BirLE-Journal Budapest International Research and Critics in Linguistics and Education



Total Quality Management in Instruction and Teaching Effectiveness

Marites Bravo-Java

Designation: Director, Board Review and Coaching, Associate Professor IV, Sultan Kudarat State University Access, EJC Montilla, Tacurong City, Sultan Kudarat, Philippines maritesbravojava@gmail.com

Abstract

The study on "Total Quality Management in Instruction and Teaching Effectiveness was conducted to assess the level of implementation of the Total Quality Management elements, such as leadership, student focus, faculty satisfaction, and programs/services management. The Total Quality Management index and its influence on the teaching effectiveness was also covered where the structured questionnaire for TOM and teaching effectiveness evaluation form were used. The respondents were chosen using complete enumeration among the Academic administrators and stratified random sampling among the faculty members. Descriptive statistics were used in describing the level of implementation of TQM elements and TQM index. The Multiple Regression Analysis was used to determine the relationship between the level of implementation of TQM elements and TQM index and its influence on teaching effectiveness. Results of the study revealed that there were high implementation of TQM elements and TQM index in the University of Southern Mindanao. Teaching effectiveness of the faculty members was rated by the students as very satisfactory. There was a significant relationship between the level of implementation of TQM elements and teaching effectiveness. Programs/services management came out as the best predictor of teaching effectiveness; where the higher the level of implementation of programs/services management, the more effective is the teaching at the University of Southern Mindanao.

Keywords

management; total quality management; TQM index; instruction; teaching effectiveness



I. Introduction

Total Quality Management has been recognized considerably as an effective approach for achieving quality and performance development in industry. With its acknowledgment and acceptance growing in the private sector, academic institutions have started to look at the probability for adopting the TQM philosophy to education. The TQM approach in education is of paramount importance in achieving high quality through influencing all components of the educational process such as organization, management, interpersonal relations, material and human resources. Applying the approach described above, quality becomes total.

In the context of higher education, striving for high quality is not a new strategy. Institutions like the University of Southern Mindanao aim for academic excellence and high quality as their highest goals. Achieving these goals may be easier in a time of abundant resources and favorable demographics. Nowadays, that most of the academic institutions experiencing multiple challenges because of globalization, a thorough scrutiny of their operations could be a strong basis for determining their capabilities in coping with the demands of global competitiveness. It is also evident that the University like other institutions is now facing decreasing enrolments and revenues while costs and competition for student admission and struggle in the labor market are continually increasing. With this scenario, the University has to produce graduates of high quality who can survive and progress in a globally competitive professional environment.

Further, effecting Total Quality Management into higher education decisionmaking offers the kind of proactive and respected process that can enable higher education to bridge this gap and to reestablish itself as credible in its need for additional resources and deserving of both public and private support. Future decision making in higher education must be part and parcel of a defensible and documentable management accountability system (Cole, 1995).

The study aimed to find out the Total Quality Management in instruction and teaching effectiveness in the University of Southern Mindanao. Specifically, the study aimed to: (1) determine the level of implementation of the TQM elements namely, leadership, student focus, faculty satisfaction, and programs/services management; (2) determine the TQM index by college; (3) compare the level of implementation of the TQM elements and the TQM index by college; (4) describe the teaching effectiveness by college; (5) determine if the level of implementation of the TQM elements by college has an influence on the teaching effectiveness; and (6) determine if the TQM index by college significantly affects the teaching effectiveness. This study was conducted in 2011.

II. Research Method

2.1 Research Design

This study used a descriptive-correlation design using a cross-sectional survey. This method is designed to provide descriptions of the implementation of the TQM elements and the TQM index (independent variables) by college (moderating variable) and its influence on the teaching effectiveness (dependent variable). The design dictates how the variables are to be measured in testing their relationship.

2.2 Locale of the Study

This study was conducted at the tertiary level of the University of Southern Mindanao-Main Campus situated in Kabacan, Cotabato. The respondents came from its seven (7) colleges namely, College of Agriculture, College of Arts and Sciences, College of Business Development, Economics and Management, College of Education, College of Engineering and Computing, College of Human Ecology and Food Sciences, and College of Veterinary Medicine.

2.3 Sampling Procedure and Population

The respondents in this study were limited to the administrators and faculty members of the identified locale of the study. The survey utilized one hundred fifteen (115) respondents coming across the identified seven colleges in the University. Students were utilized to rate the teaching effectiveness of the teachers. A stratified multi-stage sampling with proportionate allocation of respondents in the identified seven colleges was used in this study. The first stage of sampling was the identification of the administrators and faculty members who answered the TQM related questions.

A complete enumeration of the administrators, to include the deans and the department chairs, and a stratified random sampling with proportionate allocation by college for the faculty members was employed.

Second sampling stage was intended in the identification of the students who served as respondents on the teaching effectiveness of the faculty members who were identified in the first sampling stage. It utilized a two-stage sampling – the first stage was a random sampling of class and the second stage was the random selection of five (5) students from the selected class.

2.4 Research Instrument

There were two sets of questionnaires designed to get information from the group of respondents. The first set of questionnaires on TQM, which was adopted from Grandzol and Gershon (1998), was improved and designed to be answered by the administrators and faculty members. The second set of questionnaires was patterned from Doyle (2009), which was designed for the students to rate on the teaching effectiveness of the faculty members. The survey questionnaire employs a 5-point Likert-type scale for TQM and teaching effectiveness related questions.

2.5 Validity of the Instrument

Prior to the conduct of the study, there were thirty (30) randomly selected faculty members in proportionate allocation from identified colleges who were requested to rate the instrument in order to test its validity and reliability.

2.6 Conduct of the Study and Data Gathering Technique

Two stages of data gathering were used. The first stage was a survey type of data gathering for the administrators and faculty members to answer TQM related questions. Second stage of data gathering still used a survey type for five students who were randomly selected from the chosen class to provide ratings on the teaching effectiveness.

2.7 Data Analyses

The following statistics were used in this study: (1) Means and percentages and tables of frequencies; and (2) Multiple regression analysis to investigate relationship between the dependent variable (teaching effectiveness of the faculty) and the two independent variables (implementation of TQM elements and the TQM index), which resulted from the factor analysis.

III. Discussion

3.1 Level of Implementation of the Total Quality Management Elements

Table 1 shows the level of implementation of the TQM elements, namely leadership, student focus, faculty satisfaction, and programs/services management in the University of Southern Mindanao.

In terms of *leadership*, the overall mean of 3.93 implies that the level of implementation of leadership as a TQM element is High. This means that the top management of the college showed good leadership skills. The International Management for Higher Education (IMHE, 2009) concurred that institutional leadership and decision-making bodies have a fundamental role to play in shaping the institutional quality culture. They are often the initiators of quality teaching initiatives and their approach directly affects the outcome of these initiatives.

For Student Focus, an overall mean of 4.12 hints that the implementation of the student-focus TQM element is High. This means that the college's activities are centered on the development and satisfaction of the academic needs of their students. Dela Rosa (2004) as cited by Peralta (2010), claimed that students are the key factors in shaping school outcomes, and therefore they should be the central focus of our thinking about productivity.

The overall mean of 3.91 for *faculty satisfaction* as a TQM element implies that its level of implementation is High. This implies that the University highly recognized the participation and contribution of its faculty members for the betterment of its instruction services. Sharma, et.al (2009) emphasized that employee satisfaction is supremely important in an organization because it is what productivity depends on. If your employees are satisfied, they would produce superior quality performance in optimal time and lead to growing profits. Satisfied employees are also more likely to be creative and innovative and come up with breakthroughs that allow an institution to grow and change positively with time and changing market conditions.

Finally, an overall mean of 3.90 for the TQM element - program/services management suggests that the level of implementation is High. This implies that the University is delivering quality programs and services to its clientele. The study of Malik, et.al (2010) showed that the service quality greatly influences the students' satisfaction in multiple dimensions. The essence of students' satisfaction lies in the quality of teaching and learning environment of institution. The teaching methodologies and understanding with course and tasks with a friendly attitude of teaching are the key factors affecting the academic environment of an institution. The tangible facilities like class setup, digital labs and libraries, quality and reliability of the infrastructure and other assured facilities do contribute in creating the image of excellence.

	Table 1. Level	of Implementation of the	TQM Elements	
TQM Elements			Weighted	Description
			Mean	
Leadership			3.93	High
			4.12	High
Student-focus			7012	mgn
			3.91	High
Faculty satisfaction				8
Drogroms/sory	ices managemen	+	3.90	High
1 10gi aniis/sei v	ices managemen	it.		B
Legend:	Scale	Description	Weighted	d Mean
	1	Strongly Disagree	1.00 -	1.49
	2	Disagree	1.50 - 2	2.49
	3	Neutral	2.50 - 3	3.49
	4	Agree	3.50 - 4	4.49
	5	Strongly Agree		4.50 - 5.00

TOMEN

3.2 The Total Quality Management Index for USM

Table 2 presents the Total Quality Management Index were respondents rated thirteen out of twenty indicators, as Agree which implies that the University is delivering its programs, services, and activities significant to the needs of the students, faculty members, as well as the community. Only the indicator on the rate of dropouts the college produces if continually decreasing was rated Neutral. The respondents rated the remaining six indicators Disagree which means that college accommodates feedbacks and suggestions to improve its programs and services. The overall mean of 3.81 implies that the Total Quality Management Index for the USM is High. It further means that the University performed well in its management particularly in instruction. According to Ali & Shastri (2010), The participation of all constituencies of higher educational system results in continuous improvement in the process. This facilitates more customer-friendly practices, which will result in excellence of performance in terms of quality outputs. Need for higher education is primarily based from what the customers wants in terms of output and satisfaction.

Indicators	Weighted Mean	Description
1. Our programs/curriculum usually need some kind of improvement.	3.77	Agree
2. Our programs/services have all necessary parts/features/elements.	3.73	Agree
3. Our programs/services meet students/community needs.	3.97	Agree
4. This college doesn't develop new ideas or methods in its programs/services.	1.85	Disagree
5. This college rarely reinvests in the processes it uses to provide programs/services.	2.27	Disagree
6. Productivity, in terms of yielding desired student performance is continuously improving.	4.04	Agree
7. The rate of student dropouts this college produces continually decreasing.	3.23	Neutral
8. This college wastes programs and services, resulting in costs that are needlessly inflated.	2.13	Disagree
9. The processes used in this college are very efficient in terms of converting inputs into desired student performance.	3.94	Agree
10. This college rarely receives notice of dissatisfaction from local parties about its physical/chemical/ biological impact on the surrounding community.	3.71	Agree
11. This college practices "good neighbor" relationships, participating in many community-enhancing activities.	4.29	Agree
12. This college doesn't bother collecting information from its students to measure their satisfaction.	2.26	Disagree
13. Students and faculty members' satisfaction results show improvement over time.	3.85	Agree
14. This college lacks a process to provide satisfactory responses to students' inquiries.	2.23	Disagree
15. This college has processes in place to listen to and resolve student complaints.	3.94	Agree
16. This college has very low employee turnover, i.e. most faculty members choose to remain here rather than work somewhere else.	3.50	Agree

Table 2. Total Quality Management Index

transferred f	aculty members i from their presen on with their sup	3.51	Agree	
18. Faculty abs high in this	enteeism, i.e. ch college.	1.93	Disagree	
•	mbers file very f agement in this c	ew grievances/complaints college.	3.69	Agree
20. This college collects pertinent feedbacks from faculty members to measure their satisfaction.			3.69	Agree
Mean			3.81	High
Legend:	Scale	Description	Weighted	Mean
-	1	Strongly Disagree	1.00 - 1	.49
	2	Disagree	1.50 - 2	.49
	3	Neutral	2.50 - 3	.49
	4	Agree	3.50 - 4	.49
	5	Strongly Agree	4.50 - 5	.00

3.3 Level of Implementation of TQM Elements by College a. Leadership

Table 3 shows the comparison of the level of implementation of leadership as a TQM element by college. The result revealed that there was no significant difference on the level of implementation of leadership TQM element among the colleges (F value=1.052, p value=.396). The overall mean of 3.93 suggests that good leadership was well-implemented in the colleges.

Table 3. Comparison of Level of Implementation of Leadership TQM Element by College

		Mean	Std.	Level of
College	Ν	Score	Deviation	Implementation
CA	19	4.12	.42	High
CAS	42	3.88	.48	High
CBDEM	9	3.84	.65	High
CED	11	3.89	.53	High
CENCOM	16	3.87	.39	High
CHEFS	10	4.12	.45	High
CVM	8	3.83	.33	High
Total	115	3.93	.47	High
E value -1.052^{ns}	n W	alue - 306		

F value = 1.052^{ns}

p value = .396

b. Student Focus

Table 4 presents the comparison of the level of implementation of student focus TQM element by college. No significant difference on the level of implementation was found among the colleges (F value=.720, p value=.635). The overall mean of 4.12 hints that the student focus TQM element by college was well-implemented.

		Mean	Std.	Level of
College	Ν	Score	Deviation	Implementation
CA	19	4.23	.34	High
CAS	42	4.12	.46	High
CBDEM	9	4.00	.46	High
CED	11	4.00	.64	High
CENCOM	16	4.03	.40	High
CHEFS	10	4.25	.42	High
CVM	8	4.17	.31	High
Total	115	4.12	.44	High
				-

Table 4. Comparison of level of implementation of student focus TQM element college

F value = 0.720^{ns}

p value = .635

c. Faculty Satisfaction

The level of implementation TQM element in terms of faculty satisfaction by college is presented in Table 5. Using Scheffe test, the comparison of means showed that in terms of faculty satisfaction, CA surfaced other colleges at 5% level (F value=2.529, p value=.025). Result further revealed that faculty satisfaction in other colleges was found comparable to each other. The overall mean of 3.91 suggests that faculty satisfaction as a TQM element was well-implemented in the colleges. Aziz (2021) pointed out that there is a positive and significant relationship between job satisfaction and employee commitment, where the higher the employee's job satisfaction, the higher is the employee's commitment

		by College		
	-	Mean	Std.	Level of
College	Ν	Score <u>1/</u>	Deviation	Implementation
CA	19	4.08^{a}	.33	High
CAS	42	3.99 ^{ab}	.40	High
CBDEM	9	4.01 ^{ab}	.54	High
CED	11	3.55 ^b	.61	High
CENCOM	16	3.77 ^{ab}	.40	High
CHEFS	10	3.80 ^{ab}	.40	High
CVM	8	3.87 ^{ab}	.42	High
Total	115	3.91	.44	High

 Table 5. Comparison of Level of Implementation of Faculty Satisfaction TQM Element

 by College

 $F value = 2.529^*$ p

p value = $.02\overline{5}$

 $\underline{1/}$ Means with different letter superscripts are significantly different at .05 level using Scheffe Test

d. Programs/Services Management

Table 6 presents the level of implementation of the program/services management as TQM element by college. Comparison of means using Scheffe test revealed that the implementation of programs/services management as TQM element by college differ significantly at 5% level (F value=2.184, p value=.05). Result further revealed that other colleges were found comparable with each other. An overall mean of 3.90 implies that the

level of implementation of TQM in the programs/services of the colleges was well-implemented.

		Mean	Std.	Level of
College	Ν	Score <u>1/</u>	Deviation	Implementation
CA	19	4.02 ^{ab}	.37	High
CAS	42	3.88 ^{ab}	.39	High
CBDEM	9	4.06^{ab}	.50	High
CED	11	3.90 ^{ab}	.58	High
CENCOM	16	3.65 ^b	.47	High
CHEFS	10	3.81 ^{ab}	.30	High
CVM	8	4.19 ^a	.31	High
Total	115	3.90 ^{ab}	.43	High

Table 6. Comparison of Level of Implementation of Program/Services Management TQM

 Element by College

 $F value = 2.184^*$ p va

p value = .05

 $\underline{1/}$ Means with different letter superscripts are significantly different at .05 level using Scheffe Test

e. TQM Index by College

Table 7 shows the comparison of the TQM index by college. Comparison of means using Scheffe test, revealed that CA surfaced other colleges at 5% level of significance (F value=2.452, p value=.029). The remaining colleges were found comparable. The overall mean of 3.81 suggests that the TQM index in the colleges was High, which means that TQM in the University was well-implemented. Zhang, et.al. (2008) pointed out that the college reputation directly influences student expectation, therefore, to enhance student satisfaction, the colleges should first enhance their own education qualities.

Table 7. Comparison of TQM Index by College				
		Mean	Std.	Level of
College	Ν	Score <u>1/</u>	Deviation	Implementation
CA	19	3.93 ^a	.36	High
CAS	42	3.87 ^{ab}	.32	High
CBDEM	9	3.78 ^{ab}	.51	High
CED	11	3.89 ^{ab}	.36	High
CENCOM	16	3.55 ^b	.32	High
CHEFS	10	3.72 ^{ab}	.23	High
CVM	8	3.74 ^{ab}	.14	High
Total	115	3.81 ^{ab}	.35	High

 Table 7. Comparison of TQM Index by College

F value = 2.452^* p value = .029

 $\underline{1/}$ Means with different letter superscripts are significantly different at .05 level using Scheffe Test

f. Teaching Effectiveness of USM

As shown in Table 8, the respondents rated twenty-three out of twenty-five indicators of the teaching effectiveness of USM, as Most of the Time. The responses imply that the students learning experiences was well-satisfied. On the other hand, when asked if

the instructor dismissed the class early, the response was Sometimes, and most responded that the instructors in USM cancelled the class Rarely. The disruptions of classes are due to some factors, which the University cannot control, such as scheduled and unscheduled activities of both teachers and students. An overall mean of 4.01 implies that the teaching effectiveness of USM is Very Satisfactory. The same qualitative description is given based on the overall student impression on teaching effectiveness of USM with a mean of 4.04. Esleta (2008) stressed that the implementation of the school classroom discipline, motivation of students, dealing with individual differences and the presence of support system are significant predictors of the effectiveness of instruction.

Table 8. Teaching Effective	eness	
Indicators	Weighted Mean	Description
0. 1. The learning objectives set out in the syllabus for the class have been covered by the instructor.	4.06	Most of the Time
2. Students are getting regular and timely feedback from the instructor on their learning progress.	3.76	Most of the Time
1. 3. The instructor dismissed the class early.	2.99	Sometimes
2. 4. The instructor cancelled class.	2.21	Rarely
3. 5. The professor was on time for the class each day.	3.83	Most of the Time
4. 6. The professor was available for help outside of class time.	3.84	Most of the Time
5. 7. The professor kept to the timeframe announced to students.	3.79	Most of the Time
6. 8. The teacher provided a clear explanation for the grades that were assigned to all work and tests.	4.07	Most of the Time
7. 9. The instructor spoke clearly and could be easily understood.	4.17	Most of the Time
8. 10. The professor was willing to answer students' questions during class or provided other opportunities for the questions to be answered.	4.31	Most of the Time
9. 11. The teacher offered regular encouragement to the students to do well.	4.22	Most of the Time
10. 12. The teacher sought students' input on issues that directly impacted their learning (discussion guidelines, assessment methods, paper or project topics as examples).	3.92	Most of the Time
13. The professor made it clear why (or gave the learning purpose) students were to do the assignments given both in and outside of class.	3.94	Most of the Time
 11. 14. The teacher kept the classroom environment positive for learning (didn't allow sleeping, talking, doing other work, phone calls etc.). 	4.05	Most of the Time
12. 15. The textbook or other supplementary material was helpful in their learning of the course material.	4.07	Most of the Time
13. 16. The professor provided a clear set of learning objectives, or goals, or purpose statements etc. for	4.15	Most of the Time

 Table 8.
 Teaching Effectiveness

the informa 14. 17. The pa	tion they receiv ce of the class v	udents could organize ed in the class. vas reasonable for the	3.81	Most of the
individual s			5.01	Time
-	ofessor kept to t outlined in the s	he rules, policies and yllabus.	4.02	Most of the Time
0. 19. The tea for the cour	-	used were appropriate	4.23	Most of the Time
1. 20. The cor course.	itent covered wa	as appropriate for the	4.23	Most of the Time
2. 21. The co	ntent covered w	vas up-to-date.	3.99	Most of the Time
3. 22. The ass student lear	-	appropriate for aiding	4.12	Most of the Time
	tudents learned	has real world	4.23	Most of the Time
		will help them in future	4.40	Most of the Time
• •	was appropriate	help or support given to the learning goals	4.28	Most of the Time
Mean			4.01	Very Satisfactory
Overall			4.04	Very Satisfactory
Legend:	Scale	Description	Weigh	ited Mean
	1	Never	1.00	- 1.49

Legend:	Scale	Description	Weighted Mean
	1	Never	1.00 - 1.49
	2	Rarely	1.50 - 2.49
	3	Sometimes	2.50 - 3.49
	4	Most of the Time	3.50 - 4.49
	5	All the time	4.50 - 5.00

g. Teaching Effectiveness by College

Table 9 shows the results on the teaching effectiveness by college based on the mean ratings of students. Observed differences were found significant at 5% level (F value=6.277, p value=.000). Comparison of means further showed that in terms of teaching effectiveness, CVM was rated higher than CAS, CENCOM, CED, and CHEFS, which were found comparable with each other. CA was found comparable with CBDEM. It can be noted therefore, that teaching effectiveness of all faculty members in different colleges was high (4.01).

Table 9.	Comparison	of Teaching	Effectiveness b	by College	Based on	Overall Mean
	1	0		5 0		

Ratings Mean Std. Teaching Score1/ Performance College Deviation n CA 95 4.09ab .66 Very Satisfactory CAS 210 3.98a .57 Very Satisfactory **CBDEM** 45 4.16ab .42 Very Satisfactory

CED	55	3.84a	.55	Very Satisfactory
CENCOM	80	3.98a	.56	Very Satisfactory
CHEFS	50	3.81a	.51	Very Satisfactory
CVM	40	4.34b	.44	Very Satisfactory
Total	575	4.01	.57	Very Satisfactory

F value = 6.277^* p value = .000

1/ Means with different letter superscripts are significantly different at .05 level using Scheffe Test

Table 10 presents the result based on the students' overall impression on the teaching effectiveness by college. The result revealed that CA got higher mean rating compared to CBDEM, CVM, CAS, CENCOM, CHEFS and CED. Observed differences were found significant at 5% level (F value=8.952, p value=.000). However, it is interesting to note that the overall mean of 4.04 implies that the general impression of the students on the teaching effectiveness by college was Very Satisfactory.

 Table 10. Comparison of Teaching Effectiveness by College Based on Overall Impression

 of Students

		Mean	Std.	Teaching
College	n	Score <u>1/</u>	Deviation	Performance
CA	95	4.33	.76	Very Satisfactory
CAS	210	4.05	.73	Very Satisfactory
CBDEM	45	4.22	.70	Very Satisfactory
CED	55	3.60	.78	Very Satisfactory
CENCOM	80	4.00	.68	Very Satisfactory
CHEFS	50	3.68	.62	Very Satisfactory
CVM	40	4.22	.70	Very Satisfactory
Total	575	4.04	.75	Very Satisfactory

F value = 8.952^*

p value = .000

3.4 Influence of the Level of Implementation of TQM Elements and TQM Index on the Teaching Effectiveness

The data showing the analysis of variables on the influence of the level of implementation of TQM elements and TQM index on the teaching effectiveness are presented in the Table 11.

The result shows that the implementation of programs/services management came out as the best predictor (r=.78, p=.18) of the influence of TQM implementation in the teaching effectiveness in the University. The combined contribution of the TQM elements and TQM index for the operation of the University, posted a significant influence. It is interesting to note that 87% of the teaching effectiveness can be attributed to the implementation of the TQM. Only 13% can be attributed to other variables not included in the study, which were beyond the control of the University. Shah, et.al (2010) emphasized that student judgment of education is not based solely on what happens in a traditional classroom; it involves the total student experience including course design, quality of teachers, relevant support services, learning infrastructure, information technology, enabled learning, and campus life.

	Unstandardized Coefficients		Standardized Coefficients	_	_
Factors	β	Std. Error	β r	t	Probability
(Constant)	2.26	2.27		.99	.43
Leadership	44	.80	28	55	.64
Student focus	.29	.91	.15	.31	.78
Faculty	.31	.32	.29	.98	.43
Program	.87	.43	.78	2.01	.18
TQM index	63	.52	41	-1.21	.35
F value = 2.704	Probabi	lity: .29	R =0.93	3	$R^2 = 0.8$

 Table 11. Influence of level of implementation TQM elements and TQM index on the teaching effectiveness

F value = 2.704 Probability: .29 ns – not significant at .05 level

Table 12 shows the analysis on the influence of the level of implementation of the TQM elements and TQM index on the teaching effectiveness based on overall impression of students. Analysis of data revealed that faculty satisfaction came out as the best predictor (r=.84, p=.11) of the TQM implementation that influenced the teaching effectiveness in the University. Further, the combination of the TQM elements and TQM index for the operation of the University, showed a significant influence on the teaching effectiveness. Eighty-six percent (86%) of the teaching effectiveness can be attributed to the implementation of TQM. The remaining 13% can be attributed to other variables not included in the study, which were beyond the control of the University. Suryanarayana, et.al (2010) pointed out that accomplishment of the goals of education and the objectives of teaching is possible when teachers are competent in teaching with satisfaction in their profession. These two variables are conceptually independent and practically interactive. The quality or effectiveness of a teacher is considered to be associated with his attitudes towards his profession, his satisfaction with his values and adjustment in the job and professional interest. Rumbi, et.al. (2021) noted significant influence of motivation, leadership and work environment on employee performance, where motivation was the most dominant factor in affecting employee performance.

	Unstandardized Coefficients		Standardized Coefficients		
-	0		β	Т	Probability
Factors	β	Std. Error	<u> </u>		-
(Constant)	.87	3.34		.26	.82
Leadership	14	1.18	06	12	.92
Student focus	36	1.34	14	27	.81
Faculty	1.29	.47	.84	2.73	.11
Program	.54	.64	.34	.85	.49
TQM index	51	.77	24	67	.57

 Table 12. Influence of Level of Implementation TQM Elements and TQM Index on the Teaching Effectiveness Based on Overall Impression of Students

 $R^{2} =$

F value = 2.477 0.861 ns – not significant at .05 level

IV. Conclusion

Based on the findings of the study, the following are hereby recommended:

- Since the result revealed that the higher the implementation of TQM, the higher is 1. the teaching effectiveness, University of Southern Mindanao must continue to strengthen its implementation of TQM to further elevate its academic performance.
- Faculty satisfaction and programs/services management came out as the most 2. influential element of TQM to teaching effectiveness therefore, it must be continually improved.
- 3. College Deans and Department Chairs must strategize ways to improve the implementation of TQM elements such as faculty satisfaction and the management of programs and services in their college;
- The same study be conducted focusing on other functions of the University of 4. Southern Mindanao, such as research, extension, and production; and
- The same study be conducted to other State Universities and Colleges in Region XII, 5. between the SUCs in the same region, or between public and private institutions.

References

- Ali, Murad and Rajesh Kumar Shastri. (2010). Implementation of Total Quality Management in Higher Education. Asian Journal of Business Management. Vol. 2, No. 1.
- Aziz, Azhar. (2021). Relationship between Job Satisfactions with Employee Commitment at PT. Barumun Agro Sentosa. Vol. 4. No.3. BIRCI-Journal
- Cole, Bryan R. (1995). Applying Total Quality Management Principles to Faculty Selection. Netherlands: Kluwer Academic Publishers.
- Doyle, Terry. (2009) Evaluating Teacher Effectiveness Research Summary. (http://www.ferris.edu/fctl/Teaching and Learning Tips/Research%20on%20Stude nts%27%20Evalution%20of%20Faculty%20Teaching/EvalTeachEffec.htm) March 21, 2011.
- Esleta, Benjamin G. (2008). Effectiveness of Instruction Among Secondary School Teachers in the First District of Cotabato. Dissertation. USM, Kabaca, Cotabato.
- Grandzol, John R. and Mark Gershon. (1998). A Survey Instrument for Standardizing TQM Modeling Research. International Journal of Quality Science. Vol. 3, No. 1. USA: MCB University Press.
- International Management in Higher Education (IMHE). (2009). Learning our Lesson: Quality Review of Teaching in Higher Education. (http://www.oecd.org/edu/imhe/qualityteaching) March 19, 2011
- Malik, Muhammed Ehsan, et.al. (2010). The Impact of Service Quality on Students' Satisfaction in Higher Education Institutes of Punjab. Journal Management Research. Vol. 2. No. 2. Macrothink Institute.
- Peralta, Meilrose B. (2010). Level of School-Based Management Practices and Quality of Basic Education Performance Indicators of Schools in Kidapawan City Division. Dissertation. USM, Kabacan, Cotabato.
- Rumbi, Shantini et.al. (2021). The Effects of Motivation, Leadership, and Work Environment on Employee's Performance: A Case of Local Government Agency in

Emerging Country. Vol. 3 No. 2. BIoHS-Journal.

- Shah, Mahsood et.al. (2010). Monitoring Student Attrition to Enhance Quality. Quality Approaches in Higher Education. Vol. 1, No.2.
- Sharma, R.D. et.al. (2009). Job Satisfaction of University Teachers: An Empirical Study. Journal of Services Research.
- Suryanarayana, N.V.S. et.al. (2010). Teaching Competency and Teacher Job Satisfaction Among Secondary School Teachers. Articles Base. India.
- Zhang, Linying, et.al. (2008). Empirical study on the Student Satisfaction Index in Higher Education. International Journal of Business and Management. Vol. 3, No. 9. China.