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**INTERNSHIP REFLECTIVE ESSAY OF FIFTH YEAR COMPUTER  
ENGINEERING STUDENTS DURING 1<sup>ST</sup> SEMESTER SY 2012-2013: AN  
ASSESSMENT**

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**ABSTRACT**

This assessment aimed to analyze the outcomes of the internship program of the BS Computer Engineering students enrolled during 1<sup>st</sup> Semester SY 2012-2013 in terms of Internship Reflective Essay Writing. This study determined the writing communication skill of the students using the reflective journal rubric prepared by the practicum coordinator. The questions were given to the interns before they started the training. After the 600 hours of internship, they need to submit the reflective essay composed of ten questions as part of the Internship final requirement of documents. The internship reflective essay writing of the 5<sup>th</sup> Year Computer Engineering students obtained an over-all satisfactory rating wherein reflection criterion has the highest composite mean while mechanics criterion obtained the least. There is a significant difference among the criterion used in the rubric of internship reflective essay writing of 5<sup>th</sup> Year Computer Engineering students where mechanics obtained a significant lower mean among the four criteria.

**KEYWORDS:** Computer Engineering, Internship Program, LPU, Reflective Essay

**INTRODUCTION**

This assessment aims to analyze the outcomes of the internship program of the BS Computer Engineering students enrolled during 1<sup>st</sup> Semester SY 2012-2013. This study would like to determine the writing communication skills of the students using the reflective journal rubric prepared by the practicum coordinator. The questions were given to the interns before they start the training on their respective companies and industries. After the 600 hours of training, they need to submit the reflective essays for ten questions as part of the Internship final requirement of documents.

Learning portfolio can be included in syllabus and materials, to enable students to acquire the habit of self-reflection, self-direction, and self-evaluation which are embedded in the portfolio process (Hemmati & Soltanpour, 2012).

Language has an essential role in helping learners develop their thinking and creative skills through using the language in several processes such as, relating, commenting, connecting, predicting, recalling, comprehending, applying, associating, analyzing, synthesizing, evaluating and solving problems (Ibnian, 2011).

A rubric matrix is developed as an assessment tool with ordered rank of descriptive characteristics of criteria that organizations wish to evaluate (Rahman & Hassani, 2011). The rubric has four criteria namely, quality of information, organization, mechanics and reflection. In terms of quality of instruction, it measures how the information were clearly relates to the main topic or question and if the writing includes several supporting details; when it comes to organization, it considers how the Information were very organized with well-constructed paragraphs and clear transitions; in terms of mechanics, it finds out whether the answer contains grammatical, spelling or punctuation errors while in reflection criterion, it measures the strong evidence of critical thought, reflection and depth.

This study would be beneficial to the future interns of BS Computer Engineering program so that they will be given enough insights on how to answer competently the questions posted in the final requirements of internship document being required by the College of Engineering. The findings of the study will serve as the basis for the Computer Engineering department to provide trainings on how to enhance more the writing communication skill of the students through trainings and seminars.

### **OBJECTIVES OF THE STUDY**

This study aimed to assess the outcomes of the internship program of the Fifth year Computer Engineering students in terms of reflective essay writing. Specifically, this study was guided by the following objectives.

1. To determine the writing communication skill of the Fifth Year Computer Engineering students in terms of:
  - 1.1 Quality of Information;
  - 1.2 Organization;
  - 1.3 Mechanics; and
  - 1.4 Reflection;
2. To determine if there is a significant difference on the scores among the criteria used on the internship reflective essay rubric; and

3. To determine the implication of the findings of the study to the design of the internship program of the College of Engineering.

## MATERIALS AND METHODS

This study used a descriptive method of research wherein the quantitative data were gathered using a documentary analysis of the assessment on the internship reflective essay of the 15 Fifth year Computer Engineering students who underwent their Internship during 1<sup>st</sup> Semester, SY 2012-2013 on different companies and manufacturing industries. Weighted mean, rank and analysis of variance were the statistical treatments utilized in the study.

To interpret the result of the writing communication skill of the Fifth Year Computer Engineering students in terms of quality of information, organization, mechanics and reflection, the researcher was offered four options. To arrive at a verbal description of each item, the arbitrary numerical guide was followed:

Weight	Range	Descriptive Rating
4	3.50 – 4.00	Excellent
3	2.50 – 3.49	Satisfactory
2	1.50 – 2.49	Fair
1	1.00 – 1.49	Poor

## RESULTS AND DISCUSSION

Table 1 shows the writing communication skill of the Fifth year Computer Engineering Students. When the interns were asked this Question number 1, “In technical aspect related to your course being taken, what have you learned from your internship? Give examples and explain”, they obtained a “**satisfactory**” rating of 3.29 on rank number 1 followed by question number 10 regarding their recommendation of their companies to become the training ground of other computer engineering students as well as the best assets and characteristics of this company they would like to promote and emphasize to the future trainees which obtained a weighted mean score of 3.27 on rank number 2.

Table 1  
Writing Communication Skill of the Fifth Year Computer Engineering Students

Questions	Quality of information	Organization	Mechanics	Reflection	WM	VI	Rank
Q1	3.43	3.21	2.79	3.71	3.29	Satisfactory	1
Q2	3.57	3.07	2.64	3.14	3.11	Satisfactory	8
Q3	3.43	3.00	2.71	3.64	3.20	Satisfactory	4.5
Q4	3.50	3.07	2.79	3.50	3.21	Satisfactory	3
Q5	3.29	3.07	2.79	3.50	3.16	Satisfactory	6.5
Q6	3.21	2.93	2.79	3.36	3.07	Satisfactory	9
Q7	3.36	3.21	2.86	3.36	3.20	Satisfactory	4.5
Q8	3.21	3.14	2.79	3.50	3.16	Satisfactory	6.5
Q9	3.21	3.07	2.64	3.29	3.05	Satisfactory	10
Q10	3.36	3.36	2.79	3.57	3.27	Satisfactory	2
<b>Composite Mean</b>	<b>3.36</b>	<b>3.11</b>	<b>2.76</b>	<b>3.46</b>	<b>3.17</b>	<b>Satisfactory</b>	

They also obtained “satisfactory” rating of 3.21 weighted mean score in answering Question number 4 regarding their plans of working in the companies where they were assigned as interns and how the employees were compensated.

Questions number 7 and 3 obtained a weighted mean score of 3.20 which denotes “satisfactory” rating regarding the expression of their talents skills in terms of communication, logical ability and inter-personal relationship as well as their memorable events or situations they won’t forget during practicum.

Another “satisfactory” rating with 3.16 weighted mean score on rank number 6.5 was given to the answers in questions number 5 and 8 regarding the discipline and behavior of their co-employees during working and outside office hours as well as the things they really wanted to do inside the company which they haven’t given a chance to do such and the reasons what hold them back in doing those things.

Answers of the interns in question number 2 regarding the work – values they acquired from the work environment and people around them were given low rating of 3.11 on rank number 8 because most of their answers were copied from the definitions of some of the examples of work values and they did not cite their own experiences of these values.

Answers in question number 6 were not that really satisfactory because they did not discuss further the attitude and the leadership capabilities of their immediate superior. This item obtained a weighted mean score of 3.07 on rank number 9 with “satisfactory” rating.

Interns were given low scores on question number 10 because most of them did not elaborate their reasons why did they answer “No”, if another company offers them to work as trainee at the middle of their OJT, will they take it to leave the present work place or will they turn down the offer. This item obtained a weighted mean score of 3.05 on rank number 10.

The composite mean score of 3.17 implies that the internship reflective essay writing of the 5<sup>th</sup> Year Computer Engineering students obtained an over-all “satisfactory” rating with reflection criterion has the highest composite mean score of 3.46 while mechanics criterion obtained the least.

Table 2 reveals the difference on the scores among the criteria used on the reflective essay rubric. The computed f-value of 58.909 is greater than the critical value of 4.39 with significant value of .000 which is less than the 0.01 level of significance, therefore the null hypothesis of no significant difference is rejected.

Table 2

Difference on the Scores among the Criteria Used on the Internship Reflective Essay Rubric Critical Value at 0.01 = 4.39

	Sum of Squares	df	Mean Square	F	Sig.	Remarks	Decision
Between Groups	2.895	3	.965	58.909	.000	Significant	Reject
Within Groups	.590	36	.016				
Total	3.485	39					

This implies that there is a significant difference among the criterion used in the rubric of internship reflective essay writing of 5<sup>th</sup> Year Computer Engineering students. Table 3 shows that comparison among these criteria further explains the details of the differences.

Table 3 shows the multiple comparisons of the criteria used on the internship reflective essay rubric.

Table 3  
Multiple Comparisons of the Criteria Used on the Internship Reflective Essay Rubric

(I) types	(J) types	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Quality	Organization	.24400(*)	.05724	.002	.0762	.4118
	Mechanics	.59800(*)	.05724	.000	.4302	.7658
	Reflection	-.10000	.05724	.396	-.2678	.0678
Organization	Quality	-.24400(*)	.05724	.002	-.4118	-.0762
	Mechanics	.35400(*)	.05724	.000	.1862	.5218
	Reflection	-.34400(*)	.05724	.000	-.5118	-.1762
Mechanics	Quality	-.59800(*)	.05724	.000	-.7658	-.4302
	Organization	-.35400(*)	.05724	.000	-.5218	-.1862
	Reflection	-.69800(*)	.05724	.000	-.8658	-.5302
Reflection	Quality	.10000	.05724	.396	-.0678	.2678
	Organization	.34400(*)	.05724	.000	.1762	.5118
	Mechanics	.69800(*)	.05724	.000	.5302	.8658

\* The mean difference is significant at the .05 level.

Quality of information is significantly higher than the mean scores of organization and mechanics criteria, while organization is significantly higher than mechanics. Meanwhile, reflection is significantly higher than organization and mechanics. Thus, mechanics obtained a significant lower mean among the four criteria.

The result suggests that there is a need to improve the ability of the students to write essays with minimal errors in grammar, spelling and punctuation marks but more on the area of correct grammar usage. They have enough grasp on the quality of information they provided in the reflective essay and the organization has a little need to improve as well as the reflection which is the core purpose of their writing.

### Implication

The findings of the study will serve as baseline information for the College of Engineering to continuously utilize rubric in assessing the skills of the students. Teachers must strengthen the delivery of their classroom instruction especially in writing communication so that the students has the confidence to convey and express their ideas, opinions and thoughts regarding experiences in manufacturing firms and companies when the students reached Fifth year.

Rubric is a useful tool to evaluate objectively the capability of the students in certain areas that need improvement. Practicum coordinator may revise or enhance the questions utilized in the study to acquire more competent responses that could stimulate their interest to answer comprehensively.



Trainings and other educational programs may be proposed and implemented by the College of Engineering and the rest of the recognized student organizations of the college to help the students acquire the appropriate skills they need before they leave the portals of the university. Having the right confidence towards writing would give a greater opportunity for the students to excel in many areas of their respective fields of undertakings.

### **CONCLUSION AND RECOMMENDATION**

The internship reflective essay writing of the 5<sup>th</sup> Year Computer Engineering students obtained an over-all satisfactory rating wherein reflection criterion has the highest composite mean while mechanics criterion obtained the least. There is a significant difference among the criterion used in the rubric of internship reflective essay writing of 5<sup>th</sup> Year Computer Engineering students where mechanics obtained a significant lower mean among the four criteria. Result suggests that there is a need to improve the ability of the students to write essays with minimal errors in grammar and strengthen more on sharing their insights.

Students who will undergo internship may be given enough orientation on how they should provide their responses to the questions posted in the final requirements of the internship document. English teachers must strengthen the quality of English instruction and they must provide more exercises and activities that will enhance the writing communication skill of the students. The Department Chair and Dean of the College of Engineering must provide seminars and training programs that will improve the capability of the students to respond competently in the questions being given not only by the Engineering Department but also to the questions of the companies and industries that require their writing ability to yield quality outcomes.

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## Appendix A

### Questions for Reflective Essay Writing

1. In technical aspect related to your course being taken, what have you learned from your internship? Give examples and explain.
2. What are the work – values you have learned from the work environment and people around you? Please cite at least 5 work values and explain.
3. What are the memorable events or situations you won't forget during practicum, and why?
4. Do you have any plans of working there in the future? Why or why not? Do they offer good salaries to their employees? Are the employees well compensated?
5. What can you say about the discipline and behavior of the employees during working and outside office hours? Do they have the right attitude towards work?
6. How would you describe the attitude of your immediate superior/s? Are they approachable, friendly or are they difficult to work with? How would you assess their leadership skills?
7. Have you completely and competently expressed your talents and skills in terms of communication, logical ability and inter-personal relationship? In what ways you have demonstrated these skills?
8. What are the things you really wanted to do inside the company which you haven't given yourself a chance to do such? What holds you back in doing those things?
9. If another company offers you to work with them as their trainee at the middle of your OJT on this company where you get first accepted, will you take it to leave the present work place or will you turn down the offer?
10. Will you recommend this company where you get accepted to become the training ground of your co-students from College of Engineering in the near future? Why or why not? What are the best assets and characteristics of this company would you like to promote and emphasize to the future trainees?

**Appendix B**  
**Reflection Paper Rubric**

<b>CATEGORY</b>	<b>Excellent 4</b>	<b>Satisfactory 3</b>	<b>Fair 2</b>	<b>Poor 1</b>
<b>Quality of Information</b>	Information clearly relates to the main topic. It includes several supporting details.	Information mostly relates to the main topic. It provides some details.	Information somewhat relates to the main topic. Few details are given.	Information somewhat relates to the main topic. Details are missing.
<b>Organization</b>	Information is very organized with well-constructed paragraphs and clear transitions.	Information is organized with well-constructed paragraphs.	Information is organized, but paragraphs are not well-constructed.	The information appears to be disorganized or incomplete.
<b>Mechanics</b>	No grammatical, spelling or punctuation errors.	1-3 grammatical, spelling or punctuation errors.	3-5 grammatical, spelling or punctuation errors.	More than 5 grammatical, spelling or punctuation errors.
<b>Reflection</b>	Shows strong evidence of critical thought, reflection and depth.	Contains some critical thought, reflection and depth.	Some attempt at critical thought and reflection has been attempted, but primarily recalls details.	Merely states details of experience.