

# Teachers' Performance in ICT and Instructional Materials

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**Abstract**— This study was conducted to evaluate Teachers' Performance in ICT and Instructional Materials. The survey was conducted at the Elementary Schools of District I and District IV of Kidapawan City Division, Kidapawan City, North Cotabato. Majority of the teachers respondents in District I and District IV of Kidapawan City Division were aged 31-35 years old, female, married, Bachelor's Degree holder and had a length of service for 21 years and above. They were good in preparing and presenting their lesson with the use of instructional materials, and also they had a sufficient knowledge in integrating ICT to their instruction. The educational attainment had significant relationship with the use of ICT and instructional materials. High significant correlation were observed in Diversity of Learners, Teacher's Behavior in Actual Teaching, Learners Behavior in the Classroom, and the Planning, Assessing, Reporting Learner's Outcomes towards the use of ICT and Instructional Materials.

**Keywords**— Teachers' performance, ICT, instructional materials

## I. INTRODUCTION

Barangay Elementary School in a spartan, austere environment reveals simplicity in its atmosphere and orientation. This is the reality of District I and District IV at Kidapawan City. In its actual sense, it attempts to raise the level of educational programs and activities to be attuned to the demands of evolving educational trends. The existing situation in the school reveals the need to improve supervision affecting learning process. Several problems like failure of principals to make post conference for the necessary feedback after the observation is crucial part of supervisory tools. Further multi-tasks assignments to teachers greatly affect classroom performance added to the lack of motivation for them to have professional development. As a consequence, teachers' enthusiasm for outstanding performance is affected to an enormous degree that they hardly keep up with their commitment as educators. Failures of teachers encourage learners to use higher order thinking skills in asking questions as per observation. Teachers must be proficient in lesson appropriate to the needs and difficulties of learners, however, study found out that teachers are just average.

## II. METHODOLOGY

### A. Sampling Area

The respondents of the study were the teachers of District I and District IV and were identified through stratified random sampling. Survey Questionnaires were utilized in data gathering. Data collected were tabulated and analyzed using

frequency, mean and percentage. The hypotheses were tested using Pearson R Correlation.

## III. RESULTS AND DISCUSSION

### Socio-demographic Profile of Teachers

#### Age

Data show that out of 78 respondents, 2 (2.6%) were under the age bracket of 21-25, 9 (10.26%) were 26-30, 10 (12.8%) were 31-35, 18 (23.1%) were 36-40, 13 (16.7%) were 41-45, 5 (6.4%) were 45-50, 16 (20.5%) were 51-55, 4 (5.1%) were 56-60, and 1 was 61-65 years old. This means that the majority of the teachers in District I and District IV are still in their productive years. The findings of Alufohai (2015) revealed that students' academic achievement is significantly influenced by teachers' age. Hence it is expected that most of the teachers of these two districts of Kidapawan City are effective and always doing their best to cater the quality teaching to their learners.

#### Sex

Based on the data, 85.9% of the teachers were females and the rest (14.1%) were males, women dominate the teaching profession. Women have certain qualities when it comes to teaching than men do; one of them is that women tend to have a more caring nature. In addition, it is confirmed by Marchbanks (2009) that females generally possess the personality traits necessary to become an effective teacher to a higher degree than males did.

#### Civil Status

The data further show that majority or 88.5% of the teachers were married and 7.7% were single. Thus, the majority of the teachers were married. Married teachers attempt to do more things in school, put more effort in their work, persevere longer in their duties and recover faster when they fail to meet set targets (Aloka et al., 2015).

#### Educational Attainment

Table 2 revealed that 28 of the teachers graduated Bachelor's degree; 27 were Bachelor's Degree with Master's units; 22 had Master's degree and only one teacher had Doctoral units. This means that most of the teachers of these two districts graduated Bachelor's degree and some graduated Master's degree. Levin and Wadmany (2008) concluded that training programs for teachers that embrace educational practices and strategies to address beliefs, skills and knowledge improve teachers' awareness and insights in advance, in relation to transformations in classroom activities

#### Length of Service

In table 2, result revealed that out of 78 respondents, 34 had 21 years and above teaching experience; 18 were 6-10 years in

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service; 16 were 11-15 years; 6 were in 16-20 years; and only 4 were in the 1-5 years in service.

This implies that majority of the teachers were already in the service a quiet for time. It is anticipated that the teachers are effective since according to Niedo (2012), she concluded in her study that the length of service of teachers influence his teaching performances as a teacher gains or increases his length of service, the higher their teaching performance.

TABLE II. SOCIO-DEMOGRAPHIC PROFILE OF TEACHERS

Profile	Frequency (N=78)	%
<b>Age</b>		
21-25	2	2.56
26-30	9	11.54
31-35	10	12.82
36-40	18	23.08
41-45	13	16.67
46-50	5	6.41
51-55	16	20.51
56-60	4	5.13
61-65	1	1.28
<b>Gender</b>		
Male	11	14.10
Female	67	85.90
<b>Civil Status</b>		
Single	6	7.69
Married	69	88.46
Widow	3	3.85
<b>Educational Attainment</b>		
Bachelor's Degree	28	35.90
With MS/MA Units	22	28.21
Master's Degree	27	34.62
Doctoral Units	1	1.28
<b>Length of Service</b>		
1 – 5 years	4	5.13
6 – 10 years	18	23.08
11 – 15 years	16	20.51
16 – 20 years	6	7.69
21 and up	34	43.59

### Teachers' Performance toward Information and Communication Technology

In Table 3, result revealed that teacher's performance toward Information and communication technology is sometimes. This implies that teachers in the District I and District IV of Kidapawan City Division were using ICT and they possessed sufficient knowledge in integrating ICT to their instruction.

TABLE III. TEACHERS' PERFORMANCE TOWARD INFORMATION AND COMMUNICATION TECHNOLOGY.

Indicators	Mean	Description
1. Uses power point presentation	3.06	Sometimes
2. Uses computer generated materials	3.51	Often
3. Uses video-clips	3.08	Sometimes
4. Uses electronic modules	2.91	Sometimes
5. Uses excel in computing grades	4.00	Often
6. Uses Computer generated reports	3.76	Often
7. Uses tape recorders	2.54	Sometimes
8. Uses television sets	2.86	Sometimes
<b>Weighted Mean</b>	<b>3.20</b>	<b>Sometimes</b>

### Teachers' Performance toward Instructional Materials

The result shows that teacher's performance toward instructional material is sometimes. This means that teachers in the District I and District IV of Kidapawan City Division are good in preparing and presenting their lesson with the use of effective instructional materials.

TABLE IV. TEACHERS' PERFORMANCE TOWARD INSTRUCTIONAL MATERIALS.

Instructional Materials	Mean	Description
1. Brings real objects in presenting the lesson	3.76	Often
2. Uses concrete and materials practiced	3.76	Often
3. Uses indigenou/contextualized materials in giving example	3.41	Sometimes
4. Uses flashcards in drill	3.66	Often
5. Uses chart in exercises	3.68	Often
6. Uses meta strips	3.34	Sometimes
7. Uses abstract in presenting the lesson	3.28	Sometimes
8. Uses puzzles in activities	3.06	Sometimes
<b>Weighted Mean</b>	<b>3.48</b>	<b>Sometimes</b>

### Relationship between Teachers' Socio-demographic Profile and Teachers' Performance on Information and Communication Technology

#### Age

Based on the qualitative interpretation of correlation coefficient  $r$ , the result indicates that there is an almost negligible to slight indirect relationship between the age and the teachers' performance on information and communication technology.

In testing the significant relationship, data show that there is no sufficient evidence to conclude that the age of a teacher will affect the teachers' performance towards information and communication technology ( $r = -0.056$ ,  $p$ -value = 0.626). This finding is in consonant with the study of Jegede (2009) that age is not a factor affecting the attitudes, competence and use pattern of teacher educators. In other words, type of use to which educators put on ICT is not related to age.

#### Sex

Based on the quantitative interpretation of correlation coefficient  $r$ , the results indicates that there is an almost to slight indirect relationship between the sex and the performance behavior on information communication technology.

In testing the significant relationship, data show that there is no sufficient evidence to conclude that the sex of a teacher will affect the performance behaviour towards information communication technology ( $r=0.143$ ,  $p$ -value=0.211). it is confirmed by Marchbanks (2009) that females generally possess the personality traits necessary to became an effective teacher to a higher degree than males did.

#### Civil Status

Result manifest that there is an almost negligible to slight direct relationship between the civil status of a teacher and the performance behavior on information communication technology.

In testing the significant relationship data shows that there is no sufficient evidence to conclude that the civil status of a

teacher will affect the performance behaviour towards the information communication technology  $r=-0.25$ ,  $p\text{-value}=0.275$ . Vijayalakshmi (2002) reported that marital status did not have any significant influence on the teacher effectiveness.

### Educational Attainment

Based on the qualitative interpretation of correlation coefficient  $r$ , the result indicates that there is a weak direct relationship between the educational attainment and performance behavior on information and communication technology.

Data also show that there is a significant relationship between the educational attainment and performance behavior on information and communication technology ( $r = 0.238$ ,  $p\text{-value} = 0.036$ ). This means that the higher the educational attainment, the higher the performance behavior on ICT. This finding conformed to the study of Levin & Wadmany (2008), training programs for teachers that embrace educational practices and strategies to address beliefs, skills and knowledge

improve teachers' awareness and insights in advance, in relation to transformations in classroom activities. In addition, graduate studies nowadays are more on computer related manipulation works.

### Length of Service

Result manifests that there is an almost negligible to slight direct relationship between the length of service of a teacher and the performance behavior on information and communication technology.

In testing the significant relationship, data shows that there is no sufficient evidence to conclude that the length of service of a teacher will affect the teachers' performance towards information and communication technology ( $r=0.019$ ,  $p\text{-value}=0.871$ ). This findings contradicted with the study of Watson, et al. (2006) found that experience did impact on the level of ICT use that teachers prefer their students to demonstrate, with teachers who have had least experience preferring their students to use ICT more to both enhance and transform the curriculum.

TABLE V. RELATIONSHIP BETWEEN TEACHERS' SOCIO-DEMOGRAPHIC PROFILE AND THE TEACHERS' PERFORMANCE ON INFORMATION AND COMMUNICATION TECHNOLOGY.

Profile	n	r	Interpretation	Prob
Age	78	-0.056	Very weak linear relationship	0.626
Sex	78	0.143	Very weak linear relationship	0.211
Civil Status	78	-0.125	Very weak linear relationship	0.275
Educational Attainment	78	0.238*	Weak linear relationship	0.036
Length of Service	78	0.019	Very weak linear relationship	0.871

\*Significant @ 5% leve

### Relationship between Teachers' Socio-demographic Profile and the Teachers' Performance on Instructional Materials

#### Age

Based on the qualitative interpretation of Pearson  $r$ , the result indicates that there is an almost negligible to slight direct relationship between age of a teacher and the performance on instructional materials.

In testing the significant relationship, data show that there is no sufficient evidence to conclude that the age of a teacher will affect the teachers' performance towards instructional materials ( $r=-0.056$ ,  $p\text{-value}=0.626$ ). Since the performance of learners is dependent to the intervention of the teacher, especially in using instructional materials (Awolaju, 2016), hence the findings is supported by the study of Odiembo and Simatwa (2014), concluded that there is no significant relationship between teachers' age and academic performance of learners.

#### Sex

Based on the quantitative interpretation of correlation coefficient  $r$ , the result indicates that there is an almost to slight indirect relationship between the sex and the performance behaviour on instructional materials.

In testing the significant relationship, data show that there is no sufficient evidence to conclude that the sex of a teacher will affect the performance behaviour towards instructional materials ( $r=0.053$ ,  $p\text{-value}=0.643$ ).

#### Civil Status

Result manifest that there is an almost negligible to slight direct relationship between the civil status of a teacher and the performance behaviour on instructional materials.

In testing the significant relationship data shows that there is no sufficient evidence to conclude that the civil status of a teacher will affect the performance behaviour towards instructional materials ( $r=-0.004$ ,  $p\text{-value}=0.969$ ).

#### Educational Attainment

Based on the qualitative interpretation of Pearson  $r$ , the result indicates that there is a weak direct relationship between the educational attainment and teachers' performance on instructional material.

Data also show that there is a high significant relationship between the educational attainment and teachers' performance on instructional materials ( $r= 0.330$ ,  $p\text{-value} = 0.003$ ). This means, the higher the educational attainment, the higher the teachers' performance on instructional materials. Since the performance of learners is dependent to the intervention of the teacher, especially in using instructional materials (Awolaju, 2016), hence the findings is supported by the study of Zhang (2008), concluded that teachers possessing of advanced degrees in science or education significantly and positively influenced students' achievement. In fact, graduate studies content are more on teaching pedagogy.

#### Length of Service

Result manifests that there is an almost negligible to slight direct relationship between the length of service of a teacher and the teachers' performance on instructional materials.

In testing the significant relationship, data show that there is no enough evidence to conclude that the length of service of a teacher will affect the teachers' performance towards instructional materials ( $r = 0.019$ ,  $p\text{-value} = 0.871$ ). Since the performance of learners is dependent to the intervention of the teacher, especially in using instructional materials (Awolaju, 2016), hence the findings are supported by Zhang (2008), years of teaching experience did not directly influence student achievement. In fact, there are a lot of innovated and new strategies in preparing instructional materials that everyone can use especially the differentiated instruction.

TABLE VI. RELATIONSHIP BETWEEN TEACHERS' SOCIO-DEMOGRAPHIC PROFILE AND THE TEACHERS' PERFORMANCE ON INSTRUCTIONAL MATERIALS.

Profile	N	r	Interpretation	Prob
Age	78	0.180	Very weak linear relationship	0.114
Sex	78	0.053	Very weak linear relationship	0.643
Civil Status	78	-0.004	No linear relationship	0.969
Educational Attainment	78	0.330**	Weak linear relationship	0.003
Length of Service	78	0.136	Very weak linear relationship	0.234

\*\*Highly Significant (1% level)

#### IV. CONCLUSIONS

Based on the findings of the study, the teachers of District I and District IV of Kidapawan City Division are using ICT with a sufficient knowledge in integrating to their instruction. The teachers are good in preparing and presenting their lesson with the use of effective instructional materials. The use of ICT and instructional materials was affected by educational attainment of the teacher. Moreover, Diversity of learners, Teacher's Behavior in Actual Teaching, Learners Behavior in the Classroom, and the Planning, Assessing, Reporting Learner's Outcomes were affected by CB-PAST and the teacher's performance on Information and Communication Technology and Instructional Materials. Furthermore, only Teacher's Behavior in actual teaching and Diversity of Learners were influenced by CB-PAST on Teachers' Performance in Information Communication Technology and Instructional Materials.

#### V. RECOMMENDATIONS

Based on the aforementioned findings and conclusions, the following recommendations were formulated.

1. Conduct more seminars on related to ICT and in preparing effective instructional materials.
2. Encourage more teachers to pursue their graduate studies.

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#### About the Author

The author was born at Palacapao, Quezon, Bukidnon on December 1, 1980. She was the daughter of the Poferio P. Veras (deceased) and Bernarda G. Veras.

She started her formal education at Linangkob Elementary School from 1987-1994 and graduated as salutatorian. She continued her Secondary Education at Kidapawan National High School from 1994-1998.

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