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Transforming Teaching and Learning at University of Ghana through Community Service-Learning: Listening to the Voices of Students

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Abstract

Universities all over the world are undergoing change to improve teaching, learning and service. These changes have been motivated by call for universities to connect more to communities to address their problems. One of the means of ensuring that universities and communities engage mutually in a partnership where students, faculty and community members create and co-create knowledge to find solution to problems is through community service-learning. Although community service-learning has been incorporated in several universities in the United States and lately in South Africa, it is not common amongst universities in Ghana. This paper examines students' perception towards community service-learning. The study adopted a mixed methods case study approach and collected data using questionnaire and in-depth interview. The findings reveal students' positive perception towards community service-learning which could eventually have an impact on the University of Ghana's decision to implement service-learning programmes.

Keywords: higher education, community service-learning, teaching, learning, community engagement, transformation.

1. Introduction

Universities all over the world are being challenged to connect with communities to develop solutions to many of the social and economic problems of contemporary society (Hiram, 2007). In Africa, where the poor constitute the bulk of the population, universities are being called upon to use their expertise to solve pressing societal problems such as environmental degradation, poverty reduction and education for all. Cloete, Bailey, Pillay, Burting and Maassen (2011:6) quoting MacGregor & Makoni (2010) have stated that, "Universities must be 'citadels not silos', defending communities around them rather than being inward-looking, if they are to actively advance global development goals"; furthermore, they must "orientate their activities more directly towards supporting UN Millennium Development Goals" (MacGregor 2010 cited in Cloete, Bailey, Pillay, Burting and Maassen, 2011:6).

Although African universities have played a key role in national development through human capital development and community service (Lulat, 2003; Sawyerr 2004, Teferra and Altbach 2004, Cloete, Bailey, Pillay, Burting and Maassen, 2011), service missions for several years have not been transformed into systematic programmes where African universities are organically linked to local communities (Manuh, Gariba & Budu, 2006) on the basis of mutuality and reciprocity of relations (Oyewole, 2010 cited in Preece et al. 2012) through the spirit of engagement. In order to transform university-community partnership, Manuh, Gariba & Budu (2006) have reiterated the need for universities in Ghana to bring students and teachers into direct and ongoing engagement with societal needs.

In Ghana, apart from the University of Development Studies, which has a third-trimester system where students of the university spend time with communities (Kaburise, 2006), none of the other public universities has in place what Bringle and Hatcher (1995) have described as an elaborate university-community partnership based on reciprocity and where students participate in an organised service activity that meets identified community needs. Introducing community service-learning at the University of Ghana therefore calls for research among several stakeholders (institutional leaders, faculty, students and communities) whose roles are critical to incorporating community-service learning into curricula at the University of Ghana.

This article focuses on students because they represent a largely untapped source of support for the various forms of community engagement, especially service-learning (Stanton & Erasmus, 2013). Bringle and Hatcher (1996) have observed that when institutions want to institutionalise community service-learning, it is important they know the nature of students' climate and culture, including their attitudes towards voluntary service activities and service learning course development. Investigating students' attitudes, perceptions and knowledge of community service and community

service-learning is of value because uninformed students who participate in community service-learning may develop negative attitudes and participate apathetically (Bender & Jordaan, 2007).

Another important reason why there is the need to incorporate the voices of students when planning to introduce community service-learning programmes is the argument by Eyler (2010 cited in Felten and Clayton, 2011: 77) that, "A good deal is now known about the impact of service-learning on students' outcome...", but "very little is known about the perceptions of students towards community service-learning programmes before they are introduced" (Bender and Jordaan, 2007). The research problem to be investigated is the following: What are the attitudes, knowledge, and perceptions among students of the University of Ghana about community service-learning and its integration into the university's curriculum?

2. Community Engagement at University of Ghana

Universities are basically sites and systems for knowledge production. An important way in which they affect society is through the quality of their teaching and research and the effectiveness of their contributions to policy, production and management, as well as to solving social problems (Sall et al., 2003 cited in Manuh, Budu and Sulley, 2006). Since the 1990s, one of the key challenges of the University is how "to develop world-class human resources and capabilities to meet national development needs and global challenges, through high quality learning, research and knowledge dissemination" (University of Ghana, 2001:2). Unfortunately, there is ample evidence to show that advancing knowledge and producing graduates with the requisite critical thinking capacities, and oral and written communication skills, capable of competing anywhere in the world does not only happen in lecture rooms, but requires a deliberate attempt to create new learning laboratories outside the classroom (University of Ghana, 2007). One of the strategies used as laboratory of knowledge production is through community engagement.

Bender (2008) has noted that since the mid-1980s, discourse and practice regarding "extension service" or "community outreach" in higher education has shifted towards "community engagement." Community engagement is interactions between higher education and community to promote inclusiveness (Driscoll, 2009). This interaction is based on mutually useful exchange of knowledge and resources between higher education institutions and communities within a context of partnership and reciprocity (Driscoll, 2009). Bender (2008) takes a more revolutionary approach when she includes public service and private sectors in the partnership with universities so that the collaboration will lead to changes in curriculum, enhancement of teaching and learning. In addition, this partnership would produce students with the requisite democratic values and civic responsibilities and who understand societal problems and are prepared to help in solving these critical societal issues.

The University of Ghana has been involved in community engagement through its third mission. For several years, engagement with external stakeholders focused more on community outreach programmes such as the Annual New Year School (Jones-Quartey, 1974), organised by the Institute of Continuing and Distance Education, which brought ordinary Ghanaians to the university for a week to discuss topical issues of national concern. Other engagements offered by the university came from academics serving on committees in the public or private sector, their contribution as hall tutors or academic advisors, providing support to small businesses, responding to requests for short courses, clinical duties, and undertaking contract research for outside clients. Indeed, while there is some sort of engagement with communities, the major gap is that service continues to be informal and ad-hoc and one-way lacking any formal structured engagement between the University and the community. Another gap is the absence of any involvement of students in any collaborative programme with communities. Conceptualising community engagement narrowly by the university has called for recognition of the shifts from Preece et al. (2012) towards community service learning.

2.1 Community Service Learning

Service-learning has its origin in "Dewey's philosophy of education for democracy" (Hatcher cited in Mitchell and Humphries, 2007:47) and Boyer's "scholarship of engagement" (Boyer, 1990). Since becoming popular in the 1990s, service-learning continues to be the subject of debate and deliberation (Le Grange, 2007). However, some scholars have put forward some useful definitions, criteria, and conceptualizations (Butin, 2003). A few notable definitions are worth considering here. Jacoby (1999:20) defines service-learning "as a form of experiential education in which students engage in activities that address human and community needs together with structured opportunities intentionally designed to promote student learning and development. Reflection and reciprocity are key concepts of service learning." Bringle and Hatcher (1995: 112) view:

Service-learning as a course-based, credit bearing educational experience in which students (a) participate in an organized service activity that meets identified community needs, and (b) reflect on the service activity in such a way as to gain further understanding of course content, a broader appreciation of the discipline, and an enhanced sense of personal values and civic responsibility.

The two definitions offer important characteristics associated with service-learning. First, the definitions highlight the academic and curricula nature of service-learning (Jacoby 1999; Bringle and Hatcher, 2009). What makes service-learning different from other forms of practice-based and community-based learning (e.g., cooperative education, extension service placements, field education, internships and practicum), is that service-learning is integrated into a course or part of the academic curriculum (Zlotkowski, 1998; Jacoby 1999; Bringle and Hatcher, 2009). In service-learning, academic credit is not given for engaging in community service; rather, academic credit is based on academic learning that is as a result of the community service (Bringle and Hatcher, 2005).

The second feature found in the definitions is reciprocity (Jacoby 1999; Zlotkowski, 1998; Henry and Breyfogle, 2006; Kenworthy'U'Ren, 2008). According to Zlotkowsk (1998:82) "One of the most significant ways in which service-learning differs from many other community-related campus-based initiatives is the insistence that the needs to be met must be defined by the community, not the campus." In other words, reciprocity in service-learning means partnership, but partnership in which all parties in service-learning are learners and co-creators as they both contribute to help determine what is to be learned (Zlotkowski, 1998; Jacoby 1999; Zlotkowski, 1998; Henry and Breyfogle, 2006; Kenworthy'U'Ren, 2008).

A third feature found in all the definitions of service-learning is the place of reflection. Reflection is defined as "the intentional consideration of an experience in light of particular learning objectives" (cited in Bringle and Hatcher, 1999: 12). Indeed, community service per se does not necessarily produce learning. The critical role reflection plays in service-learning is attributed to the works of Dewey (Eyler and Giles 1994; Bringle and Hatcher, 1999), Freire (1972) and Kolb (1984). Dewey believed that experiences contribute to learning, but cautioned that not all experiences were educative. Experience becomes educative when critical reflective thought creates new meaning and leads to growth and the ability to take informed actions (Bringle and Hatcher, 1999). Freire (1972), taking a similar position as Dewey on the need for experience to be incorporated in teaching and learning, has argued that when experience is not embedded in teaching, students are denied the process of praxis and problem-posing education which often leaves them disengaged from the learning process and alienated from their social world. Situating experience in teaching and learning gives students the opportunity to put theory into practice. It allows students to reflect on the educational content and its relevance to the wider society leading to cognitive and affective transformation (Freire, 1972).

2.2 Benefits and challenges of Service-learning

The rapid spread of service-learning globally has been attributed to the benefits it offers to students, communities and faculty. Studies have found that service-learning experiences benefit students, both in the classroom and outside the classroom, where service-learning "counters the isolation of learning" (Eyler, 2002: 517 cited in Henry, 2004) as it moves learning beyond the walls of the classroom into real life, community-based settings where students work with communities to address real-life issues and challenges (Henry, 2004, Lester, Tomkovick, Wells, and Flunker, 2005). Kenworthy-U'Ren (2008) has argued that service-learning offers opportunity for students to interact with people of different cultures and lifestyles to understand social problems, and create long-term and sustainable positive change in the communities of which they are a part. Service learning fosters pre-employment skills and job readiness and, as such, is an excellent focus for vocational education (Brown, 1998).

Service-learning enhances effectiveness of students' 'communication ...social interaction (and) decision-making' (Deeley, 2010: 44), and their intellectual skills are enhanced too through critical thinking (Eyler and Giles, 1998). Studies have found that students who have been involved in service-learning have a better understanding of course concepts and course content (Gallini and Moely, 2003; Butin, 2006). Furthermore, service-learning increases youth civic knowledge and political engagement (Butin, 2006, Battistoni, 1997) and is a stronger predictor of intention to pursue service-related careers than participation in stand-alone community service (Vogelgesand and Astin 2000).

In spite of these benefits, service-learning is also fraught with challenges (Butin, 2005, 2006; Hatcher and Erasmus, 2008). Butin (2005) has noted that it is "extremely difficult to *pragmatically* implement a powerful service-learning program." There are several factors that ought to underpin effective implementation which Butin (2005) identified as foresight, time, organizational capabilities, creativity, and networking skills. These factors may pose challenges to several institutions that may want to implement community service-learning. One could also mention the pedagogical challenge where service-learning transforms teaching and learning by reconstructing a new relationship between lecturers and students where they both become creators and sharers of knowledge through a problem-posing approach (Butin, 2006).

There are also issues of poverty, diversity and power imbalances in societies. The challenge that Ghanaian institutions may have to confront when introducing community service-learning will be how to use community service-learning to address issues of poverty, diversity and power imbalances since the relationship between university and community is always based on a hierarchical relationship (O'Brien 2005; Hatcher and Erasmus 2008; Mitchell, 2008; Bringle and

Hatcher, 2002; Mahlomaholo and Matobako, 2006). In dealing with these challenges, Mitchell (2008) suggests that it requires "confronting assumptions and stereotypes, owing unearned privilege, and facing inequality and oppression as something real and omnipresent" (Mitchell, 2008: 56). Will universities in Africa be able to use community service-learning to transform their communities? Deciding whether service-learning should be transformational or charity-based is still one of the challenges confronting service-learning today (Morton 1995; Mitchell 2008).

The final challenge has to do with workloads. There is always the perception that service-learning would increase the workloads of lectures and students ((Furco and Moely, 2012). It is common knowledge that lecturers in Ghana have large class sizes and high teaching loads due to high student to academic staff ratios (Bailey, Cloete and Pillay, 2011). Thus, adding service-learning to the already heavy workloads may be resisted by faculty members (Furco and Moely, 2012). Students may also resist the introduction of service-learning because this would mean additional work because of their already tight academic and other related schedules.

3. Method

The research design adopted for this study was the mixed method case study design involving both a quantitative survey and qualitative interviews. Survey asks many questions about people's beliefs, opinions, knowledge, attitudes, characteristics, and past or present behaviour (Neuman, 2003). From a total population of 14,587 students from the Faculties of Arts and Social Sciences, a sample of 380 students was selected, based on Krejcie & Morgan's (1970) method of determination of sample size. Using the stratified sampling method, the following students were selected: Level 100 (97 (27.1%)), Level 200 (99 (27.1%)), Level 300 (18.7%)), Level 400 (96 (26.5%)). The gender distribution comprised 49.2% males and 50.8% females. The age distribution comprised 15.6% in the 15-19 age range, 65.5% in the 20-24 age range, 11.5% within the 25-29 age range and 4.7% in the 30-34 age range. The study found that 78.5% of students were residential, whereas 21.5% were non-residential.

The questionnaire method was the main data collection tool. Based on earlier works by Moely et al. (2003), Bender & Jordaan (2007) and Jordaan (2006), a total of 29 questions were developed. A five-point Likert scale was used to measure the responses on the interview schedule. The responses ranged from: *I strongly agree* – (1) to *I strongly disagree* – (5). In addition to the questionnaire, the study used in-depth interviewing to collect qualitative data to explore students' understanding of what community service-learning is. Typically, in-depth interviews are used when seeking information on individual, personal experiences from people about a specific issue or topic (Charmaz, 1990; Hennink, Hutter, and Bailey, 2011). Semi-structured interviews were used to collect data from 10 students across different levels.

The quantitative data was analysed using the SPSS version 16. The constant comparative method was used in analysing the qualitative data collected. The data were analysed comparing incident with incident (Glaser, 1965; Glaser and Strauss, 1967; Corbin and Strauss, 2008). Each incident was coded and similar and dissimilar themes were identified. Quotations from the themes on the definitions and whether students understood community service-learning were used in the study.

Table 1 Alpha	Coefficients for	Constructs	with Multiple items
Table 1. Alpha	i Coemicients for	Constructs	with Multiple items

Construct	Number of items	Cronbach Alpha
Perceived Benefits	4	0.854
Perceived Needs	3	0.724
Perceived Intention	3	0.864
Perceived Contribution	3	0.700
Perceived Cost	2	0.624
Perceived change	2	0.690

Table 1 shows the Cronbach alpha test conducted to determine the internal consistency of the items used in the study. The overall test for reliability (α) was 0.926. The Cronbach alpha (α) values for the various items are deemed acceptable, based on the common threshold values recommended by accepted literature (Nunnally & Berstein, 1994 cited in Tavakol and Dennick 2011).

4. Findings

In order to find out if students have heard of the term 'community service-learning' before, some of the definitions of community service gathered through an in-depth interview with students are as follows:

It is like working in a community. Going to a community where one is not from the said community; one has to adjust to the situation in which community members are. For instance, I have taught before. In our teaching practice we go to a community which we are not familiar with. We conform to or learn the social norms and practices of the community in order to fit in that society. One can also act as a role model and help the community by doing communal labour (Level 300 student).

A group of people coming together either from the urban or the rural sector to offer certain services. It could be health services, communal labour or anything that has to do with the community (Level 200 student).

It is about helping community members live a better life by ensuring that their needs are provided or catered for to help them have good living conditions or better conditions of life (Level 300 student).

On whether students understood community service-learning, the following were some of their responses. Community service-learning is:

When persons go round teaching various communities about a particular topic or issue concerning the community or development which is about to go on in the community (Level 300 student).

Learning about communal development and ways of helping out to raise the capacity of your community or any community within the nation (Level 100 Student).

It is a situation where a class of people engage themselves in doing services for people to learn from said services, so that they can engage themselves in other services (Level 300 student).

Frankly speaking, I don't know what theoretically it is but I have an idea of what it can be. My knowledge of communal service is that, it helps understand the benefits or essences of helping by contributing to our community. That is what community service learning is all about. It is to orient us to contribute to the various communities we come from as students (Level 400 student).

4.1 Factor Analysis

A common factor analysis was carried out on the responses given by the 360 students who provided the responses to the survey questions. A principal component analysis identified 23 linear components within the data set with 6 eigenvalues greater than 1. However, the eignevalues-one rule is known to overestimate the true number of components in a correlation matrix because of the sampling effects (Cliff, 1988; Jelfs, Richardson, & Price, 2009). In order to overcome the challenge of the eigenvalues-one rule, the scree test was used which confirmed that six components should be extracted (Hayton, Allen & Scapello, 2004). The total percentage of variance for the cumulative value of the six factors was 67.9%. The Kaiser-Meyer-Oklin (KMO) test for sampling adequacy was 0.919, while the Barlett Test of Sphericity was ($\chi^2 = 4798.0$, df = 465, p < 0.000) showing evidence of adequate number of significant correlations among items to justify the conduct of factor analysis (Lu and Viehland, 2008). The principal axis factoring was used with the oblique rotation method using the default delta (0) (Costello & Osborne, 2005) because of its advantages over the orthogonal rotation approach (Jelfs, Richardson and Price 2009; Matsunaga, 2010).

Table 2. Pattern Matrix

	Factor					
_	1	2	3	4	5	6
Community service-learning would provide me with new sources of knowledge	.800					
Community service learning would bridge the gap between theory and practice	.717					
I would experience personal satisfaction knowing that I am helping others	.617					
I would gain valuable experience for my resume	.596					
My contributions to the community will make real difference		.829				
Contributing my skills will make the community a better place .623						
I can make a difference in the community		.610				
I would seek out an opportunity to participate in community service-learning in the next year	980					

I have the intention to engage in community service-learning	709
I would participate in community service-learning project if introduced next year	707
I would have little time for my coursework when community service is introduced at the undergraduate level	.750
Lecture timetables are already full without the addition of community service-learning	.650
There are people who have needs which are not being met in our communities	719
There are needs in the community	584
As a university, community groups need our help	503
It would be a good idea to revise the current courses and include community service-learning in the university's curriculum	.689
Community service-learning will prepare students for community participation after university	.689

Extraction Method: Principal Axis Factoring.

Rotation Method: Oblimin with Kaiser Normalization.

The pattern factor matrix generated shows salient loadings (Table 2). Factor loadings greater than [0.40] was relied upon which led to the extract of six factors. The four questions that load highly on factor 1 seem to relate to benefits to be derived from community service-learning to students. Therefore, we could label this factor *Perceived Benefits*. The three questions that load onto factor 2 relate to contributions to society by students; this could be labelled *Perceived Contributions*. The three questions that load onto factor 3 relate to intentions of students, and so could be labelled as *Perceived Intention*. The two questions that load onto factor 4 could be described as *Perceived Cost*. The three questions that load onto factor 5 relate to awareness of needs, and so may be referred to as *Perceived Awareness*. Finally, two questions loaded onto factor 6 relating to change in curriculum and attitudes to community participation could be labelled as *Perceived Change*.

4.2 Discriminant Analysis

Discriminant analysis was used to describe, summarise, and understand differences between and among groups; and to determine which set of continuous predictor variables best captures group differences (Betz, 1987). To test the assumption of equal variance-covariance, though the Box's M-test statistic of Box's M = 650.572; F (253, 86633.0) = 1.844; p = 000 violates the equal variance-covariance assumption; the corresponding F value is only 1.844, which indicates that the departure from the null is not large (Noble and Schewe, 2003 cited in Gupta and Ogden, 2009). The log determinants are relatively equal at -33.585 and -34.574, a difference of 0.98 that suggests that the two groups are drawn from the same distribution (Gupta and Ogden, 2009).

Table 3 shows strong statistical evidence of significant differences between means of those who agree to participate in community service-learning and those who disagree.

Table 3. Tests of Equality of Group Means

	Wilks'	F	df	df2	Sig.
	Lambda		1		
Age	.997	.724	1	252	.396
Gender	.988	2.988	1	252	.085
Level	.997	.677	1	252	.411
Residential Status	.996	.897	1	252	.344
Have you taken part in any community service before?	.967	8.715	1	252	.003**
Have you heard about community service-learning before?	.997	.871	1	252	.352
Do you understand what community service-learning is?	.996	1.085	1	252	.299
There are needs in the community	1.000	.053	1	252	.818
There are people who have needs which are not being met in	.988	3.001	1	252	.084
our communities					
Contributing my skills will make the community a better place	.990	2.511	1	252	.114

My contributions to the community will make a difference	.997	.679	1	252	.411
I can make a difference in the community	.983	4.482	1	252	.035
I would like to be involved in a community service-learning	.839	48.222	1	252	**000
project while I am a student at the university					
Community service learning will promote my social growth	.907	25.768	1	252	**000
Community service-learning will enhance my interaction with	.918	22.554	1	252	**000
people of diverse cultures and lifestyle					
Community service-learning should be course-based or	.960	10.637	1	252	.001**
credit-bearing course					
I have the intention to engage in community service-learning	.940	16.201	1	252	.000**
I would seek out an opportunity to participate in community	.891	30.687	1	252	.000**
service-learning in the next year					
I would make valuable contacts for my future career	.949	13.652	1	252	.000**
I would gain valuable experience for my resume	.777	72.285	1	252	.000**
Community service-learning would provide me with new	.934	17.678	1	252	.000**
sources of knowledge					
Community service learning would bridge the gap between	.988	3.047	1	252	.082
theory and practice					
I would experience personal satisfaction knowing that I am	.940	16.220	1	252	.000**
helping others					
I would have little time for my coursework when community	.987	3.247	1	252	.073
service is introduced at the undergraduate level					
Lecture timetables are already full without the addition of	.997	.723	1	252	.396
community service-learning					

^{*}p < .05 **p < 0.01

Table 4 which is the structure matrix shows that three variables from *Perceived Benefits* and three variables from *Perceived Intention* are within the group correlations between the predictors and the discriminant function. The 0.30 cut-off between important and less important variables was applied. The discriminant analysis showed that the overall multivariate relationship was statistically significant at the 0.05 level (Wilks' $\Lambda = 0.595$; chi square (22, n = 254) = 125.174; p < 0.001) indicating that students who agree with the statement differed significantly from those who disagreed with the statement. The discriminant analysis results reveal that the *perceived benefits* variables (*I would gain valuable experience for my resume*, r = 0.649 with an effect size of R^2 - 42.1%; Community service-learning would provide me with new sources of knowledge, r = 0.321 with an effect size of R^2 - 10.3%; *I would experience personal satisfaction knowing that I am helping others* r = 0.307 with an effect size of R^2 - 0.9%) were good predictors which accounted for 53.3% of the variables in scores on the function. In addition, the study also found that *perceived intention* (*I would like to be involved in a community service-learning project while I am a student at the university* r = 0.530 with an effect size of R^2 - 28.0%; *I would seek out an opportunity to participate in community service-learning in the next year* r = 0.423 with an effect size of R^2 - 17.8%; *I have the intention to engage in community service-learning* r = 0.307 with an effect size of R^2 - 0.9%) also accounted for 46.7% of good predictor variables.

Table 4. Structure Matrix

	Function
	1
I would gain valuable experience for my resume	.649
I would like to be involved in a community service-learning project while I am a student at the university	.530
I would seek out an opportunity to participate in community service-learning in the next year	.423
Community service-learning would provide me with new sources of knowledge	.321
I would experience personal satisfaction knowing that I am helping others	.307
I have the intention to engage in community service-learning	.307
I would make valuable contacts for my future career	.282
Have you taken part in any community service before?	.225
I can make a difference in the community	.162

Community service learning would bridge the gap between theory and practice	.133
There are people who have needs which are not being met in our communities	.132
Gender	132
I would have little time for my coursework when community service is introduced at the undergraduate level	126
Contributing my skills will make the community a better place	.121
Do you understand what community service-learning is?	.080
Residential Status	072
Have you heard about community service-learning before?	.071
Age	065
My contributions to the community will make a difference	.063
Level	.063
Lecture timetables are already full without the addition of community service-learning	018
There are needs in the community	018

Table 5 shows strong statistical evidence of significant differences between means of those who agree to participate in community service-learning and those who disagree. Table 6 shows that the Wilks lambda indicates a highly significant function (p < .000), with a proportion of total variability (59.5%) not explained. A canonical coefficient of 0.636 indicates that it accounted for 40.4 per cent of the variance in the dependent variable. Group centroids were -.306 and 2.205 for those who would participate in community service-learning and those who would not next year.

Table 5. Summary of Canonical Discriminant Functions

I would participate in community	service-learning
project if introduced next year	
Group Centroid (Agree)	306
Group Centroid (Disagree)	2.205
Wilks Lambda	0.595**
(Canonical correlation) ²	0.404

Table 6. Comparison of goodness of results

Measure	Value
Maximum chance	0.877
Proportional chance	0.784
Press Q table value	6.635
Press Q calculated value	180.2**

^{**}p< 0.01

Table 7 presents the classification results and the 'hit ratio'. Of the 233 students who agreed to the statement, the model predicted 214, or 96.0% of them would fall in that group. Of the 31 students who disagreed with the statement, the model classified 13 of them, or 58.1% to fall in that group. Since 223 out of the 254 cases fell in the 'agree' group, the maximum chance criterion was 87.8%. The hit rate of the present model of 91.3% was above chance (Table 8). The proportional chance criterion ($C = (0.878)^2 + (0.122)^2 = 0.785$) is 78.5%. This chance occurrence is significantly less than the hit rate of 91.3% provided by the model. The Press Q1 statistics of 180.2 was significant.

Press's Q = $[N - (n*K)]^2/N*(K - 1)$ where N + sample size, n=number of correct classification, K=number of groups

Table 7. Prior Probabilities for Groups

I would participate in community service-learning project if introduced		Cases Used in Analysis		
next year	Prior	Unweighted	Weighted	
Agree	.878	223	223.000	
Disagree	.122	31	31.000	
Total	1.000	254	254.000	

Table 8. Classification Results^{b,c}

		I would participate in community	Predicted Gro	Predicted Group Membership			
		service-learning project if introduced next year	Agree	Disagree	Total		
Original	Count	Agree	214	9	223		
		Disagree	13	18	31		
		Ungrouped cases	59	36	95		
	%	Agree	96.0	4.0	100.0		
		Disagree	41.9	58.1	100.0		
		Ungrouped cases	62.1	37.9	100.0		
Cross-validated ^a	Count	Agree	212	11	223		
		Disagree	17	14	31		
	%	Agree	95.1	4.9	100.0		
		Disagree	54.8	45.2	100.0		

a. Cross validation is done only for those cases in the analysis. In cross validation, each case is classified by the functions derived from all cases other than that case.

5. Discussion

The purpose of the study was to examine the perceptions of students of the University of Ghana toward community service-learning. The study showed that a significant number of students had not engaged in any community service before. Those who had taken part in community service before had had those programmes arranged mostly by churches. The study found that a greater number of students in Levels 300 and 400 had participated in community service as compared to those in Levels 100 and 200. Although students were not too familiar with the meaning of community service-learning, the results of the factorial analysis showed that students perceived community service-learning as beneficial and indicated that it would provide them new sources of knowledge and bridge the gap between theory and practice.

The intention of students to engage in community service-learning was also strongly revealed in the study. Students indicated that community service-learning would enhance their career development through gaining valuable experience for their resume. This point on career development supports similar findings by Bender and Jordaan (2007) and McLaughlin (2010). This also confirms Brown's (1998) assertion that service-learning fosters pre-employment skills and job readiness. Other benefits students noted they could derive from participating in community service-learning included hands-on experience, which, they believed would help them bridge the gap between theory and practice, and the satisfaction that they were helping their communities. Students were of the opinion that the introduction of community service-learning would bring some costs to them. These findings support similar results from studies reported elsewhere (Maccio and Voorhies, 2012). However, the cost of introducing community service-learning was not a strong predictive variable in distinguishing students who would engage in community service-learning from those who would not.

6. Conclusion and Future Research

The study provides significant findings on students' perception of community service-learning and why it should be incorporated into teaching and learning at University of Ghana. These findings lead to three important conclusions for university administrators who may in future decide to incorporate community service-learning into teaching and learning at the University of Ghana.

b. 91.3% of original grouped cases correctly classified.

c. 89.0% of cross-validated grouped cases correctly classified.

The first conclusion is that students are aware that there are needs in the society, and that they have a role to play in addressing those societal needs. Indeed, students think that they can help make a difference through their involvement in community service-learning.

The second conclusion is that, although the majority of the students have not engaged in community service and are not well acquainted with the meaning of community service-learning, there is ample evidence from the study of students' willingness to engage in community service-learning and that it will be beneficial to students. This finding has important implications for administrators when thinking about implementing community service-learning.

The third conclusion is that students associate community service-learning with experiential learning, career and social growth and the ability to work with people of diverse cultures and lifestyles. These experiences go a long way to enhance teaching and learning among students as well as foster civic engagement. Indeed, Eyles and Giles (1994 cited in Bender and Jordaan, 2007) have argued that community service-learning offers students the opportunity to recognise the role they can play as responsible citizens, while they are students and also after they have completed their studies, by bringing their future career to the community to help solve problems or add value.

Finally, there is need for future research to investigate the perceptions of faculty towards community service-learning who are important stakeholders in the implementation of community service-learning programmes. Although, this is a study that focused only on students in the two largest faculties, a campus-wide approach could be adopted in future to provide a deeper perspective to students' perception before a campus-wide service-learning programme is adopted by university administrators.

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