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Formative assessment on the implementation of senior High school program at the University of Rizal System, Philippines

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Abstract
The study aimed to assess the implementation of the Senior High School program in the University of Rizal System in the last two years. The study made use of the descriptive research utilizing evaluation method. The participants of the study were the one hundred twenty-one (121) Senior High School graduates of University of Rizal System Antipolo, Morong, and Tanay during the School Year 2017-2018. The study found out that the graduates obtained an over-all Quality Point Average (QPA) of 89.58 with three hundred fifty-seven (357) academic and seventy-six (76) non-academic awards. Most of the faculty members taught the subjects are assistant professors I and III with a license to teach. Instructional facilities are available but are not enough to cater to the needs of the graduates. The respondents' assessment on the implementation of the program was outstanding in the area of administration, faculty, and graduates, very satisfactory in the curriculum, and satisfactory in instructional facilities.

Keywords: formative Assessment, implementation, senior high school program

1. Introduction

Since the beginning of the 21st century, the government has taken firm a definite step towards the improvement of the Philippine Educational System through enhancing its basic education. Republic Act No. 10533, otherwise known as the "Enhanced Basic Education Act of 2013", Sec. 4 stated that "The enhanced basic education program encompasses at least one (1) year of kindergarten education, six (6) years of elementary education, and six (6) years of secondary education, in that sequence. Secondary education includes four (4) years of junior high school and two (2) years of senior high school education". This provision clearly emphasizes that the implementation of the Senior High School program in the country is a reality. The Department of Education schools and some Private Schools, Local Government and State Universities and Colleges (SUCs) enjoined the implementation of the Senior High School program on June and August 2016. The University of Rizal System as a State University implemented the Senior High School Program as permitted by the Department of Education. Similarly, the University of Rizal System Board of Regents approved a Resolution No. 050-086-15 on the offering of Senior High School Program. The Senior High School program implementation in the University should be assessed in such a way that the Department of Education can prepare a comprehensive report needed in the country. Magno, Carlo & Piosang (2016) cited that there are several assessment schemes on the implementation of Senior High School in the Philippine Basic Education. These are the placement of students in the senior high school tracks, classroom-based assessment, assessment of achieved competencies, participation in international benchmarking of competencies, College readiness assessment, and career assessment. In recent years in the Philippines, studies were concentrated in the readiness of schools in the offering of Senior High School program.

Acosta and Acosta (2016) [2] studies on teachers' perceptions on Senior High School Readiness of Higher Education Institutions in the Philippines revealed that "there are five factors affecting the readiness in the implementation of Senior High School Curriculum. Mohammad (2016) [12] study on perceptions of the parents, students and the community on the implementation of k – 12 Basic Education Program found out negative and positive perceptions of parents, students, and community. Combalicer (2016) [6] study on the best practices and problems in the initial implementation of the K+12 curriculum among teachers showed that there were no identified best practices in learning resources, as well as, teaching strategies and techniques while the following were the top ten best practices in the areas of teacher preparation/readiness, curriculum enhancement, and student preparation/readiness. Estonanto (2017) [7] found out that there was low acceptability of the curriculum. In addition, Rabacal and Alegato (2017) [20] revealed that there was a very high extent of opportunities on the implementation of the STEM K-12 program in terms of curriculum and instruction, faculty qualifications, learning resources, and physical plant and facilities as claimed by the administrators. Morever, Canezo (2016) [4] in the study on the implementation of Senior High School revealed that the implementers were aware of the background and rationale of the program. Ramos (2018) [21] manifested that the state of implementation of the Senior High School Program encountered several problems.

Previous studies reviewed failed to find out how the implementation of the Senior High School program in State Universities and Colleges as a partner institution in offering this education development. Hence studies on "Formative assessment on the implementation of Senior High School program" is necessary. If this study was not conducted the Department of Education will not be able to complete their report on the implementation of Senior High School program in the country. Aside from this, the study serves as one of the bases of DepEd in crafting a policy relative to the implementation of the Senior High School curriculum in

State Universities and Colleges and other partner institutions. The study aimed to assess the implementation of the Senior High School Program of the University of Rizal System. It determined the status, and perceptive assessment of learners and teachers on the implementation of the program in the University.

2. Materials and Methods

The study made use of descriptive of research using evaluation method. The method was used through the questionnaire-checklist and documentary analysis. The questionnaire-checklist was developed to find out the perceptive assessment of the respondents on the implementation of Senior High program in the University. The documentary analysis was used to determine the status of the Senior High School program in various areas through the available documents.

The study was conducted in the three (3) campuses of the University of Rizal System (URS), Province of Rizal offering Senior High School Program with ninety-seven (97) faculty members and the one hundred twenty-one (121) graduates of Senior High School (SHS) program. The total number of faculty members were totally enumerated and selected through incidental sampling.

The data came from the perceptions of the teachers expressed on the questionnaire-checklist developed to answer specific questions in the study and the official documents. The questionnaire-checklist on Implementation of Senior High School Program for Teachers/Graduates. The checklist consisted of five (5) major parts such as graduates, faculty members, curriculum, instructional facilities, and administration. It was evaluated by five (5) senior high school principals in the Division of Rizal and pilot tested in five (5) senior high school teachers and five (5) senior high school learners in the Baras-Pinugay National High School.

3. Results and Discussions

Status of Implementation in terms of graduates, faculty members, curriculum, instructional facilities, and administration

Table 1: Frequency and Percentage of Graduates

Career Track	URS Antipolo		URS Morong		URS Tanay		Total	%
	f	%	f	%	f	%		
1. STEM	30	35.71	181	62.20			211	50.12
2. ABM	36	42.86			35	76.09	71	16.86
3. HumSS			91	31.27			91	21.62
4. TVL	18	21.43	19	6.53	11	39.91	48	11.40
Total	84	100	291	100	46	100	421	100

Legend: STEM-Science, Technology, Engineering and Mathematics
ABM - Accountancy Business and Management hummus - Humanities and Social Sciences
TVL - Technology and Vocational Livelihood Track
URS - University of Rizal System
% - percent
f - Frequency

As presented in table 1, the STEM strand has the highest frequency of 211 or 50.12%, while TVL strands have the lowest frequency of 48 or 11.40%. The data shows that graduates in Senior High Schools are willing to take college courses related to Science, Technology, Engineering, and Mathematics and graduates have the inclination to work in industries. In other words, the Senior High Graduates of the University of Rizal System would like to continue college education rather than working in various industries.

Table 2: Mean Performance of Graduates

Career Track	URS Antipolo		URS Morong		URS Tanay		Over-All Mean	
	Mean	VI	Mean	VI	Mean	VI	Mean	VI
1. STEM	89.98	O	92.43	O	-	-	91.21	O
2. ABM	90.6	O	-	-	89.29	VS	89.95	O
3. HumSS	-	-	90.73	O	-	-	91.00	O
4. TVL	89.19	VS	87.84	VS	87.67	VS	88.23	VS
Average	90.00	O	90.33	O	88.50	VS	89.58	O

The graduates of STEM, HumSS, and ABM strands have high mean QPA of 91.21, 91.00, and 89.95 respectively verbally interpreted as 'Outstanding', while TVL track has a mean QPA of 88.23 interpreted as 'Very Satisfactory'. The result indicates that the performance of graduates in the academic tracks is high compared to the TVL track. The findings illustrate that graduates from STEM, HumSS, and ABM strands perform better than those graduates in TVL track.

Table 3: Frequency and Percentage of academic Awards of Graduates

	Awards	URS Antipolo		URS Morong		URS Tanay		Over-all	
		f	%	f	%	f	%	f	%
Academic	1. With Highest Honors	0	0	2	0.91	0	0	2	0.58
	2. With High Honors	3	5.45	60	27.27	5	22.73	68	19.05
	3. With Honors	52	94.55	158	71.82	17	77.27	287	80.39
Total		55	100	220	100	22	100	357	100
Non-Academic	1. Outstanding Leadership Award	0	0	2	8.00	0	0	2	2.63
	2. Outstanding Research Award	0	0	12	48.00	18	35.29	30	39.47
	3. Outstanding Performance in Athletics	0	0	3	12.00	0	0.00	3	3.95
	4. Outstanding Performance in Arts	0	0	3	12.00	0	0.00	3	3.95
	5. Outstanding Performance in Communication Arts	0	0	5	20.00	0	0.00	5	6.58
	6. Outstanding Performance in Math	0	0	0	0.00	2	3.92	2	2.63
	7. Outstanding Performance in Social Science	0	0	0	0.00	4	7.84	4	5.26
	8. Outstanding Performance in Work Immersion	0	0	0	0.00	27	52.94	27	35.53
Total		0	0	25	100	51	100	76	100

Table 3 shows that out of 421 graduates, 357 got academic awards with distributions as with highest honors, 2 or 0.58%, with high honors, 68 or 19.05% and with honors, 287 or 80.39%. The data illustrate that there are plenty of graduates who got with honors. On the other hand, most of the graduates, 30 or 39.47% have outstanding research award and 27 or 35.53% have outstanding performance in work immersion and few. On the other hand, 2 or 2.63% of the graduates have outstanding leadership and performance in mathematics. The result is in consonance with the scale prescribed by the DepEd Order No. 36, s. 2016.

Table 4: Frequency and Percentage Distribution of Highest Educational Attainment of Faculty Members

Highest Educational Attainment	frequency	Percent
Doctor of Philosophy	2	2.22
Doctor of Education	2	2.22
Master of Arts in Agriculture	4	4.44
Master of Science	1	1.11
Master of Arts in Teaching	27	30.00
Master of Arts in Education	33	36.67
Master in Management	2	2.22
Master of Technology Education	1	1.11
Master in Business Administration	5	5.56
Bachelor of Science in Education	3	3.33
Bachelor of Science	5	5.56
Bachelor of Arts	2	2.22
Bachelor of Business Management	1	1.11
AB/BS with Units in Education	2	2.22
Total	90	100

As presented in Table 4, most of the faculty members teaching the program are Master of Arts in Education with a frequency of 33 or 36.67%, followed by Master of Arts in Teaching with a frequency of 27 or 30.00%, and few, 1 or 1.1% teaching SHS has the highest educational qualification of Master of Science, Master of Technology Education and Bachelor of Business Management. The data shows that the faculty members teaching in Senior High School Department are dominated by graduates of Master of Arts in Education and Master of Arts in Teaching degrees. Moreover, faculty members met the DepEd Qualification Standards that a teacher in Senior High School should possess is at least Master's degree in the field where the teacher is teaching (DO No. 27, s. 2016). The educational qualification of teachers is very important in increasing the performance of the students. Owolabi and Adedayo (2012) [17] found out that "students taught by teachers with higher qualifications performed better than those taught by teachers with lower qualifications". In addition, the training of teachers brought about by education, their educational background has a slight improvement in the performance of the students in Science Mathematics subjects (Musau & Abere, 2015) [11].

Table 5: Frequency and Percentage Distribution of Faculty Members According to Faculty Rank

Faculty Rank	frequency	Percent
Associate Professor V	6	6.67
Associate Professor IV	2	2.22
Associate Professor III	3	3.33
Associate Professor II	9	10.00
Associate Professor I	5	5.56
Assistant Professor IV	9	10.00
Assistant Professor III	14	15.56
Assistant Professor II	9	10.00
Assistant Professor I	15	16.67
Instructor III	2	2.22
Instructor II	4	4.44
Instructor I	12	13.33
Total	90	100

Table 5, reveals that the rank of the faculty members teaching the program is Assistant Professor I with a frequency of 15 or 16.67%, followed by Assistant Professor III with a frequency of 14 or 15.56%. On the other hand, both instructor I and Associate Professor IV had a frequency of 2 or 2.22%. The data emphasize that the faculty members handling the subjects are in the professorial ranks.

Table 6: Frequency and Percentage Distribution of Eligibility of the Faculty Members

Eligibility	frequency	Percent
Licensure Examination for Teachers	72	90.00
Licensure Examination in Chemical Engineer	1	1.25
Licensure Examination for EC Engineer	1	1.25
Licensure Examination in Agricultural Engineer	1	1.25
Licensure Examination for Agriculturist	2	2.50
Licensure Examination for Accountants	1	1.25
Licensure Examination for Nutrition and Dietetics	1	1.25
PRC Master Electrician	1	1.25
Total	80	100

Note: Faculty members handling TVL tracks possessed the NC III eligibility

As shown in Table 6, the greater the number, 72 or 87.80% of faculty members who taught in Senior High School are passers of the Licensure Examination for Teachers (LET), and few, 1 or 1.22% have licensed from other fields. The result shows that the faculty members possess the professional qualification in teaching that leads to high performance of the students. Owolabi, Thomas, Olugbenga (2012) [17] revealed that students perform better when taught by professional teachers.

The status of educational facilities with respect to the classrooms for instructions and offices are available. The computers used in subjects ICT had an average ratio of 1:10 which is considered to be insufficient, but the faculty members handling the subjects develop strategies in order to accommodate the students in using computers for practical activities. Overhead projectors are available for use by the faculty members. Relative to books, faculty members use the available books and other materials in the library and those provided by some publishing house to the Business Affairs Office in a form of consignment basis. The students buy books from bookstores and the Business Affairs office for their utilization. Generally, the status of educational facilities as rare and the implementation of the Senior High School program greatly depends on the available educational

facilities. The University did not purchase these educational materials, except some books in the library due to legal constraints.

Level of assessment of the respondents in the implementation of the program with respect to students, faculty members, curriculum, instructional facilities, and administration

Table 7: Mean Assessment of Respondents on the Implementation of the SHS program with respect to Graduate

Graduate	Faculty		Graduate		Over-All	
	x̄	VI	x̄	VI	x̄	VI
1. The positive attitude of the learners in studying lessons	4.16	VS	4.61	O	4.39	O
2. Knowledge and skills development of the learners	4.12	VS	4.01	VS	4.06	VS
3. The attitude of the students to other people	4.33	O	4.64	O	4.49	O
4. The attitude of the students towards the utilization of internet & multi-media	4.22	O	4.30	O	4.26	O
5. Attendance of the students in their classes and other school activities	4.57	O	4.55	O	4.56	O
Average	4.28	O	4.42	O	4.35	O

As presented in table 7, the assessment of the faculty members and graduates on the item "attendance on their classes and other school activities" has the highest mean of 4.56, followed by the item "attitude of the students towards to other people" with a mean of 4.49. The items with the highest mean as well as other items are interpreted as 'outstanding' except knowledge and skills development of the students with a mean of 4.06 interpreted as 'very satisfactory'. The area on graduates has an over-all mean of 4.35 interpreted as 'outstanding'. The assessment clearly shows that the Senior High School program is beneficial to the students. Crisole and Alamillo (2014) believed that the addition of two years provided greater knowledge and skills and makes competitive graduates.

Table 8: Mean Assessment of Respondents on the Implementation of the SHS program with Respect to Faculty

Faculty	Faculty		Graduate		Over-All	
	x̄	VI	x̄	VI	x̄	VI
1. Understanding of the faculty member in the nature and attitude of the students	3.72	VS	4.88	O	4.30	O
2. Knowledge and skills of the faculty members in teaching the subject	4.70	O	4.22	O	4.46	O
3. Knowledge of the faculty members on the delivery of the lesson	4.53	O	4.86	O	4.70	O
4. Knowledge of the faculty members in assessing the students' performance	4.44	O	4.59	O	4.52	O
5. Knowledge of the faculty members in the utilization of instructional materials	4.38	O	4.76	O	4.57	O
Average	4.36	O	4.66	O	4.51	O

As presented in table 8, the assessment of the respondents on the "knowledge of the faculty members on the delivery of the lesson" has the highest mean of 4.70, followed by the "knowledge in the utilization of instructional materials" with a mean rating of 4.57. However, understanding of the faculty members the nature and attitude of the students have the lowest mean rating of 4.30. The general assessment of the faculty members and students on the different items in the area of faculty is 4.51 considered to be 'outstanding'.

The finding emphasizes that the faculty members are well equipped to handle the subjects in the SHS program. Ogbueghu and Ugwu (2017) [14] stipulated that teacher competencies in subject matter, methodologies, and instructional materials have significant influence on the students during the implementation of the curriculum. These competencies important manifestation because faculty members tend to have close interactions among students inside the classroom (Punongbayan & Bauyon, 2015) [19].

Table 9: Mean Assessment of Respondents on the Implementation of the SHS Program with Respect to Curriculum

Curriculum	Faculty		Graduate		Over-All	
	x̄	VI	x̄	VI	x̄	VI
1. The learning outcomes in the syllabi are SMART	4.49	O	4.47	O	4.48	O
2. The alignment course syllabi to the curriculum guide of DepEd	4.27	O	4.13	VS	4.20	O
3. Clarity and proper in the scheduling of classes	4.70	O	4.66	O	4.68	O
4. Utilization of Outcomes-Based teaching strategies	3.98	VS	4.83	O	4.36	O
5. Implementation of Extra-curricular activities	2.94	S	1.94	F	2.44	F
6. Utilization of Outcomes-Based Assessment	3.99	VS	4.67	O	4.33	VS
Average	4.05	VS	3.99	VS	4.08	VS

As reflected in table 9, the mean assessment of the respondents on the implementation of SHS program in the aspect of curriculum with respect to the item "there is clarity in the schedule of classes" is 4.68 interpreted as 'Outstanding'. This result strengthened the idea of Shapiro and Williams (2015) [22] who revealed that there is an impact of the scheduling of classes on the academic fatigue of the students in the STEM and Non-STEM Courses. Moreover, Landry (2016) claimed that teachers and students feel dissatisfied if the class schedule is not favorable. The item "learning outcomes in the syllabi are specific, measurable, attainable, realistic and time-bounded" has a mean of 4.49 interpreted as 'Outstanding'. The data show that the learning outcomes appeared in the syllabi of the faculty members met the standard criteria which are specific, measurable, attainable, realistic and time-bounded (Popenici and Pillar, 2015) [18]. In addition, the preparations of the course syllabi should be adequate paving the way to the formulation of learning outcomes which will guide the delivery of the learning (Odivilas, 2015) [13].

On the other hand, the item "implementation of extra-curricular activities" has a mean rating of 2.44 interpreted as

'fair'. The result emphasizes that the faculty members and students considered that the implementation of extracurricular activities as aspects in the curriculum is required promotion. The result is in contrary to the findings of Bakoban and Aljaralla (2015) [3] revealing that the students and faculty are satisfied in the available extra-curricular activities.

Generally, the implementation of the SHS curriculum is 'very satisfactory' which is more than the 'average level'. The curriculum is beneficial to the students in terms of enhancing competencies. Crisole and Alamillo (2014) reveals that the addition of two years provide greater knowledge and skills and make graduates competitive. Moreover, Rabacal and Alegato (2017) [20] found out that there was a very high extent of opportunities on the implementation of the STEM K-12 program in terms of curriculum as perceived by stakeholders.

Table 10: Mean Assessment of Respondents on the Implementation of the SHS program with Respect to Instructional Facilities

Instructional Facilities	Faculty		Graduate		Over-All	
	x̄	VI	x̄	VI	x̄	VI
1. Space of the Head's Office	2.89	S	2.95	S	2.92	S
2. Space of faculty office	2.89	S	2.91	S	2.90	S
3. Availability of classrooms	2.69	S	2.50	F	2.59	F
4. Ventilation of classrooms	2.87	S	2.59	F	2.73	S
5. Availability of science equipment	3.09	S	3.09	S	3.09	S
6. Availability of books and other Instructional materials	2.29	F	2.10	F	2.19	F
7. Availability of Multi-media equipment	3.48	VS	3.39	S	3.44	VS
Average	2.88	S	2.79	S	2.84	S

As revealed by table 10, the item on "availability of multimedia equipment" has the highest mean assessment of 3.44 interpreted as 'very satisfactory'. The result shows that the management of the Senior High School Department provides more attention to the utilization of multimedia equipment. The value of this fact lies in the sense that the utilization of multimedia equipment is more effective than the conventional method (Olori and Igbosanu, 2016) [15].

The assessment of the faculty members and students on the 'availability of the instructional facilities' has the lowest mean of 2.19 interpreted as 'Fair'. The result illustrates that the respondents assessed the availability of books and other materials is limited. Thus, it needs careful consideration by the administration particularly in space of faculty office and availability of books and other instructional materials. Educational facility is an important factor in improving the performance of learners. Oluremi, & Olubukola (2013) [16] found out that provision of instructional facilities influence the performance of the students. In addition, Akomolafe and Adesua (2016) [1] more "physical, human and material resources are of high quality should be made available in public school to motivate students towards learning". Therefore, facilities in Senior High School should be given priority by the institution.

Table 11: Mean Assessment of Respondents on the Implementation of the SHS program with Respect to Administration

Administration	Faculty		Graduate		Over-all	
	x̄	VI	x̄	VI	x̄	VI
1. Knowledge and competencies of the administrators	4.70	O	4.89	O	4.80	O
2. Administrative supports the implementation of the SHS program	4.22	O	3.90	VS	4.06	VS
3. Democratic administration in the implementation of the SHS program	4.56	O	4.78	O	4.67	O
4. Supervision in the delivery of Senior High School curriculum	4.59	O	4.68	O	4.63	O
Average	4.52	O	4.56	O	4.54	O

As reflected in table 11, the assessment of the respondents on the item of administration with respect to "the knowledge and competencies of the administrators" has the highest mean of 4.80 followed by the item "democratic administration in the implementation of the Senior High School program" with a mean assessment of 4.67 both interpreted as 'Outstanding'. The finding explains that knowledge and competencies of the administrators are important to make the program succeed. Ikegbusi (2016) [9] found out that principals consider instructional leadership skills as a very essential management skill needed for effective secondary school administration. Moreover, democratic leadership leaders are important to the school and results to higher level of success and achievement of the students (Faize, 2010) [8].

On the other hand, the item 'administrative supports the implementation of the SHS program' has the lowest mean of 4.06 interpreted as 'Very Satisfactory'. Although this item has a low mean rating, it is still more than the average level. It shows that the management of the program gives importance to administrative support and supervision of instruction which affect the performance of the students (Usman, 2015) [23].

4. Conclusion

The University of Rizal System produces Senior High School graduates who are ready for the college education. The implementation of the program was outstanding in the area of administration, faculty, and graduates, very satisfactory in the curriculum, and satisfactory in instructional facilities.

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