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# Competencies and Work Performance of Information Technology Educators of State Universities and Colleges in Region 1

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Abstract – This study sought to determine the competency and work performance of Information Technology Educators of State Universities and Colleges (SUCs) in Region I. The research-formulated questionnaire was utilized as the main data-gathering instrument. All SUCs in Region I were involved in the study with 107 as the faculty-respondents. The descriptive-survey method was employed. Appropriate statistical tools were used to analyze the data of interest. The competency level of the faculty-respondents in the different areas of computer programming is highly competent. They regard their selves as very satisfactory in the level of their work performance in terms of curriculum and instruction, research services, extension services, and support to operation. The test of significance revealed the following: The level of work performance in terms of curriculum and instruction, research services, extension service and support to operations is not significant to sex and civil status of the respondents. Their highest educational attainment is significantly associated to their work performance in terms of research services. Others have slight correlation such as in curriculum and instruction, extension services, and support to operations. Age has negative correlation and others are slightly correlated such as academic rank, and length of service. Their work performances have significant relationship to the number of attended seminars/trainings/conferences in the different levels. Finally, there are correlations between the level of work performance to the level of competencies in the different areas of computer programming as well as job satisfaction and the latter.

*Keywords* – competency, computer programming, Individual Performance Commitment, IT Educators, work performance

#### INTRODUCTION

Teacher, as the most significant person in school has to perform numerous and critical tasks in moulding the learners personally and academically.

Given that Information Technology Education (ITE) teachers are efficient in using computers, but still, some are not that skilled in other field. Henceforth, the complexity of teaching and learning depends upon the eagerness of the one who wants to learn it and the competency of the one who makes them learn.

Faculty members of higher institutions are rated and evaluated based on curriculum and instruction, research services, extension services and support to operation. These domains are adapted from the Individual Performance Commitment (IPC) form in order to create good research instrument and gather more meaningful data.

This research study mainly focuses in evaluating the competency especially in computer programming, and performance of IT educators in the

above stated domains so as to improve teaching performances and to attain the goals of the institution.

# **OBJECTIVES OF THE STUDY**

This study determined the levels of competencies and performance of the Information Technology Educators of State Universities and Colleges (SUCs) in Region I, which include the profile, competency level, and work performance in terms of curriculum and instruction, research services, extension services and support to operation and their significant relationships.

## MATERIALS AND METHODS

Descriptive survey was deemed an appropriate research design for this study which uses survey questionnaire as the main tool in gathering relevant data of the respondents.

The researcher asked the permission from the higher authorities of SUCs in Region I to distribute questionnaire to the respondents of the study. The

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faculty- participants was informed about the objective of the research. The questionnaire was handed out to the respondents personally and was picked up after the agreed time and day, for the convenience of the researcher and faculty participants.

The data was tabulated and presented in clearer visualization of facts using tables. Simple tools were used such as frequency and percentages, weighted mean, Chi-square and Spearman's-rho Correlation Coefficient to present the needed data.

## RESULTS AND DISCUSSION

Table 1. Profile of the IT Educators of SUCs in Region I in terms of Personal Variables

Region I in terms of F	cisonai v	arrables
Variable	f	%
Sex		
Male	68	63.6
Female	39	36.4
Total	107	100
Age		
21-25 years old	16	15.0
26-30 years old	22	20.6
31-35 years old	31	29.0
36-40 years old	17	15.9
41-45 years old	15	14.0
46-50 years old	4	3.7
50-55 years old	2	1.9
Total	107	100
Civil Status		
Single	53	49.5
Married	53	49.5
Divorced/Separated	1	0.9
Total	107	100

The IT male educators is almost twice the number of female. It can be noticed that most of their age ranges from 31-35 years old. Likewise, the same number of respondents is both single and married and only one respondent is divorced/ separated.

Table 2. Profile of the IT Educators of SUCs in Region I in terms of Education and Work-Related Variables

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Variable	f	%
<b>Highest Educational Attainment</b>		
BSIT/BSCS Graduate	19	17.8
with MSIT/MIT/MSCS units	29	27.1

MSIT/MIT/MSCS Graduate	30	28.0
with DIT/Ph.D/Ed.D units	20	18.7
Graduate DIT/Ph.D/Ed.D Graduate	9	8.4
Total	107	100
Academic Rank		
Instructor I-III	77	71.96
Assistant Professor I – IV	21	19.63
Associate Professor I – V	9	8.41
Total	107	100
Length of Service		
1-5 years	42	39.3
6-10 years	36	33.6
11-15 years	17	15.9
16-20 years	9	8.4
21-25 years	2	1.9
31-35 years	1	.9
Total	107	100

The data on their highest educational attainment shows that most of them finished their Masteral studies which is either MSIT, MIT or MSCS. In terms of their academic rank, majority of the respondents are Instructors. They teach for 1-5 years, thus, it can be concluded that most of them are new in the service.

Table 3. Number of Seminars/Trainings/
Conferences Attended by IT Educators for the Last
3 Years Related to IT Education

Variable	f	%
Institutional		
No Seminar Attended	44	41.1
1 - 3 Seminar/s Attended	46	43.0
4 - 6 Seminars Attended	8	7.5
7 - 9 Seminars Attended	2	1.9
10 or more Seminars Attended	7	6.5
Total	107	100
Regional		
No Seminar Attended	52	48.6
1 - 3 Seminar/s Attended	45	42.1
4 - 6 Seminars Attended	10	9.3
Total	107	100
National		
No Seminar Attended	46	43.0
1 - 3 Seminar/s Attended	54	50.5
4 - 6 Seminars Attended	3	2.8
7 - 9 Seminars Attended	2	1.9
10 or more Seminars	2	1.9
Attended	_	



Total 107 100 **International** No Seminar Attended 78 72.9 1 - 3 Seminar/s Attended 26 24.3 4 - 6 Seminars Attended 3 2.8 Total 107 100 Volume 5, Issue 1, 2020 P-ISSN: 2672-2984 E-ISSN: 2672-2992

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Consequently, the number of seminars related to IT Education also shows that they are new in the teaching field. Data revealed that the highest number of seminars/ trainings/conferences they attended for the last three years is 1-3 seminars under institutional and national level. And, most of them have not attended regional and international level.

Table 4.Competency Level of the Information Technology Educators of SUCs in Region I in Computer Programming in terms of Design Program Logic

Computer Programming in terms of Design Program Logic						
I am a ammatant in	Competency Level in Computer Programming					
I am competent in	1	2	3	4	5	
1. Selecting the program logic design approach.	0	2 (1.9%)	23 (21.5%)	56 (52.3%)	26 (24.3%)	
2.Structuring the diagrams of program flow and modules according to project standards.	0	2 (1.9%)	23 (21.5%)	60 (56.1%)	22 (20.6%)	
3. Documenting program scope and limits and referencing special routines and procedures.	0	3 (2.8%)	25 (23.4%)	54 (50.5%)	25 (23.4%)	
4. Identifying and revising program functionalities such as tables, files, inputs and outputs according to program requirements.	0	2 (1.9%)	24 (22.4%)	55 (51.4%)	26 (24.3%)	
5. Validating the design.	0	2 (1.9%)	30 (28.0%)	48 (44.9%)	27 (25.2%)	
Weighted Mean	3.96 Highly Competent					

Legend: (1)Not Competent; (2) Least Competent; (3) Competent; (4) Highly Competent; (5) Very Highly Competent

This study shows that the respondents are highly competent in this field of study such as in selecting the program logic design approach, Structuring the diagrams of program flow and modules according to project standards, Documenting program scope and

limits and referencing special routines and procedures, Identifying and revising program functionalities such as tables, files, inputs and outputs according to program requirements and validating the design.

Table 5. Competency Level of the Information Technology Educators of SUCs in Region I in Computer Programming in terms of Applying Program Development Approach

Computer Programming in terms of Appropria Program Development Approach						
Competency Level in Computer Programming						
1	2	3	4	5		
0	3	20	53	31		
U	(2.8%)	(18.7%)	(49.5%)	(29.0%)		
0	1	30	46	30		
U	(0.9%)	(28.0%)	(43.0%)	(28.0%)		
0	1	20	57	29		
U	(0.9%)	(18.7%)	(53.3%)	(27.1%)		
0	1	22	58	26		
U	(0.9%)	(20.6%)	(54.2%)	(24.3%)		
0	2	23	54	28		
		Competency Lev  1 2 0 3 (2.8%) 0 1 (0.9%) 0 1 (0.9%) 0 1 (0.9%)	Competency Level in Comp  1	$\begin{array}{c ccccc} & \text{Competency Level in Computer Progra}\\ \hline 1 & 2 & 3 & 4\\ \hline 0 & 3 & 20 & 53\\ \hline (2.8\%) & (18.7\%) & (49.5\%)\\ \hline 0 & 1 & 30 & 46\\ \hline (0.9\%) & (28.0\%) & (43.0\%)\\ \hline 0 & 1 & 20 & 57\\ \hline (0.9\%) & (18.7\%) & (53.3\%)\\ \hline 0 & 1 & 22 & 58\\ \hline (0.9\%) & (20.6\%) & (54.2\%)\\ \hline \end{array}$		

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testing programs.			(1.9%)	(21.5%)	(50.5%)	(26.2%)
	Weighted Mean	4.02	Highly Competent			

Results showed that respondents are highly competent in Determining and selecting appropriate program development approach, Using documentation tool for program development, Documenting input and output forms and the program flow and processes, Monitoring the program

activities and Identifying resources for coding and testing programs.

Although most of the respondents are new in their job and most of them are instructors, they are very knowledgeable in the application of program development approach.

Table 6. Competency Level of the Information Technology Educators of SUCs in Region I in Computer Programming in terms of Applying Object-Oriented

Programming Language Skills

Commutanting Edition States							
La	m competent in	Competency Level in Computer Programming					
I a.	in competent in	1	2	3	4	5	
1.	Applying basic language syntax and layout, arrays of objects and modular programming approach.	0	4 (3.7%)	19 (17.8%)	47 (43.9%)	37 (34.6%)	
2.	Applying basic object oriented principles in the target language.	0	4 (3.7%)	21 (19.6%)	54 (50.5%)	28 (26.2%)	
3.	Using language debugging facilities and program debugging techniques to detect and resolve error.	0	6 (5.6%)	22 (20.6%)	52 (48.6%)	27 (25.2%)	
4.	Documenting activities following the set of coding standards.	0	6 (5.6%)	17 (15.9%)	55 (51.4%)	29 (27.1%)	
5.	Developing and conducting tests to confirm if the coding processes meet the design specification.	1 (0.9%)	4 (3.7%)	20 (18.7%)	54 (50.5%)	28 (26.2%)	
	Weighted Mean	4.00	Highly Competent				

Findings show that they are highly competent in this area such as in Applying basic language syntax and layout, arrays of objects and modular programming approach, Applying basic object oriented principles in the target language, Using language debugging facilities and program debugging techniques to detect and resolve error, Documenting activities following the set of coding standards and Developing and conducting tests to confirm if the coding processes meet the design specification.

Table 7. Competency Level of the Information Technology Educators of SUCs in Region I in Computer Programming in terms of Applying Programming Skills in a Second Language

In this area, I do the following	Competency Level in Computer Programming					
in this area, I do the following	1	2	3	4	5	
1. Apply basic language syntax for sequence, selection and iteration constructs and layout.	0	4 (3.7%)	21 (19.6%)	46 (43.0%)	36 (33.6%)	
2. Code using standard algorithms.	0	3 (2.8%)	21 (19.6%)	50 (46.7%)	33 (30.8%)	

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3.	Debug code visually or by the use debugging tools.	0	(3.7%)	21 (19.6%)	55 (51.4%)	27 (25.2%)
4.	Document activities based on a set of coding standards.	0	4 (3.7%)	21 (19.6%)	58 (54.2%)	24 (22.4%)
5.	Test code.	0	4 (3.7%)	19 (17.8%)	46 (43.0%)	38 (35.5%)
	Weighted Mean	4.11	Highly Competent			

The following skills in this area show that that the IT Educators of SUC's in region 1 are highly competent. It can be depicted from tables 4, 5, 6 and 7, that the IT Educators of SUC's in region 1 are highly competent in computer programming. Thus, they need to sustain their competency in this field through seminars and trainings with the latest

curriculum competencies in order for them to understand the recent trends in programming languages. This implies that they still need to recognize that the currency and the quality of their programming skills, and their competency levels, will be significant determinants of success throughout their teaching career.

Table 8. Levels of Work Performance of the IT Educators of SUCs in Region I in terms of Curriculum and Instruction

in terms of Curriculum and Instruction							
I am a kind of instructor who		Level o	of Work Per	formance			
I am a kind of mistructor who	1	2	3	4	5		
1. Orients students about the course, the rules and regulations inside and outside the classroom and discusses the grading system on the first day of class.	0	0	5 (4.7%)	43 (40.2%)	59 (55.1%)		
2. Promotes individual and teamwork and encourages students' interest and motivation to learn.	0	0	5 (4.7%)	49 (45.8%)	53 (49.5%)		
3. Shows fair assessment to students at all times.	0	0	9 (8.4%)	38 (35.5%)	60 (56.1%)		
4. Ensures common standards in assessing students' progress.	0	0	9 (8.4%)	42 (39.3%)	56 (52.3%)		
5. Provides evidences of classroom organization for effective instruction.	0	1 (0.9%)	9 (8.4%)	53 (49.5%)	44 (41.1%)		
6. Develops Instructional Materials (IM) such as books, module etc. to improve instructional delivery.	2 (1.9%)	6 (5.6%)	26 (24.3%)	47 (43.9%)	26 (24.3%)		
7. Uses various teaching strategies and methods in lesson delivery.	0	2 (1.9%)	13 (12.1%)	53 (49.5%)	39 (36.4%)		
8. Complies with policies and procedures concerning grading system	0	0	10 (9.3%)	49 (45.8%)	48 (44.9%)		
9. Displays a thorough knowledge of curriculum and subject matter.	0	0	10 (9.3%)	50 (46.7%)	47 (43.9%)		
10. Interacts satisfactorily with the students and maintains a respectful position with the students.	0	0	9 (8.4%)	43 (40.2%)	55 (51.4%)		
11. Constructs tests and table of specifications, validates and administers examination on the scheduled date.	0	1 (0.9%)	19 (17.8%)	44 (41.1%)	43 (40.2%)		

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12. Participates in the curriculum review, enhancement and revision.	0	1 (0.9%)	17 (15.9%)	48 (44.9%)	41 (38.3%)	
13. Applies the enhanced curriculum with a certain amount of flexibility for a better class dynamic.	0	0	16 (15.0%)	48 (44.9%)	43 (40.2%)	
14. Prepares and enriches course syllabi and designs the content based on the approved curricula.	0	0	16 (15.0%)	47 (43.9%)	44 (41.1%)	
15. Is punctual in attendance and in submission of grades and other school- related paper works.	0	2 (1.9%)	16 (15.0%)	53 (49.5%)	36 (33.6%)	
Weighted Mean	4.29	Very Satisfactory				

Legend: (1) Poor; (2) Fair; (3) Satisfactory; (4) Very Satisfactory; (5) Excellent

As shown in the table 8, the levels of work performance of the IT educators in terms of curriculum and instruction vary mostly from very satisfactory to excellent.

Further, it revealed that the level of the respondents work performance in terms of curriculum and instruction is rated as very satisfactory. These two variables have the highest

percentage in evaluating the performance of teacher in the IPCR form because these are the meat of every institution which provides direction to meet the mission and goals of education.

Consequently, IT educators must still need to find ways to perform their work concerning curriculum and instruction from very satisfactory to excellent performance.

Table 9. Levels of Work Performance of the IT Educators of SUCs in Region I in terms of Research Activities

With regards to Descarch Corvins I		Level of	f Work Per	formance	
With regards to Research Service, I	1	2	3	4	5
1. Attend seminars/trainings/ conferences to enhance my knowledge in writing a research proposal.	1 (0.9%)	4 (3.7%)	27 (25.2%)	47 (43.9%)	28 (26.2%)
2. Serve as Research adviser or panel member in	2	2	13	39	51
Students' Thesis.	(1.9%)	(1.9%)	(12.1%)	(36.4%)	(47.7%)
3. Apply the American Psychological Association (APA) or Institute of Electrical and Electronics Engineer (IEEE) format.	3 (2.8%)	5 (4.7%)	22 (20.6%)	43 (40.2%)	34 (31.8%)
4. Practice research ethics especially in dealing		4	19	51	33
with respondents.		(3.7%)	(17.8%)	(47.7%)	(30.8%)
5. Publish/ present research in international or	13	9	40	30	15
national journals	(12.1%)	(8.4%)	(37.4%)	(28.0%)	(14.0%)
6. Consider feedbacks as positive rewards during		5	25	42	35
defense proposal.		(4.7%)	(23.4%)	(39.3%)	(32.7%)
7. Am proficient in using statistical tools such as	5	10	44	30	18
SPSS in analyzing the gathered data.	(4.7%)	(9.3%)	(41.1%)	(28.0%)	(16.8%)
8. Teach research and/or other research-related	3	7	28	43	26
field.	(2.8%)	(6.5%)	(26.2%)	(40.2%)	(24.3%)
9. Ensure research outcome to address the needs	2	5	29	44	27
of the society.	(1.9%)	(4.7%)	(27.1%)	(41.1%)	(25.2%)
10. Develop novelty; not to plagiarize.	1	6	21	48	31
	(0.9%)	(5.6%)	(19.6%)	(44.9)	(29.0%)
Weighted Mean	3.84	Very Sat	isfactory		

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Data showed that the levels of work performance of the IT educators in terms of research services are very satisfactory. With regards to this service, the respondents are rated excellent in their work performance as "Research adviser or panel member in Students' Thesis".

The other job performances are rated very satisfactory and some are rated satisfactory. This

implies that respondents must learn more regarding this tool in measuring research data and they need to engage in research publications. These can be obtained through attending different level of seminars/trainings which research is the main area of concern.

Table 10. Levels of Work Performance of the IT Educators of SUCs in Region I in terms of Extension Activities

****	h terms of E	Level of Work Performance						
W 1	th regards to Extension Service, I	1	2	3	4	5		
1.	Am knowledgeable with the goal of	0	2	14	52	39		
	extension service	U	(1.9%)	(13.1%)	(48.6%)	(36.4%)		
2.	Spearhead trainings/ seminars in a	5	7	33	34	28		
	partner institution (Project leader)	(4.7%)	(6.5%)	(30.8%)	(31.8%)	(26.2%)		
3.	Serve as trainer/ speaker/lecturer in the	1	10	20	45	31		
	implementation of extension activity	(0.9%)	(9.3%)	(18.7%)	(42.1%)	(29.0%)		
4.	Facilitate skills training (Facilitator)	0	6	26	38	37		
		U	(5.6%)	(24.3%)	(35.5%)	(34.6%)		
5.	Design benchmark survey instrument and	6	6	31	42	22		
	conduct need assessment survey.	(5.6%)	(5.6%)	(29.0%)	(39.3%)	(20.6%)		
6.	Monitor and evaluate extension	4	5	38	37	23		
	activities.	(3.7%)	(4.7%)	(35.5%)	(34.6%)	(21.5%)		
7.	Follow up the outcome of extension	4	4	41	40	18		
	service in a partner institution.	(3.7%)	(3.7%)	(38.3%)	(37.4%)	(16.8%)		
8.	Get feedback of the extension activity	4	5	27	52	19		
	from the participants.	(3.7%)	(4.7%)	(25.2)	(48.6%)	(17.8%)		
9.	Sources out additional funding from	5	11	37	35	19		
	other agencies.	(4.7%)	(10.3%)	(34.6%)	(32.7%)	(17.8%)		
10.	Establish linkages with local and non-	5	8	36	38	20		
	governmental agencies.	(4.7%)	(7.5%)	(33.6%)	(35.5%)	(18.7%)		
	Weighted Mean							

Result of this study showed that most of the respondents work performance with regards to extension services was rated as very satisfactory. Among the ten functions/ skills/ knowledge of the respondents with regards to extension service, seven were rated very satisfactory. However, three of their functions in the extension service was satisfactory.

This indicates that each faculty member must be given an opportunity to spearhead, not just to participate, an extension service in order for them to do monitoring, evaluating and sourcing out funds to be used in the extension activity.

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Table 11. Levels of Work Performance of the IT Educators of SUCs in Region I in terms of Support to Operations

	in terms of St	upport to (	Operations			
Da	garding to Support to Operations (STO), I		Level of	f Work Per	formance	
KC,	garding to Support to Operations (310), 1	1	2	3	4	5
1.	Attend the flag raising ceremony and flag retreat regularly.	0	0	21 (19.6%)	43 (40.2%)	43 (40.2%)
2.	Submit DTR with complete entries and attachments on the date that was agreed upon.	0	0	7 (6.5%)	42 (39.3%)	58 (54.2%)
3.	Submit leave form on time.	1 (0.9%)	2 (1.9%)	14 (13.1%)	40 (37.4%)	50 (46.7%)
4.	Submit all the required documents by the HRMDO on time (e.g. SALN, PDS,etc.)	0	1 (0.9%)	9 (8.4%)	45 (42.1%)	52 (48.6%)
5.	Attend seminars conducted by the campus.	0	2 (1.9%)	6 (5.6%)	41 (38.3%)	58 (54.2%)
6.	Participate actively in Brigada Eskwela, Foundation Day, Christmas Party and other Campus activities.	0	0	15 (14.0%)	39 (36.4%)	53 (49.5%)
7.	Attend the scheduled faculty and staffs meeting in the campus.	0	0	5 (4.7%)	42 (39.3%)	60 (56.1%)
8.	Attend all university activities (e.g. seminars, sportsfest, cultural activities, graduation and other important university activities).	0	0	11 (10.3%)	41 (38.3%)	55 (51.4%)
9.	Serve as Resource Person/ Winning coach or Trainer	4 (3.7%)	5 (4.7%)	27 (25.2%)	39 (36.4%)	32 (29.9%)
10.	Collect and prepare documents in preparation for accreditation of the programs under the Department/College.	0	0	13 (12.1%)	40 (37.4%)	54 (50.5%)
	Weighted Mean	4.33	Very Satis	sfactory		

Data showed in the level of work performance to support to operations (STO), respondents regard themselves very satisfactory.

This denotes that the faculty respondents carried out their duties and responsibilities not just in executing their lesson, but also in performing their work-related tasks.

Table 12. Relationship Between the Levels of Work Performance along Their Personal Variables in terms of Sex

Then I ersonar variables in terms of Sex									
Work Performance	Chi-square Statistic	Df	Sig.	Cramer's V Coefficient	Sig.				
Curriculum and Instruction	26.887	26	.415	.435	.778				
Research Services	29.258	27	.349	.466	.673				
Extension Services	33.823	28	.207	.495	.560				
Support to Operations	24.665	17	.102	.442	.233				

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Research findings showed that work performance regarding curriculum and instruction, research services, extension service and support to operations is not significant to sex as personal profile of the respondents. The result tells that sex is not associated to the levels of work performance of the respondents,

thus, the performance rating of the IT Educators of SUC's in Region 1 is not affected whether they are male or female.

This result is in contrary to the research findings of Nadeem, et.al. (2011), that gender is a significant predictor of teachers' job performance.

Table 13. Relationship Between the Levels of Work Performance along their Personal Variables in terms of Civil Status

Work Performance	Chi-square Statistic	Df	Sig.	Cramer's V Coefficient	Sig.
Curriculum and Instruction	44.792	52	.751	.554	.097
Research Services	37.574	54	.956	.433	.919
Extension Services	45.311	56	.846	.473	.772
Support to Operations	21.071	34	.959	.545	.002

Data showed that work performance in terms of curriculum and instruction, research services, extension service and support to operations is not associated to civil status. It shows that the respondents whether single, married or separated have no significant association to their work

performance. In other words, the null hypothesis is not rejected.

This finding contradicts the study of Hussain et.al (2012), that personal factors such as civil status affect the performance of teachers.

Table 14. Relationship Between the Levels of Work Performance along Their Profile Variables in Terms of Age, Highest Educational Attainment, Academic Rank and Length of Service

and Bengin of Service									
Work Performance	Age		Highest Educational Attainment		Academ	nic Rank	Length of Service		
	ρ	Sig.	ρ	Sig.	ρ	Sig.	ρ	Sig.	
Curriculum and Instruction	127	.191	.175	.071	.171	.078	.129	.185	
Research Services	086	.376	.241*	.012	.151	.119	.187	.054	
Extension Services	139	.153	.091	.349	.052	.591	.026	.791	
Support to Operations	006	.950	.067	.495	.059	.546	.104	.288	

<sup>\*</sup>Correlation is significant at the 0.05 level (2-tailed).

Findings showed that highest educational attainment is significantly associated to the work performance of the respondents in terms of research services. This is an indication that the work performance in research services is affected by the highest educational attainment of the respondents. It is clear that respondents who already earned higher degrees are

rated very satisfactory in research and others have slight relationship.

Data showed that age has negative correlation to the work performance of the respondents in curriculum and instruction, research services, extension services and support to operations. This implies that as age becomes higher, the quality of work becomes lesser or its vice versa. Simply put,

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younger teachers perform well in their job than older ones, either in teaching and other related activities. Moreover, it is slightly if not moderately affected by academic rank. Furthermore, length of service has almost negligible or slight correlation.

It signifies that academic rank and length of service frailly influence the work performance of the

respondents. It manifests whether a faculty is an Instructor or Professor; younger or older in experienced, is trivial in performing his/her teaching job and its work-related activities. Consequently, it is not always a major factor to consider as basis for an excellent or very satisfactory performance.

Table 15. Relationship Between the Levels of Work Performance along Their Profile Variables in Terms of Number of Seminars/Trainings/Conferences Attended

W 1 D C	Institutional		Regional		National		International	
Work Performance	ρ	Sig.	ρ	Sig.	ρ	Sig.	ρ	Sig.
Curriculum and Instruction	.261**	.007	.186	.055	.222*	.022	.202*	.037
Research Services	.263**	.006	.247*	.010	.277**	.004	.301**	.002
Extension Services	.151	.121	.088	.366	.295**	.002	.299**	.002
Support to Operations	.144	.140	.188	.052	.256**	.008	.226*	.019

<sup>\*</sup>Correlation is significant at the 0.05 level (2-tailed). \*\*Correlation is significant at the 0.01 level (2-tailed).

relevant to their field and benefit themselves personally and professionally, thus, extending that skills and knowledge to students. From the study of Abarro (2018), work related variable such as seminars are significantly related to the performance of teachers and as cited from his study, Essien, Akpan and Obot (2016) found out that there is a positive relationship between the frequency of teachers attendance to training, seminar and workshops to the performance of teachers.

Table 16. Relationship Between the Level of Competencies in Computer Programming and Level of Work Performance of the IT Educators of SUCs in Region I

	Work Performance								
Competencies	Curriculum and Instruction		Research Services		Extension Services		Support to Operations		
	ρ	Sig.	ρ	Sig.	ρ	Sig.	ρ	Sig.	
Design Program Logic	.580**	.000	.458**	.000	.531**	.000	.461**	.000	
Apply Program Development Approach	.693**	.000	.651**	.000	.636**	.000	.561**	.000	
Apply Object-Oriented Programming Language Skills	.537**	.000	.433**	.000	.492**	.000	.374**	.000	
Apply Programming Skills in a Second Language	.544**	.000	.447**	.000	.520**	.000	.401**	.000	

<sup>\*\*</sup> Correlation is significant at the 0.01 level (2-tailed).

Data showed that all of the variables were significantly related to the level of work performance in terms of curriculum and instruction, research services, extension services and support to operations

Findings showed that seminars/ trainings/ conferences are significantly associated to the work performances of the IT educators of SUC's in region 1. This is because the primary goal of every seminar is to enhance the skills and knowledge of teachers



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to the level of competencies in Computer Programming in terms of Design Program Logic, Apply Program development Approach, Apply Oriented Programming Language Skills and Apply Programming Skill in a Second Language. This implies that their relationships are positive, direct and substantial correlation, which means that as one variable goes up or down so will the other one.

The result implies that the respondents are already competent in computer programming, thus, they perform well in teaching this computer course among their students and in extending this competency to other work-related activities such as in curriculum and instruction, research, extension services and support to operate.

#### CONCLUSION AND RECOMMENDATION

Based from the data gathered, the competencies and work performance is not a complex study. This research study is challenging since the respondents are the IT Educators of SUCs in Region 1. Errors are unavoidable in the research instruments. Appropriate Statistical tools were used in this study. Related literature and studies were presented with organization. Results of this study gear towards the progression of competencies and work performances of faculties in an institution.

The strength of the IT educators should be utilized further or wider for the development of program applications for instructional purposes. It is recommended that the researcher consider replication for further validation and reliability of this study. And, it is further suggested to consider other factors that may prove to be significant on what really contributes to the excellent performance of IT educators.

#### REFERENCES

Abarro, Juan O. (2018, November). Factors Affecting the Performance of Public School Teachers in the Division of Antipolo City, Philippines. IRJET-International Research Journal of Engineering and Technology. https://www.irjet.net/archives/V5/i 11/IRJET-V5I11249.pdf

Essien, Ekpenyong Essien; Akpan, Okon Edem; Obot, Imo Martin. (2016). The Influence of In-Service Training, Seminars and Workshops Attendance by Social Studies Teachers on Academic Performance of Students in Junior Secondary Schools Incross River State, Nigeria. ERIC - Education Resources Information Center.

https://files.eric.ed.gov/fulltext/EJ1112947..pdf

Hussain, Nasreena and Nadia Ayub. (2012, October 10). (PDF) Learning styles of students and teaching styles of teachers in business education: A case study of Pakistan. ResearchGate. https://www.researchgate.net/publication/261991681\_Learning\_Styles\_of\_Students\_and\_Teaching\_Styles\_of\_Teachers\_in\_Business\_Education\_A\_Case\_Study\_of\_Pakistan

Mohammad Nadeem, et. al. (2011, October). Teacher's Competencies and Factors Affecting the Performance of Female Teachers in Bahawalpur (Southern Punjab) Pakistan. International Journal of Business and Social Science.

https://ijbssnet.com/journals/Vol\_2\_No\_19\_Special\_Issue\_October\_2011/27.pdf