

THE ROLE OF REFLECTION IN MEANINGFUL
SERVICE-LEARNING

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Abstract

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Under the Supervision of Karen Stinson and Ed.D

The purpose of this study is to determine if service-learning is meaningful in an international school in Africa and to quantify the importance of reflection for meaningful service-learning.

High school students were placed into a control group and an experimental group balanced gender and grade. Students in the experimental group were asked to write a reflection on a service-learning opportunity. All students responded to six statements in an interview. The results indicated that service-learning is meaningful in an international school in Africa. The results also indicated that a written reflection does not enhance the meaningfulness.

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CHAPTER 1

INTRODUCTION

Service-learning has become an important element in some secondary schools around the world. Many schools require service-learning while others recommend it. Throughout research, authors repeatedly claim that reflection is important for true service-learning. One question arises: How important is it?

Answering that question led to action research regarding service-learning opportunities in Burkina Faso, the 3rd poorest country in the world. Researchers have shown that service-learning works in the United States (Ash & Clayton, 2004; Billig, 2000; Hart, Donnelly, Youniss, Atkins 2007; Roehlkepartain, 2007; Seitsinger, 2005) but the researcher wanted to know if service-learning would work in Africa, especially in a very high poverty area. Service-learning opportunities abound in and around Ouagadougou, the largest city and capitol of Burkina Faso. This research explores the role of service-learning in the overall development of students in an international school in West Africa and how reflection contributes to the meaningfulness of the experiences of the students.

Statement of the Problem

The problem to be addressed is, “How important is reflection for meaningful high school service learning opportunities in an international school in Africa?”

Purpose of the Study

The purpose of this study is to look at the importance of reflection in meaningful service-learning for high school students. Some research indicates that reflection is an important component in service learning for high school students (Roehlkepartain, 2007). The purpose of this study is to investigate the benefits of reflection in high school service-learning opportunities in Africa.

Hypothesis

The hypothesis is that service-learning is effective in an international school in Africa and that students who have been asked to reflect on their experiences will see their service-learning as more meaningful than the students who have not reflected. Knowing that reflection is used in other aspects to increase learning outcomes, it seems as though the same conclusion would hold for service-learning.

Definition of Terms

Service-learning is defined as experiences in education through a collaborative approach to teaching and learning designed to promote academic enrichment, personal growth, and civic commitment (Ash & Clayton, 2004).

Reflection, in service-learning, assists students in expressing what they have learned, how it has effected them as people, and strengthens the connection between the two (Ash & Clayton, 2004).

Delimitations of Research

The delimitations of this research are that the study was performed at one school in West Africa. The purpose is to gauge meaningfulness in high school service-learning opportunities; however it was limited to the experiences of students in one high school. The study was also restricted to short term benefits of service-learning and the impact of written reflection.

Method of Approach

After completing service learning opportunities in a one-month-long research window, students in the experimental group had one week to write a reflection on their service learning experience. A week after those students had a chance to reflect on the service learning, all students were interviewed. Students were randomly assigned to the experimental group within the confines of grade and gender; within each grade the random selection was from the group of males and separately from the group of females. The responses in the interview were given

using a Likert Scale.

CHAPTER 2

REVIEW OF RELATED LITERATURE

Impact on Students

Academic Benefit for Students

Teaching and learning should be done with outcomes for students as the top priority. It is widely known that relevance leads to increased student learning and motivation. Relevancy comes from authentic learning opportunities. Shelley Billig (2000) explains that “when service-learning meets an authentic community need and includes meaningful planning, service, reflection, and celebration, it typically succeeds in engaging students in the learning task” (p. 662). That is a powerful statement in today’s challenges in education. She goes on to explain that many studies connect the engagement of the students to the point of service-learning as an activity is perceived by the students to have many layers including being relevant and meaningful (Billig, 2000).

Personal Development for Students

The positive impact of service-learning on students goes far beyond the academic benefits. It is equally important to help students develop skills and attributes that go beyond class content. Students benefit in personal and social development as well. Students’ self-confidence, self-efficacy, resilience, and cultural sensitivity all improve through participation in service-learning (Billig, 2002). Development of these attributes will help students be successful throughout their lives.

Social Development

The National Service-Learning Clearinghouse: Fact Sheet confirms the increase in self-efficacy and higher academic achievement through service-learning. Other benefits are

attributed to service-learning such as the students' gaining access to a range of supports and enhanced problem-solving skills (Roehlkepartain, 2007). Service-learning, again, provides another avenue for students to develop important skills that they will use in school and in the workforce.

Positive Image from Others

The reach of the impact of service-learning does not stop with the students; entire communities can be impacted by meaningful service-learning. The role of schools in communities is not as well defined as in the past. Youth are portrayed by the media based on the negative actions of a few youth in America. Shelley Billig (2000) makes two valuable assertions on how communities and community members are impacted through service-learning opportunities. She first explains that through service-learning the community perceives the schools and youth in a more positive way. Even more importantly, youth who work as partners with community members are seen as valued resources and positive contributors to that community.

Students receive academic, personal, and social benefits from service-learning. In addition, service learning provides the opportunity for students to receive a more positive image and reaction from others in the community. While the research on the benefits for students are clear, the nature of the service is still in question.

Mandatory or Volunteer Service

Whether service-learning should be a mandatory requirement of students or an optional, volunteer activity is a debate in the education community. In a study comparing student civic interest between students of whom service-learning was mandatory and of whom service-learning was voluntary, the same gains in civic interest was found between the two

groups (Metz and Youniss, 2003).

The frequency of which service-learning is performed is a better indicator of long term benefit than whether the service is required. The higher the frequency of service-learning in high school, the more likely those students were involved in volunteering later in life (Hart, Donnelly, Youniss, Atkins, 2007).

Civic Responsibility

Civic responsibility comes in many forms. Voting and political involvement is one category; each person's role in the global society is another. Built into civic responsibility is the idea that learning does not stop when one leaves the classroom. A holistic approach to education bridges the gap between in-school and out-of-school learning in meaningful ways (Eshach, 2007).

One could claim that requiring service could lessen a person's interest in being engaged in helping society. Hart et al. found a surprising conclusion after controlling for important variables, service-learning opportunities in high school lead to greater participation in voting and more civic engagement (2007). In an increasingly global society, service-learning appears to be an important piece for developing global citizens.

The acquisition of civic skills during the service-learning activity leads to students' development of confidence in their role in society. Opportunities in which students are working side-by-side with community members to reach a common goal help students understand their potential for being capable volunteers (Hart, et al., 2007). Recognizing how one can help others takes a student's inward focus and turns it outwards.

Social change is another avenue of civic responsibility. Knowledgeable teachers are able to bridge the gap between a social change view and a standards-based approach to education

in a meaningful way through service-learning (Seitsinger, 2005). Service-learning enhances standards-based education and brings together the academic and civic responsibilities of education.

Reflection

The benefits of service-learning do not come automatically. Students cannot simply go through the motions of a service-learning experience and be expected to benefit in so many ways. The National Service-Learning Clearinghouse: Fact Sheet says that students need to have active and meaningful roles throughout the experience. The Fact Sheet goes on to articulate the vital need for active, intentional, and structured reflection (Roehlkepartain, 2007).

In a study on guided reflection, it was found that reflection especially increased the outcome of learning goals, problem-solving, critical thinking, and open-mindedness in students. Reflection was found to be important in challenging students to think in new ways and improve communication of alternative perspectives (Ash & Clayton, 2004).

Summary

The research confirms that service-learning is important for student learning. It also clearly names the benefits of service-learning for students as academic, personal and social development, and positive image from others; and communities in the form of voting, volunteering and political involvement. The research claims that reflection is important and suggests what pieces are needed. The question still remains: How important is reflection?

CHAPTER 3

SURVEY METHODOLOGY

Procedures

Permission was granted by the principal and school director to study the role of reflection for meaningful service-learning with the high school students in an international school in West Africa. Students and parents were asked for verbal agreement to be a part of the research.

Students were sorted by grade and by gender. Half of the girls in the 9th grade were chosen at random to obtain the experimental group; the remaining became the control group. The process continued for the boys, and the other grades.

After a school sponsored service-learning opportunity, the researcher asked the students to volunteer to participate in another service-learning project. Once the students volunteered, they were told whether they were in the control or the experimental group of the research. Students were given the choice of writing their reflection about a school sponsored medical field trip that was a service-learning project or another service-learning opportunity they had completed during the year. If a student was in the control group, an interview took place. If a student was in the experimental group, each student was asked to complete a reflection paper within a week and then all students were interviewed.

The reflection paper consisted of the following prompts

Short description of your service:

What were you hoping to accomplish in this activity? Were your expectations met?

What difficulties did you encounter? How did you overcome them?

What did you learn about yourself and about others?

Did you find this experience worthwhile? Did you feel useful?

Is there anything about this activity that you would change to improve it?

Students were asked to write a few sentences in response to each prompt and return within a week.

When students from both groups had their interview they were asked to respond to six statements on a scale from zero to ten. To help the student get an idea of what the scale represented they were told how the scale corresponded to levels of agreement. A response of zero indicated that the student would “disagree” with the statement. A response of five meant the student would “somewhat agree”. A ten indicated that the student would “strongly agree” with the statement. The students were asked to respond to the following statements

I learned a lot from this experience.
Others benefitted from my experience.
I was challenged.
My compassion for people has increased.
I felt I made a difference for people.
My experience was meaningful.

The responses were recorded.

The goal was to be able to compare student responses from similar service-learning experiences, namely the medical field trip. Due to circumstances beyond the researcher’s control, not all students were able to participate in the medical service-learning project but all students participated in some service-learning project throughout the school year. Students who did not participate in the medical service-learning project were asked to reflect and complete the interview about another service-learning opportunity they had experienced.

Participants

The participants are all students at the International School of Ouagadougou (ISO) in Ouagadougou, Burkina Faso. Burkina Faso is said to be the third poorest country in the world. Ouagadougou is the largest city in Burkina Faso and is the capitol.

ISO is the only English speaking school in Ouagadougou. There are 240 students in pre-kindergarten through grade twelve. The participants in this study were in grades nine through twelve which include ages fourteen to eighteen. ISO is a very multicultural school; the

high school student body is 59% African, 19% North American, 11% European, and 11% other. The high school is comprised of 61% female students and 39% male students.

As mentioned above students were sorted by grade and gender before the random selection of groups was performed. This assured that the control and experimental groups would be balanced by ages and gender.

CHAPTER 4

ANALYSIS OF THE SURVEY DATA

Overall Results

Two questions arose throughout this project. Is service-learning meaningful for students at an international school in Africa? Does reflection increase this meaningfulness? The answer to whether service-learning is meaningful for these students is a resounding “yes.”

In both groups, the average answer to each statement fell between “agree” and “strongly agree.” The overall average answer to the statement “my experience was meaningful” was 8.5. These students feel strongly that their experiences with service-learning have been meaningful.

Whether or not reflection increases this meaningfulness is not as easy to decipher from the data; below is a table comparing the average responses for the control and experimental groups for each statement in the interview.

Question	1	2	3	4	5	6
Control	8	8.7	6.4	8.8	8.2	9.3
Experimental	7.5	8	6.3	7.6	8	7.7

On average, every response by the experimental (reflection) group was lower than the control group. Reflection does not look to have increased the meaningfulness of the service-learning experience. However, this comparison does not give the whole picture. There are a number of other ways to look at the data. How do the medians compare?

Question	1	2	3	4	5	6
Control	8	9.5	6.5	9	8.5	10
Experimental	8	8.5	6.5	8	8	8.5

The median response between the two groups is much more balanced than the mean responses.

The median responses for two of the statements are now equal. Three responses are now within one point between the control and experimental groups. In all but one instance the median response for each question was higher than the mean response in both groups. This shows that the data is negatively skewed. This means that one or two low responses are affecting the overall picture of what the mean is describing therefore the median is the better way to describe the data. The median gives a more accurate snapshot of the data.

Results by Service-Learning Experience

Another comparison that can be made is within service-learning experiences. When the mean and median of the results are compared looking at only the medical field trip control group responses to the medical field trip reflection group responses the results change a little.

Question	1	2	3	4	5	6
Control (mean)	7.7	8.4	6.8	8.2	8.3	8.6
Experimental (mean)	7.4	8	4.9	8.1	7.6	7.7
Control (median)	7.5	8.5	7	9	8.5	9
Experimental (median)	8	8	5	8	8	10

Looking at the mean values the results change, but the overall picture remains. The average responses for each statement continue to be higher for the control group than the experimental group. The control group was negatively skewed in five out of the six responses. The experimental group was negatively skewed in four out of six. The most telling response is for the statement “My experience was meaningful.” The difference between the control mean and median is only .4 but the difference in the experimental group is 2.3, this shows that the data for the meaningfulness responses in experimental group is extremely skewed.

If the median response to the statement “My experience was meaningful” is examined it

is clear that students who reflected on their experiences “strongly agree” that their experience was meaningful. It may be interesting to note that the students who participated in the medical field trips did so as a school sponsored field trip. There was little choice in whether they participated or not.

One after school activity option that is offered at the International School of Ouagadougou is a weekly visit to a nearby orphanage. These trips are completely voluntary, though there is a graduation requirement for community service hours. If the results are compared for the school sponsored orphanage visits, here are the results:

Question	1	2	3	4	5	6
Control (mean)	7.5	8.2	3.1	9	7.6	9.4
Experimental (mean)	8.5	6	4	8.5	7.5	8.5
Control (median)	7	9	4.5	10	7	10
Experimental (median)	8.5	6	4	8.5	7.5	8.5

Here the results show a different picture. The students who reflected agreed more to the statements “I learned a lot from this experience” and “I was challenged.” Unfortunately the sample space for the experimental group was only two compared to the five responses in the control group. Nonetheless students agree that their time at the orphanage was meaningful, confirming that service-learning is beneficial for students in Africa.

The other service-learning opportunities that students experienced were a variety of experiences from donating bicycles to village girls to HIV testing to teaching English to helping refugees. When those measures of central tendency are compared here are the results.

Question	1	2	3	4	5	6
Control (mean)	8.6	9.2	7.7	9.2	8.3	10

Experimental (mean)	7.3	8.3	7.6	7.1	8.3	7.5
Control (median)	9	10	8	10	10	10
Experimental (median)	8	9	8	8	8	8

These experiences are a combination of voluntary and school sponsored service-learning. The control group's responses are consistently higher, however all responses confirm once again that service-learning is meaningful. One student in the control group when asked to respond on a scale from 0 to 10 to the statement "my experience was meaningful" responded "10, I couldn't agree more."

CHAPTER 5

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

Based on these conclusions and findings, it is recommended that students participate in and reflect on service-learning. How the reflection is completed may be up for discussion. As defined above, reflection “assists students in expressing what they have learned, how it has effected them as people, and strengthens the connection between the two.” Can reflection be done without writing a personal reflection? Did students reflect as they responded to the statements in the interview?

The goal of reflection is to assist students as they think about their experiences. This is important. It is through this reflection that educators can see if students have thought about these things; but this idea goes deeper. One must look at the goal of the service-learning itself. If the enduring understandings of service-learning are developing “experiences in education through a collaborative approach to teaching and learning designed to promote academic enrichment, personal growth, and civic commitment”, then the reflection must enhance these ideas without being artificial. Is it more important that the educator can assess the reflection or that the reflection happens?

If a reflective product, such as a written response, is proof that service-learning’s enduring understandings have been accomplished, then this project proves that reflection is not as important as research has lead us to believe. However, if a reflective process is the proof, then there are other means to this end. If educators want to foster life-long reflectors, then requiring a reflection paper will not help them achieve that goal. Students learn to write what the teacher wants to hear. The reflection ends up being for the benefit of the teacher instead of the benefit for the student.

If the evidence of enduring understanding is that students have taken the skills developed through service-learning and use those skills elsewhere for the good of those around them, then a reflection is just one indicator of success. By simply responding to the interview students have reflected. A casual conversation can be proof enough that a student has internalized the service-learning experience and developed empathy for others. For some students, writing a reflection will be the most effective, but others will reflect without needing to complete a personal written reflection.

Meaningful service-learning can be measured through reflection, but the passion and engagement through which students embrace service-learning is an important part of the experience as well. Writing a reflection because a teacher requires it is not the indicator of success in service-learning.

REFERENCES

- Ash, S. L., & Clayton, P. H. (2004). The articulated learning: An approach to guided reflection and assessment. *Innovative Higher Education*, 29(2), 137-154.
- Billig, S. H. (2000). Research on K-12 school-based service-learning. *Phi Delta Kappan*, 81(9), 658-664.
- Billig, S. H. (2002). Support for K-12 service-learning practice: A brief review of the research. *Educational Horizons*, 80, 184-189.
- Hart, D., Donnelly, T. M., Youniss, J., & Atkins, R. (2007). High school community service as a predictor of adult voting and volunteering. *American Educational Research Journal*, 44(1), 197-219.
- Eshach, H. (2007). Bridging in-school and out-of-school learning: Formal, non-formal, and informal education. *Journal of Science Education and Technology*, 16(2), 171-190.
- Metz, E., & Youniss, J. (2003). A demonstration that school-based required service does not deter but heightens volunteerism. *PS: Political Science and Politics*, 36, 281-286.
- Roehlkepartian, Eugene C. (2007) Benefits of Community-Based Service-Learning. *Search Institute*, Retrieved from www.nationalserviceresources.gov.
- Scales, P. C., Roehlkepartian, E. C., Neal, M., Kielsmeier, J. C., & Benson, P. L. (2006). Reducing academic achievement gaps: The role of community service and service-learning. *Journal of Experiential Education*, 29(1), 38-60.
- Seitsinger, A. M. (2005). Service-learning and standards-based instruction in middle schools. *The Journal of Educational Research*, 99(1), 19-30.