarina Leba, University of Jember, katrinwatunglawar@gmail.com

Even though Indonesian government, non-governmental, and religious organizations' efforts to address poverty include cash transfers there is almost no efforts to employ robust educational strategies to address hunger. This preliminary study found that civic education lecturers in the University of Jember employed traditional teaching methods and strategies characterized by lecturing aided by PowerPoint presentations. The conventional teaching method is problematic since it only emphasizes transmission of knowledge. Even though the lecturers used group discussion, there are no rules regarding who does what. Consequently, the same students dominate discussion during question and answer sessions. As Ramos (2005) notes, implementing such a conventional method is like Paulo Freire's concept of *banking education*, where the role of the teacher is depositor while students are receivers. These studies implement food bank activities in civic education which engages students through project-based learning.

## Literature Review

### Food Bank

Studies that use food bank as one step in eradicating poverty are both intervention and evaluative-based. The intervention-based studies conducted by Roncarolo, Adam, Bisset, & Potvin (2015) in Montréal, Québec addressed the urgent need for food. However, the finding found that participants in traditional food bank interventions have less access to resources (food bank), do not provide sufficient food variety, and raise moral concerns associated with social and political issues, all of which do not satisfy an individual's hunger. The problems pivot around how to distribute food and what kinds of food meet a nutritious diet. Case studies conducted by Kozak, Lombe, & Miller (2012) in four countries: (Columbia, Indonesia, Jamaica, and Uganda) have found that the higher average of poverty in those countries is caused by the disengagement of people from the formal labor market. It is also the case in Indonesia that due to limited employment opportunity in the formal sector, the share of working poor has stagnated at 8.2% since 2002 (Stalker, 2008). To respond to the problem of poverty, the Indonesian government has implemented cash transfers that enable poor households to pay for health and education expenses (Kozak, Lombe, & Miller, 2012). In addition to cash transfers, the Indonesian government policy found in the Food Nutrition Action Plan 2006-2010 aims to eradicate hunger (Minister of National Development Planning, 2010). Recent studies argue that although these first steps in eradicating poverty and hunger were strong, the creation of the action programs is only one step in reaching MDG #1 (Kozak, Lombe, & Miller,

2012). In addition, non-profit organizations, such as food bank of Indonesia, contributes to reduce hunger, but only in the areas of West Java (Kompas, 2015).

In an educational context, studies which evaluated a service-learning project conducted at a public university in the southern United States of America have *suggested* that students' volunteerism and fundraising were the most important components to help students understand food insecurity (Tallant, 2011). This study implements food banks in civic education as a pedagogical tool in project-based learning. The projects include complex tasks based on challenging questions or problems that involve students in designing, problem solving, decision making, and other investigative activities (Larmer and Mergendoller, 2010). Further, some scholars and educators believe that using project-based learning methods, which constructs new knowledge by challenging students with driving questions to guide their investigation (Blumenfeld et al. 1991; Krajcik & Soloway, 1997). Unlike conventional methods which focus on lectures and text-book based instruction, project-based instruction uses constructivism as its theoretical foundation where students construct knowledge through interactions with their social environment (Perkins 1991; Piaget 1969; Vygotsky, 1978). So, by conducting investigations, conversations (interviews), and activities, students are learning by constructing new knowledge. Therefore, instead of using a lesson plan that directs students to specific learning outcomes, the employment of project-based learning allows students to conduct in-depth investigations into a topic worth learning more about (Harris & Katz, 2001). Studies conducted by Jones, Ramussen, & Moffitt (1997) found that by engaging students in authentic activities provides students the opportunity to work autonomously over extended periods of time and culminate in realistic products or presentations. The activities culminate in students' working in groups whose outcomes are presented publicly in a showcase as a realistic product.

### **Project-Based Learning**

Studies that support effectiveness and implementation of project-based learning employed as an instructional method are primarily in science and interdisciplinary studies, including civic education and social studies (Barron & Darling-Hammond, 2008; Krajcik & Shin 2014; Larmer & Mergendoller, 2010; Parker, et al. 2013; Thomas, 2000). Historically, the term project learning derives from the work of John Dewey and William Heard Kilpatrick's - 'project method' - dating back to 1918 (Larmer, 2014; Pellegrino & Hilton, 2012; Peterson, 2012). Ravitch (2000) asserts

that the key to the - 'project method'-lies in activities undertaken by students that really interest them. Ravitch's assertion emphasizes that project-based learning (PBL) is theoretically constructivism. Constructivists believe that learning is an active process, where learners utilize their prior knowledge of the topic to construct new ideas (French, 2016). PBL is rooted in the constructivist ideas of Piaget (1990), where humans were born with the schemas to which individuals add through the process of assimilation or accommodation. By employing prior experience and the environment around them, PBL engages learners' intellectual development through observation and investigation to expand their preexisting schemas concerning the topic being studied (French, 2016). The social nature of PBL also accords with social constructivist theories of Vigotsky where social interaction is critical in student learning (McLoud, 2014). According to Vigotsky (1978), students absorb the information they are receiving through interactions with others and internalize the conversations to create knowledge about a particular topic.

Empirical studies on the effectiveness of project-based learning were mostly conducted in science education (Alacapinar, 2008; Krajcik, Resier, Shuterland, & Fortus, 2012). Meanwhile, qualitative studies on the implementation of project-based learning were conducted in two science classrooms. The former was called project-based inquiry science, or PBIS (Kolodner, Krajcik, Edelson, Reiser & Starr, 2009-2013) The latter was called Investigating and Questioning our World through Science and Technology, or IQWST (Krajcik, Resier, Sutherland, & Fortus, 2012). Further, study on the implementation of PBL was conducted in social studies curriculum with Knowledge in Action, or KIA (Boss et al. 2011; Parker et al. 2011). French (2016) conducted studies on integrating social studies and literacy through project-based learning. According to Barrows (French, 2016) the characteristics of PBL includes the following. First, ill-structured problems are presented as unresolved so that students will generate not only multiple thoughts about the cause of the problem, but multiple thoughts on how to solve them. Second, a student-centered approach is one in which students determine what they need to learn. It is up to the learners to derive the key issues of the problems they face, define their knowledge gaps, and pursue and acquire the missing knowledge. Third, teachers act as facilitators and tutors, asking students the kinds of meta-cognitive questions they want to ask themselves. In subsequent sessions, guidance is reduced. Fourth, an authenticity forms the basis of problem selection, embodied by an alignment with professional or real world practice. This study implements food bank in civic

education as a pedagogical tool by adopting Larmer & Mergendoller's elements of PBL. The aim of the research is to enhance students' awareness of social responsibility by collecting and distributing a large quantity of groceries to needy people. The research questions are as follows:

1. What is the operational definition of project-based learning?
2. What are the elements of project-based learning?
3. Why uses food bank project to teach civic education?
4. How does food bank project enable students to enhance awareness of social responsibility?

### **Methodology**

This study employs research and development by Gall and Borg (2003). According to Gall and Borg (2003), Sugiyono (2014), and Rachman (2015) the research and development approach is the approach to conduct research, development, and the examination of a product. In addition, research and development aims to examine the effectiveness and practice in order that the product can function and be utilized by the community. Therefore, the research and development approach is longitudinal or conducted over a span of years. In educational contexts, the products of research and development include: such results as policy, system, working method, curriculum, reference book, media, learning model, educational aid, prototype, simulator, training/science kit, instrument assessment, and the likes (Gall and Borg, 2003; Sugiyono, 2014; Rachman, 2015).

For this study a learning model in civic education course titled 'Developing Project-Based Learning through *Food Bank* was employed. This model included ten steps (Gall & Borg, 2003): 1) research and information collecting, 2) planning, 3) develop preliminary form of product, 4). preliminary field testing, 5) main product revision, 6) main field testing, 7) operational product revision, 8) operational field testing, 9) final product revision, and 10) dissemination and implementation. Gall and Borg (2003) categorized the ten steps into three main steps: 1) introduction to examine the existing model used, 2) development process to include designing the model, arrangement of model components, and limited try-outs 3) validation step to actualize the final model to be implemented.

The study was first conducted in University of Jember in 2017 as limited try-outs to implement project-based learning through *food bank* in a civic education course. Further, the results of the study would be presented in an international conference. The second phase (second

year) 2018 of the study would be implemented to the Teacher's Training College PGRI Jember. The study involved undergraduate students who enrolled in civic education as one of the required general courses in University of Jember to investigate issues of poverty in Garahan village, Jember. The students chose Garahan village as their research since it is a village in Jember where citizens live below national poverty line (The Statistics Agency, 2014).

### **Operational Definition of Project Based Learning through Food Bank and its Elements in Civic Education**

#### *Operational definition of project-based learning through food bank*

Project-based learning through food bank is designed to address social problems of poverty by involving students to find out one of the solutions by collecting donations of large quantities of groceries so that it looks like a bank and distributing to poor households.

#### *Designing syntagmatic of project-based learning through food bank*

- Prior to conducting the project, the class was divided into groups of 5-6 heterogenously in terms of gender, ability, and ethnic groups.
- Providing responsibility to each member of each group, whether as a chair, a recorder, or as members to respond the participants' questions and observations.
- Examining journal articles of social problems to decide complicated problems on poverty in a village as a means of resource investigation in the field.
  - 1) During the project students arrange project plan through observation, interview, and documentation (A Need to Know)
  - 2) Creating A *Driving Question* "How to eradicate hunger?"
  - 3) Makinga project proposal which includes activity list in weekly bases (weekly I, weekly II, weekly III et cetera) to promote fundraising strategy (Student Voice and Choice).
  - 4) Monitoring collaborative activities of the groups (Who does what?) in collecting non-perishable food or groceries from individuals and companies through the chair of each group (21st Century Skills).
  - 5) Examining project result through editing both writing and documentation of pictures or video that was used in oral presentation in a showcase (Feedback and Product).

- 6) Examining students' finding about the patterns of poverty, both structural and cultural (Inquiry and Innovation).
  - 7) Presenting the learning outcomes through *showcase* outside class, including the delivery of groceries to 2-3 poor households symbolically.
- After the project, students distribute groceries to poor households from the result of students' investigation in the field by each group.
  - Submitting a portfolio (*hard copy & soft copy*) of food bank project activities in groups.
  - Submitting a one-page reflective journal on a series of food bank activities individually.

*The strengths of a series activities in implementing project-based learning through food bank in civic education.*

1. Enhancing students' working cooperatively and collaboratively within and outside groups
2. Enhancing students' sharing knowledge and skills through discussion in solving social problems of poverty.
3. Creating comrades among friends with different ethnic groups and cultures.
4. Enhancing students' higher order thinking skills.
5. Encouraging students as critical thinkers and problem solvers
6. Improving students respecting individual accountability within groups.
7. Strengthening a sense of solidarity and integrity in solving the problems of poverty.
8. Strengthening a sense of sympathy towards people in need.
9. Strengthening a sense of empathy towards people in need, which is the highest moral responsibility.
10. Advancing students' democratic thinking and action.

*The weaknesses of a series activities in implementing project-based learning through food bank in civic education.*

1. Time consuming since it requires long time planning to coordinate class meeting among chairs of each group for setting up weekday schedule available to them.
2. Challenging to collect variety of food or groceries using conventional door to door strategy.
3. Challenging to monitor who does what of the members of each group.

*Strategies to minimize the weaknesses in implementing project-based learning through food bank in civic education*

1. Class meeting coordination is held on the weekends; Saturdays or Sundays, based on the agreed weekly bases.
2. Creating non-traditional fundraising by selling product to the community and to the city square, conducting students' concert, or conducting a service of car wash.
3. Creating rules to the members of each group who participate in the project to sign both before and after the activities.

### **Discussion**

The purpose of civic education is to prepare students to be effective citizens. One of the ways to actualize being effective citizens is that students should act as part of the solution. Developing project-based learning through food bank in civic education helps students engage actively to eradicate hunger in Garahan village, Jember sub-district. Using Larmer and Mergendoller's seven essential elements of meaningful projects (2010) the development of a project-based learning model to teaching civic education proves to be effective for a number of reasons: It includes students' observation and interview regarding who are categorized as poor (A Need to Know). After discovering the issues from first-hand observation and interview, students were encouraged to raise awareness of food insecurity by creating a driving question: How to eradicate hunger? (a driving question). Additional activities include students' writing project proposals in groups to use in promoting their project (student voice and choice). In order to respond to their driving question students need to move further to action by collaborating with other classes to distribute the research project proposal to individuals and companies as fundraising strategy (21st century skills). In writing journal entries, students had the opportunity to reflect on their thinking and problem solving processes, which they need to explain in their oral presentation in a showcase (feedback and product). After the discussion of their finding about the patterns of poverty, whether it is structural or cultural, both of them probe students' inquiry (Inquiry and Innovation). A series of students' activities on the project is finally well documented and presented in a public showcase.

Even though Indonesia has made moderate progress to eradicate hunger, problems of distributing nutritious food to targeted poor households has enjoyed a little success. This happens due to limited access to resources concerning transportation. Therefore, it requires intervention for both need and practicality to engage students' participation through formal education. As most students wrote in their reflective journal entries, they love and enjoy doing these social and humanitarian activities in practice, rather than just learning from the theory they have obtained from lectures. They also have emotional attachment to the people they investigated that they never had before. Many students shared their experience that most members of households they investigated are already old and are not able to walk and work. In addition, Garahan village community, Jember mostly lives in below the poverty line (BPL), and have limited access to formal jobs. From the group report, it also shows students' pride to be part of the solution of eradicating hunger to this community temporarily. Even though this project proves to be effective pedagogical skills and meet the analysis in terms of need and practically, the implication of practical tool is suggested for further research by conducting variety of well-planned fundraising strategies. Additional implication of research would be possibility investigating more than one village. This proposed project-based learning model is expected to help government policy for transparency in food distribution for the purpose of eradicating hunger through formal education in higher education nationwide.

### **Conclusion**

This study found that project-based learning implemented through food bank in higher education further developed students' awareness of the eradication of poverty among those who most need the attention of the Indonesian community. These are the people who constitute approximately 40% of the entire population and remain vulnerable of falling into poverty (World Bank, 2017).

Implementing civic education requires innovative teaching and learning strategies. The food bank project and practical help in eradicating poverty enabled significant progress toward both goals. The work has not only furthered students' goals of the University of Jember to be aware of food insecurity, it also assisted Indonesian government policy under the auspices of higher education to introduce such welfare programs through a food bank project which alleviates poverty and hunger as alternative solution.

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