Measuring the relative efficiency of school services in St. Dominic College of Asia based upon the responses of BSIT graduates of 2015-2016

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Abstract – *Universities and colleges play a dynamic and critical part in the improvement of a nation. They are habitats for producing thought and information which advances a nation's economy and its natives' quality of existence. Information about the service efficiency of these higher education institutions also act as management information, which is important to educational institution managers who use them for decision making in improving their schools. This study is aimed to measure the relative efficiency of school services in St. Dominic College of Asia, based upon the responses of BSIT graduates of A.Y. 2015-2016. The school services measured are the Dean of the School of Business and Computer Studies (SBCS), the SBCS Faculty, Accounting, MIS, the Registrar, and Classrooms. Questionnaires were used to construct output performance indicators using the Likert Scale from the perceptions the twenty-eight (28) BSIT students of the relative efficiency of the SDCA school services. The result indicates that the Dean's Office and DSAS are tied in first place, with both of them having the same average mean of 4.29 as the most efficient school services. The Faculty Office and MIS got tied in second place with an average mean of 3.68, while the Registrar got third place with an average mean of 3.25. The Accounting office got the fourth and last place, with an average of 2.11 as the least efficient school service.*

Keyword – *Student, school services, efficiency, Information Technology.*

Introduction

A student's college experience is dependent on the environment the institution provides. As schools focus on student academic achievement, policy makers and educators are increasingly examining the value of school services that are traditionally considered supplemental. The efficiency of school services is valuable data to administrators of basic leadership units, since it allows them to carry out powerful asset distribution (Agasisti, 2012). To measure this efficiency, the recipients of instruction—the students—are now asked to give feedback to assess these school services (Kuhail, 2011).

At this level, the use of student ratings to evaluate school services is a familiar part of the total evaluation system. The students can provide insights into the system—information that cannot be gained otherwise.

Student ratings for the performance of school services should not be overlooked, for students are the only people who interact with these services day by day (Kumar, 2010). In "School Structural Characteristics", Stewart (2008) suggested that school climate, or the sense of school cohesion felt by students, teachers, and administrators, is important to successful student outcomes. The study mentioned that the environment a student is in while in school will greatly affect their attitude and learning later in life.

In the modern climate of high-stakes testing and educational accountability, the success of a school is measured by the school's achievement of set performance indicators. These indicators are intended to demonstrate how effectively the school is preparing pupils to perform in the real world. While specific regulations vary in many areas, schools are graded upon whether or not they meet these pre-set indicators. In some instances, funding decisions are made based upon the proven successes of the educational institution.

Objectives of the Study

Services improvement. This study wants to identify which of the chosen school service performed in such a way that it needs continuing and/or future enhancement.

Evaluation. This study wants to rank a particular school service in relation to other school services under the study in relation to each other and as a whole based upon the perception of the respondents.

Efficiency. This study wants to increase concern and well-informed interest in a particular school service, in regards to their ability to perform their function effectively and successfully.

Graduating students' perception. This study wants to evaluate the respondents' perception due to being saturated by school services in their four-year stay.

Statement of the Problem

Stated below are the problems that are expected to be solved by the study:

1. What school services need to be improved?

2. What are the rankings of the mentioned school services in relation to each other?

3. Which school service among the mentioned are efficient and which are not?

4. What are the respondent's perceptions on the school services that were mentioned?

Review of Related Literature

Comparative departmental efficiency analysis within a university: A DEA approach. This paper illustrates the application of Data Envelopment Analysis (DEA) to measure the relative efficiency of 22 academic departments of a public university in Malaysia using data collected from the year 2011. The input and output variables used in this study are those that contribute to teaching/learning and research performance. The input variables considered were number of academic staff, number of non-academic staff, and yearly operating expenses, while the output variables are number of graduates for the year, total amount of research grants received for that year, and number of academic publications by faculty members. To investigate the performance of departments with different dimensions, four models with different input-output combinations are defined. Sensitivity analysis performed suggests that different combinations of input-output yield different efficiency scores. Furthermore, when all outputs are included, the social science-based departments on average perform better than the science-based departments (Catalano, 2012).

Assessment of academic department's efficiency using data envelopment analysis. In this age of knowledge economy, universities play an important role in the development of a country. As government subsidies to universities have been decreasing, more efficient use of

resources has become important for university administrators. This study evaluates the relative technical efficiencies of academic departments at the Islamic University in Gaza (IUG) in 2004 to 2006 (Kuhail, 2011).

School structural characteristics, student effort, peer associations, and parental involvement: The influence of school- and individual-level factors on academic achievement. This research examines the extent to which individual-level and school structural variables are predictors of academic achievement among a sample of 10th-grade students abstracted from the National Educational Longitudinal Study database. The study results showed that individual-level predictors, such as student effort, parent-child discussion, and associations with positive peers, play a substantial role in increasing students' achievement. Furthermore, the results also suggest that school climate—in particular, the sense of school cohesion felt by students, teachers, and administrators—is important to successful student outcomes. In total, school structural characteristics were found to have relatively small effects on student achievement when compared with individual-level characteristics. Given these results, interventions aimed at improving academic achievement need to take into consideration the impact of individual-level and school structural factors on students and their ability to succeed (Stewart 2008).

Assessing students' views of school climate: Developing and validating the "What's Happening in This School?" (WHITS) questionnaire. This study describes the development and validation of a six-scale survey to assess school climate in terms of students' perceptions of the degree to which they feel welcome and connected, together with a scale to assess students' perceptions of bullying. The development of each survey involved a multi-stage approach, including 1.) An extensive review of research related to school climate to identify components that can be considered important for effective schools made up of diverse students, 2.) Elucidating the scales identified in step one, and 3.) Writing individual items within the scales. Items from previously validated questionnaires were examined and, if appropriate, adapted. Trochim and Donnelly's (2006) framework was used for construct validity of the new questionnaire. When the questionnaire was administered to a sample of 4,067 high school students from eight schools, various statistical analyses ensured the questionnaire's discriminant, convergent, concurrent, and predictive validity (Aldridge 2013).

Direct and indirect educational relationships: Developing a typology for the contribution of different categories of school staff in relation to a students' educational experiences. This study presents results from a research project exploring the relational interplay between school staff and students and its functions and complexity in the secondary school context. School relationships (between students and different kinds of staff) are more or less indirectly related to educational content, subject matter, as well as norms and values. In the teacher-student relationship, the teaching and learning of subject matter largely defines the relationship, whereas for school support staff the relationship to such content is fairly distant (Frelin, 2015).

Methodology

The proponents executed both exploratory and descriptive research. Using exploratory research, the proponents rely on gathering secondary researches such as reviewing available literature and/or data, where as in the descriptive research, the proponents will employ types of quantitative researches for data gathering such as questionnaires, interviews, observation schedule, checklist, and rating scales. Data will be recorded and analyzed for further improvement of the software project. The proponents chose questionnaires for instrumentation, and were asked to rate the SBCS Dean, SBCS Faculty, Registrar, Accounting, DSAS, and MIS from 5 to 1 (with 5-Excellent, 4-Very Good, 3-Good, 4, Fair, and 5-Poor).

From the aforementioned instrumentation used by the proponents, all the data gathered will be treated as essential to the development and assessment of the result's interpretations.

Results and Discussion

Figure 1 – Respondents' Rating on the SBCS Faculty's Performance
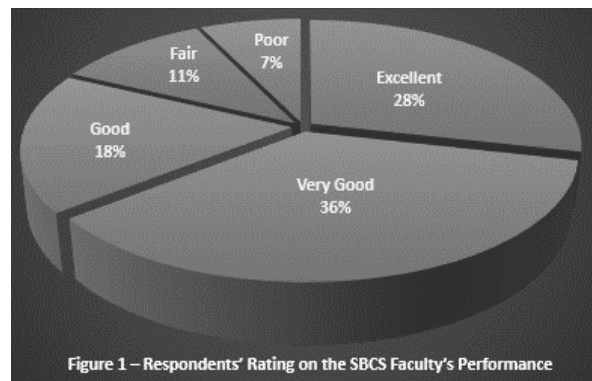
As shown in the above figure, thirty-six percent (36%) of the respondents rate the SBCS faculty very good, twenty-eight percent (28%) rate it excellent, eighteen percent (18%) good, eleven percent (11%) fair, and seven percent (7%) poor. With an average mean of 3.68, the SBCS faculty receives an overall good rating based upon the respondents' perceptions, meaning that they are satisfied with this school service.

Figure 2. Respondents' Rating on the SBCS Dean's Performance
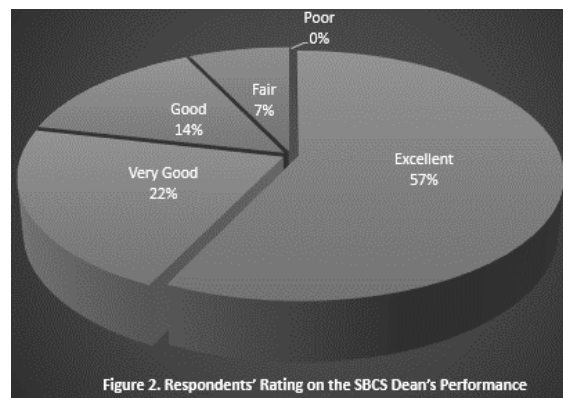
As shown in the above figure, fifty-seven percent (57%) of the respondents rate the SBCS dean excellent, twenty-two percent (22%) very good, fourteen percent (14%) good, seven percent (7%) fair, and zero percent (0%) poor. With an average mean of 4.29, the dean receives an overall
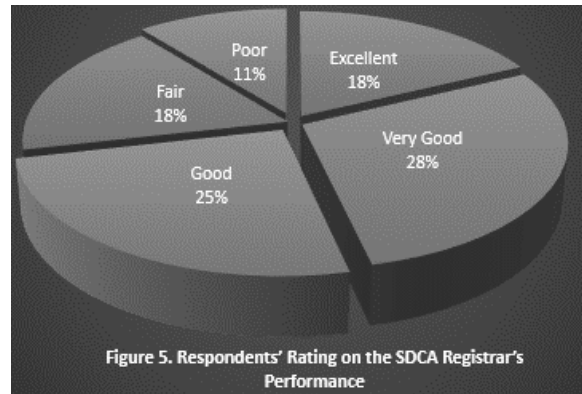
very good rating based on the respondents' perceptions. This means that they are very satisfied with this school service.

Figure 3. Respondents' Rating on the SDCA Accounting's Performance
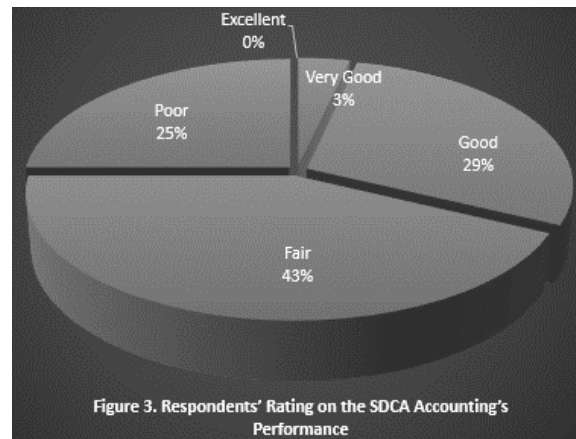
As shown in the above figure, forty-three percent (43%) of the respondents rate the SDCA Accounting department as fair, twenty-nine percent (29%) good, twenty-five percent (25%) poor, three percent (3%) very good, and zero percent (0%) excellent. With an average mean of 2.11, the SDCA accounting department receives an overall very fair rating based on the respondents' perceptions. This means that most are somewhat satisfied (fair) with this school service.

Figure 4. Respondents' Rating on the SDCA DSAS's Performance
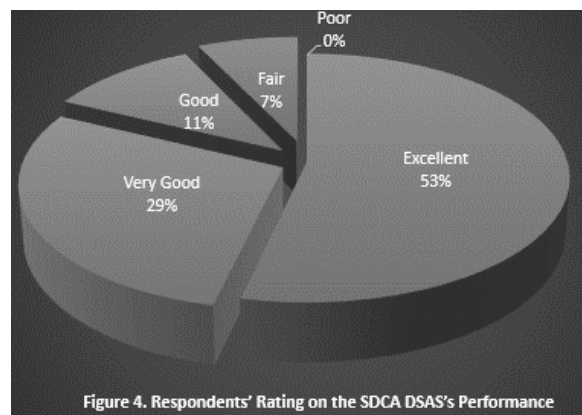
As shown in the above figure, fifty-three percent (53%) of the respondents rate DSAS as excellent, twenty-nine percent (29%) rate it very good, eleven percent (11%) good, seven percent (7%) fair, and zero percent (0%) poor. With an average mean of 4.29, the DSAS receives an overall very good rating based upon the respondents' perceptions. This means that they are very satisfied with this school service.

Figure 5. Respondents' Rating on the SDCA Registrar's Performance

As shown in the above figure, twenty-eight percent (28%) of the respondents rate the registrar as very good, twenty-five percent (25%) good, eighteen percent (18%) fair, eighteen percent (18%) excellent, and eleven percent (11%) poor. With an average mean of 3.25, the registrar receives an overall good rating based on the respondents' perceptions. This means that they are satisfied with this school service.

Figure 6. Respondents' Rating on the SDCA MIS's Performance
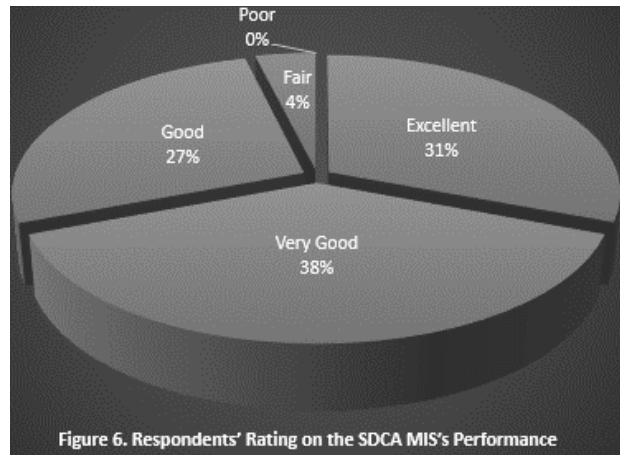
As shown in the above figure, thirty-eight percent (38%) of the respondents rate the MIS as very good, thirty-one percent (31%) rated excellent, twenty-seven percent (27%) good, four percent (4%) fair, and zero percent (0%) poor. With an average mean of 3.68, the MIS receives an overall good rating based upon the respondents' perceptions. This means that they are satisfied with this school service.

Table 1. The computed ranks and means of the performances of the school services based on the respondents

School Service	Rank	Computed Mean
Dean	1	4.29
DSAS	1	4.29
Faculty	2	3.68
MIS	2	3.68
Registrar	3	3.25
Accounting	4	2.11

As shown from the table above, the Dean and DSAS are tied in first place with both of them having the same average mean of 4.29. The SBCS faculty and MIS are tied in second place with an average mean of 3.68, while the Registrar has third place with an average mean of 3.25. Accounting has the fourth and last place with an average of 2.11.

Table 2. Sample reactions of the performances of the school services based on the respondents

Dean reaction	Faculty reaction	DSAS reaction
	Helpful and Wise	Not open
Very Open		Always
Generous	Kind	need chairs
good	approachable	Approachable
	not always	helpful in
helpful	around	activities
		helpful in
passionate	crowded	activities
Approachable	well played	bad
		needs
calm	Helpful	improvement
Approachable	Approachable	helpful
good		always
ambiance	conflicts	crowded
not helpful	not helpful	fast response
Approachable	Approachable	approachable
Approachable	Approachable	Approachable

Registrar reaction	MIS reaction	Accounting reaction
Helpful	Friendly Staff	Quick Service
		good at
understaff	no internet	computing

		good at
nice	nice	computing
approachable	helpful	welcoming
quick to		accommodatin
response	helpful	g
good	good	okay
needs	needs	needs
improvement	improvement	improvement
good service	good service	no concern
		wrong
approachable	leader missing	computations
updates	good	not efficient
kind	welcoming	Approachable
		not
Approachable	welcoming	approachable

The above table represents sample reactions of the respondents' opinions regarding the school services studied. It clearly shows some positive and negative points that can lead to a strength or weakness of a certain school service. On the table, some of the respondents' opinions are the same as those of the other school services. For example, the Dean and DSAS are both approachable, and they display qualities such being able to manage simple and complex school issues. Although far from perfect, both of them show commitment as perceived by the respondents. The least-rated school service, the accounting department, needs improvement because they lack the personal touch that respondents expect from them. According to the respondents, they must learn from the other departments how to delegate graduates, and develop themselves more efficiently so that future alumni will have a more positive perception of them.

Conclusions and Recommendations

Conclusions. In line with the problem stated, the following questions were concluded:

1. What school services need to be improved?

   Based upon the results shown, the SDCA accounting department needs improvement because they ranked last and got the lowest average mean among the school services in this study.

2. What are the rankings of the mentioned school services in relation to each other?

   The SBCS dean and DSAS got tied in first place, with both of them having the same average mean of 4.29. The SBCS faculty and MIS got tied in second place with an average mean of 3.68, while the registrar got third place with an average mean of 3.25. The accounting department got the fourth and last place, with an average of 2.11.

3. Which school service among the mentioned are efficient and which are not?

   The SBCS dean and DSAS are the most efficient, while the faculty and MIS have a slightly above-average efficiency. The registrar has average efficiency while accounting was the least efficient.

4. What were the respondent's perception on the school services that were mentioned?

> Some of the respondents' perceptions of the school services are being open, approachable, helpful, not approachable, crowded, having fast response time, etc. Sample responses are shown on table 2.

Recommendations. Further revision of the instrument when used for evaluation purposes is necessary to determine other factors that led to the result of the respondents' perceptions. However, the fact that these items were not discussed in the study does not mean that they are poor items, nor that the students cannot perceive them. It does indicate that the students are in consensus. Although there will be always room for improvement in the future, the proponent believe that there are possible enhancements that can be included and added to how certain school departments can deliver their services to the institution.

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