CHANGE ADAPTABILITY OF TEACHERS IN LIBERAL ARTS COURSES IN RELATION TO TEACHING EFFICIENCY*

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INTRODUCTION

One great thinker, David Brewer, aptly said: "The moving water is full of life and health; only in still water is stagnation and death." In a rapidly changing world, one cannot just stay idle and static. An individual should keep abreast with the development of the things around him so that he may be able to maintain life and health, and live in his time. Whether we like it or not, change will definitely take place. It is said that everything will change, and that the only thing that is permanent is change itself. Change is a handmaiden to progress. Thus, there can be no progress without change.

Robert Oppenhiener (1953) said:

> "One thing that is new is the prevalence of newness, the changing scope and scale of change itself so that the world alters as we walk on it, so that the years of man's life measures not small growth or rearrangement or moderation of what he learned in childhood but a great upheaval."

Ideally, man should respond to change, and the most convenient and practical way to cope with change is to adopt it. Warren Bennis, about three decades ago, said:

> "If change has now become a permanent and accelerating factor in today's life, then adaptability to change *becomes increasingly the most single determinant of survival*" (underscoring supplied).

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*(*A Dissertation Abstract, Xavier University, Cagayan de Oro, 1987)*

Change and its never-ending influence affect all activities of man. In social institutions, its value can never be taken for granted. The school, as a special institution, values change as a part of its educational functions. One of the activities that an educational institution should undertake regularly is to assess and evaluate its functions and check whether its graduates have been properly trained to meet the needs of society.

The most important component in education, next to the student, is the teacher. There are strong reasons that will support the assertion that the faculty is very important in the field of education. The teacher's primary responsibility is to instruct students. This is the most important duty of the school. In fact, there are those who maintain that the school is only as efficient as its faculty. The teacher is very important because from his character is fashioned the role he is to perform in education. The vital role of the teacher is felt more clearly today that at any time in the past. This observation is shared by former DECS Secretary Lourdes Quisumbing (1989:338) when she said:

> "Under this healthy (democratic) climate, we in the education sector are assured of the needed support to effect a more positive role in nation building and social transformation has been able to institute much needed reforms in the system as well as to initiate a massive program, focused on these areas: (a) *teacher personal welfare;* (b) student welfare and development; (c) quality and relevance of education; and (d) educational financing" (underscoring supplied).

Making teacher's welfare as the priority program is very reasonable. The efforts to study, support and enhance teacher's psychological, academic and personal qualities are urgently needed today and in the future. Along this line, Paplauskas Ramunas said:

> ". . . the teacher holds the keys to the future. To win the war against war will be very difficult because to win the war in the educational sense means to conquer the human mind and to conquer the human mind means to reach the human mind. But the human mind is a very tortuous and unusually mazed labyrinth. To reach it you have to open it. It means that the teacher should study human nature in all its aspects and environmental constellations, actions and interactions. (Speech delivered at the International Conference of World Educational Fellowship, Tokyo, 1973.)

Indeed, there is an urgent need to conduct an in-depth study about the preparedness of a teacher and the gigantic role he is expected to perform. Concerning this, David Hunt (1979) said: "The stage of psychological development seems to adequately explain the difference in the performance in the classroom." Suffice it to say that a teacher should be updated in everything that is new. There is no end to learning. This we can learn from John Dewey (1923) when he repeatedly claimed that education is an endless process – thus, an educator, as an agent of change, must possess the fervor for change."

The Problem

This study was undertaken to find out if teachers handling liberal arts courses in the colleges and universities of the coastal cities of Northern Mindanao are adaptable to change. It also investigated whether change adaptability (CA) has a significant effect on teaching efficiency (TE).

More specifically, this study sought to answer the following questions:

1. How do teachers who are adaptable to change compare in their teaching efficiency with those who are not adaptable to change?
2. Is there a significant relationship between change adaptability and teaching efficiency?
3. Is there a significant difference between and within change adaptability of teachers from private sectarian schools, (PSS) private non-sectarian schools (PNSS) and government schools (GS)?
4. Is change adaptability effected by some socio-educational factors such as: a) educational qualification, b) teaching experience and c) seminars attended?
5. Does standard of living affect change adaptability?
6. Will the type of school affect change adaptability when motivational factors are considered?

Hypotheses

In this motivation, the following hypotheses were drawn and tested at .05 level of significance:

HO_1 There is no significant difference in teaching efficiency between teachers who are adaptable to change and those who are not.

HO_2 There is no significant relationship between change adaptability and teaching efficiency.

HO_3 There is no significant difference in change adaptability between and among teachers coming from the private sectarian schools (PSS), private non-sectarian schools (PNSS) and government schools (GS).

HO_4 Change adaptability is not significantly affected by the following socio-educational factors:

4.1 educational qualification
4.2 teaching experience
4.3 seminars attended

HO_5 Standard of living does not affect change adaptability.

HO_6 The levels of change adaptability brought about by the different types of school are not affected by motivational factors such as:

6.1 intrinsic motivation
6.2 extrinsic motivation
6.3 leadership style of the administrators

Theoritical Framework

Two theories were advanced at this stage concerning change adaptability in relation to teaching efficiency. These were Behavioral Flexibility Theory and Developmental Theory.

Behavioral Flexibility Theory. Warren Bennis (1966:150) views the relationship between those who are responsible for creating change and for the target of change. This theory states that a change agent must act congruently in accordance with the value he is attempting to superimpose upon the target system's value. In education, the teacher is the change agent. There are certain characteristic behaviors and attitudes that are expected of this agent of change. The teacher should be a witness to what he is trying to impress upon the students. For instance, he cannot teach honesty if he is not honest; nor can he teach diligence if he is lazy. One known adage goes: "You cannot give anything you do not have;" nor can one teach anything he does not know. A teacher has to be true and consistent with himself before he can effectively influence his students on the target system.

> A personal flexibility theory that permits coping with change is a necessary characteristic of a teacher. Teachers should be equipped with a repertoire of teaching styles that will allow them to vary their practices according to the needs of the situation. They should be able to quickly and easily modify syllabi to serve the varied problems of modern society and accommodate the flood of new materials, teaching aids, ideas, and the like.

At this point, a schematic diagram is presented to show the direction of this investigation, and the way the variables are related and compared.

The Conceptual Framework

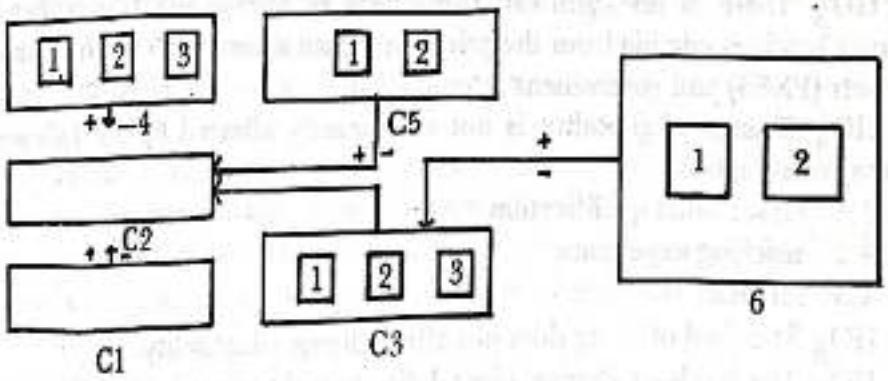

Figure 1

C_1 Teaching Efficiency
C_2 Change Adaptability
C_3 Types of School
C_4 Socio-Educational Variables
C_5 Economic Factors
C_6 Motivational Factors
+ or – signs represent the type of correlation or differences

Importance of the Study

Teachers. The factors that affect teaching efficiency are very complicated. If change adaptability is one of them and is highly correlated with teaching efficiency, then teachers should be so informed so that steps can be taken to insure that the value of change adaptability will be developed.

School Administrators. The constant search for improved teaching methodologies is usually one of the major concerns of a dedicated and effective school administrator. The result of this investigation will, therefore, be beneficial to the school administrator, especially when he plans upgrading programs for the faculty.

Scope and Limitation

The teachers involved in this study were those actually handling classes in college in the coastal cities of Northern Mindanao. The specific focus of this study was on the attitude of the teachers regarding change adaptability. Only teachers present during the survey were included. Those who were out for various reasons were not counted in the population of the study. The group of teachers involved in the study comprised those handling liberal arts subjects only.

Definition of Important Terms

Adaptability. In this paper, adaptability describes a faculty who is willing to modify, change, or adjust this attitudes as a person, be flexible in his methods of instruction as a teacher and vary his behavior to meet certain situations.

Change. Bennis (1962) says: "As regards rapid acceptance of new ideas for flexibility in dealing with novel problems, generally high morals and loyalty . . . the more egalitarian or decentralized type seems to work better."

Extrinsic Motivation. Davis (1972:56) describes this motivation as those that occur after work or away from work. It also includes motivations that occur outside of self.

Intrinsic Motivation. Castetter (1976:103) defines instrinsic motivation as anything in the work structure that develops the desire within oneself – thus developing self-esteem and inspiration to work better.

Morale. The important element in morale is what the teacher believes in and feels (Wiles, 1971:227). Actual conditions are not the critical factors. Teachers' morale may be high or low.

Teaching Efficiency. In this study, teaching efficiency refers to the level of teaching ability measured by the evaluation of the students and the direct superior or supervisor.

Methodology of the Study.

Setting of the Study. Five cities in the coastal area of Northern Mindanao served as the geographical setting of this study. The cities were: Ozamis, Iligan, Cagayan de Oro, Butuan and Surigao. In terms of size and location, the five cities have the highest population in the respective provinces where they are located. As a result, they have developed into the educational centers of each province. Each city has a representative number of colleges.

Subjects of the Study. College teachers handling courses in the 26 colleges and universities constituted the population (1985-86). The liberal arts courses were English, Spanish, Psychology, Philosophy, Sociology, Political Science, Filipino, History, Anthropology, Ethics, Humanities, Basic Economics and Literature. By a simple random sampling, 12 schools representing equally the three types of school constituted the school samples.

Research Method Used. The Descriptive Survey method was used. Change Adaptability was measured by a Gordon type personal inventory, semantic differential and Likert Scale Measurements. The variables and their corresponding measures were as follows:

VARIABLES	MEASURES
1. Educational Qualifications	Bachelor's Degree/Master's Degree
2. Seminars Attended	number of days
3. Teaching Experience	number of years
4. Economic Variables	
Salary	high, low
Other Economic Indicators	high, low
5. Types of School	Private Sectarian (PSS) Private Non-Sectarian (PNSS) Government Schools (GS)
6. Motivational Factors	
Intrinsic Motivations	High, average, low
Extrinsic Motivations	High, average, low
7. Change Adaptability	High, low (by Quartiles)
8. Teaching Efficiency	High, Low

Sampling Procedure. There were 599 teachers who were identified as the subject of the study. From this population the sample was drawn applying the aforecited formula (Pagoso, Garcia, Guerrero & de Leon, 1985:46).

The sample obtained after the computation was rounded off to 240. From here, a two-stage cluster sampling was applied. Out of the 26 schools, 12 were taken through a simple random sampling representing equally the three types of school. For equal representation, 80 teachers for each type of school were randomly sampled.

Instruments Used in Data Gathering

Two instruments were used and these were the questionnaires for change adaptability and rating scale for teaching efficiency.

The questionnaire. Ten indicators were included and the summary and exponent for each are shown in Table 1.

TABLE 1
List of Indicators and the Exponent/s of Each

	INDICATORS	EXPONENT/S
1.	Creativity	Paul Torrance & Sarnoff Mednoch
2.	Inventiveness	Donald Mackinson
3.	Intuition	Carl Jung
4.	Strong Preference for Perception	Myer-Briggs
5.	Achievement Orientation	Allport-Vernon-Lindsay
6.	Autonomy of Judgment	Ann Roe
7.	Innovativeness	Eric Hoyle
8.	Initiativeness	Richard Sprinthall
9.	Flexibility	J.P. Guilford
10.	Originality	J.P. Guilford

Teaching Efficiency. Three areas were included in measuring teaching efficiency. These were: personality traits of the teacher, instructional ability and communication skills. The teachers were evaluated by the students (which carried a weight of 60%) and superiors (dean or chairman, with 40% weight).

Validation of Instruments

The change adaptability questionnaire was pre-tested among high school faculty members of MSU-IIT, while the rating scale was experimented on two English classes at the college department of the same school. Item analysis was used in solving the discrimination index of each item. Items with d-values lower than 20 (the acceptable level) were excluded in the final set of questions.

Findings

On the profile level, the findings are shown in the table below:

TABLE 2
Respondents' Educational Qualifications

Type of School	BA*	Percent	MA**	Percent	Total	Percent
Gov. School	35	23.97	45	47.87	80	33.33
Priv. Sec. Sch.	53	36.30	27	28.72	80	33.33
Priv. Non-Sec. Sch.	58	39.70	22	23.41	80	33.33
Total	146	100.00	94	100.00	240	100.00

* *Bachelor's Degree*
** *Master's Degree*

There were more master's degree holders (45) in the government schools while there were more bachelor's degree holders in the private sectarian (27) and private non-sectarian schools (22).

There seems to be no significant difference in seminar attendance among the three groups.

TABLE 3
Respondents Seminar Attendance

Type of School	Frequency		Percent
Gov. School	(0 - 20 days)	62	77.50
	(21 over)	18	22.50
Total		80	100.00
Priv. Sec. School	(0 - 20 days)	69	86.25
	(21 over)	11	13.75
Total		80	100.00
Priv. Non-Sec. School	(0 - 20 days)	73	91.25
	(21 over)	7	8.75
Total		80	100.00

Faculty from the Private Sectarian Schools (11) and from the Private Non-Sectarian Schools (7) had lesser seminar attendance compared with the faculty from the government schools (18).

TABLE 4
Mean Difference in the Teaching Efficiency of the Most Adaptable to Change (MAC) and the Least Adaptable to Change (LAC) Groups in Fisher's Test of Independent Sample

1st & 3rd Quartiles CA Level	F	TE Means	T-value
MAC (scores from 112 & over)	60	145.34	
LAC (scores from 111 & lower)	58	108.31	
			4.59
Total	118		

4.59 .001 df 116

This data disclosed that there is indeed a big difference (4.59 > .001) between the teaching efficiency of those who are adaptable to change (mean 145.34) and those who are not (mean 108.31). It is therefore clear that those who have "high" change adaptability are more efficient teachers than those who have "low" change adaptability.

With correlation r.82 (Pearson or Computation) it was shown that teaching efficiency is highly correlated with change adaptability. This finding strengthens the position that change adaptability is related to teaching efficiency.

The one-way analysis of variance was used in testing a null hypothesis which says that there is no significant difference in the scores among the group. The next table presents the findings.

TABLE 5
ANOVA Table Showing the Difference in Variance of Change Adaptability and the Three Groups

SV	S S	df	V E	F
Between Grps.	342	2	171.1	
Within Grps.	4310.8	237	18.23	
Total	4653	239		9.41

$9.41 > .01$

where

S V Sources of Variance
S S Sum of Squares
df Degree of Freedom
F F value

The computed value of F which is 9.41 is greater than the critical value of 4.71 at .01 level of significance. This finding reveals that the distribution of scores differs significantly among the three groups even if the sample of each is held constant.

However, the F ratio of 9.41 even if it is better at .01 level of significance could not tell which of the three groups obtained the highest level of change adaptability, and which had the lowest. To identify, (the type), a Scheffe Test was applied. The result is shown in the next table.

TABLE 6

Scheffe Test Showing the Difference of
Change Adaptability Among the Three Groups

Groups Compared	Computed Value	df	Level of Significance
Gov. & Priv. Sect. Sch.	3.22	2	.05
Gov. & Priv. Sect. Sch.	18.33	2	.001
Priv. Sect. & Priv. Non-Sec. School	7.84	2	.01

The above findings disclosed that a slight difference (>.05) in change adaptability was registered when the government schools was compared with the private sectarian schools. The big difference (> .001) was revealed when the government schools were compared with the private non-sectarian schools. A significant difference (> .01) was shown when private non-sectarian schools were compared with the private sectarian schools.

A. Change Adaptability and Educational Qualification. Table 7 illustrates the results of the investigation.

TABLE 7
Change Adaptability and
Educational Qualification

Category	High C A		Low C A		Total
AB, BSE	a)	57	b)	88	145
MA (ph.D.)	c)	64	d)	29	93
Total		121		117	238*

*N = 238, two respondents did not answer this item.

where:

df, 1 p .001

X^2 = 19.95 C = .27

The above table shows that there is a very significant relationship (.> .001) between change adaptability and educational qualifications. The computed chi-square value of 19.95 is far greater than the critical value of 10.827 at .05 level of significance. The above table also suggests than when the educational qualification is high, the change adaptability level is also high.

B. On Change Adaptability and Seminars Attended. In this data, a multiple-fold contingency table was used, as shown in Table 8.

TABLE 8
Change Adaptability and Seminars Attended

Category	High Change Adaptability	Low Change Adaptability	Total
from 0 to 1 (0 to 10 days)	a) 51 (62.83)	b) 70 (58.17)	121
2 - 3 (from 11 to 30 days	c) 62 (54.55)	d) 44 (51.45)	106
4 - 5 (from 31 days over	e) 10 (6.17)	f) 2 (6.83)	12
Total	123	116	239*

* total N is only 239, one respondent did not answer this item.

x^2 = 10.805 p .01
df = 2 C = 21

The above findings manifest that seminars greatly affect change adaptability. The computed chi-square value of 10.805 is placed at better than .01 level of significance.

C. Teaching Experience and Change Adaptability. The possible correlation between change adaptability and teaching experience was also treated in multiple-fold contingency table. The results is presented in Table 9.

TABLE 9
Teaching Experience and Change Adaptability

Teaching Experience	High C A	Low C A	Total
"Short" Teaching Exp.	a) 30 (38.44)	b) 45 (36.56)	75
"Average" Teaching Exp.	c) 47 (42.02)	d) 35 (39.98)	82
"Long" Teaching Exp.	e) 46 (42.54)	f) 37 (40.46)	83
Total	123	117	240

$X^2 = 6.92$ df = 2 p .05
N = 240 C .17

The above findings attest that teaching experience is significantly correlated with change adaptability. The computed chi-square value is 6.92 better at .05 level of significance.

Salary was classified into three categories, namely: "below average" for those whose salary level was ₱ 2,000 or below; "average" for salaries from ₱ 2,001 to ₱ 3,500 and "above average" for salaries from ₱ 3,501 or over. The findings are shown in Table 10.

TABLE 10
Salary and Change Adaptability

Salary Level	High C A	Low C A	Total
Below average	a) 113 (110.7)	b) 103 (105.3)	216
Average	c) 8 (9.22)	d) 10 (8.78)	18
Above average	e) 2 (3.17)	f) 4 (2.92)	6
Total	123	117	240

$X^2 = 1.26$ df = 2 p N.S.
N = 240

The findings yielded a computed value of 1.26 which is lesser than the critical value at .05 level of significance. The findings further disclosed that difference in salary is not correlated with change adaptability.

Intrinsic Motivation. This variable was tested with the "low" separately from the "high" change adaptability group. The next two tables show the "low" and the "high" groups, respectively.

TABLE 11

Low Change Adaptability, The Three Types of School and Intrinsic Motivation

Type of School	High C A		Average C A		Low C A		Total	
	F	Percent	F	Percent	F	Percent	Total	Percent
Pri. Non Sect.	(a) 31 (26.09)	26.50	(b) 7 (12.49)	5.98	(c) 5 (4.4)	4.27	43	36.75
Pri. Sect.	(d) 23 (24.88)	19.66	(e) 13 (11.91)	11.11	(f) 5 (4.21)	4.27	41	35.04
Gov. Schools	(g) 17 (20.02)	14.53	(h) 14 (9.58)	11.97	(i) 2 (3.38)	1.71	33	20.21
Total	71	60.69	34	29.06		10.25	117	100.00

N = 117
X^2 = 6.86

df = 4
P = N.S.

TABLE 12
High Change Adaptability, the Three Types of School and Intrinsic Motivation

Types of School	High		Average		Low		Total	
	F	Percent	F	Percent	F	Percent	Total	Percent
Pri. Non. Sect.	(a) 27 (21.07)	21.95	(b) 7 (12.88)	5.69	(c) 2 (2.05)	1.63	36	29.27
Priv. Sect.	(d) 21 (22.82)	17.07	(e) 15 (13.96)	12.19	(f) 3 (2.22)	2.44	39	31.71
Gov. School	(g) 24 (28.11)	19.51	(h) 22 (17.16)	17.88	(i) 2 (2.73)	1.63	48	39.02
Total	72	58.53	44	35.77	7	5.69	123	100.00

N = 123 P = N.S.

X^2 = 7.03 df = 4

The findings in Table 12 simply show further that intrinsic motivation is not related to change adaptability.

Extrinsic motivation and change adaptability were tested among the "high" change adaptability group. The result is found in the next table.

TABLE 13
High Change Adaptability, Extrinsic Motivation and Types of School

Types of School	High		Average		Low		Total	
	F	Percent	F	Percent	F	Percent	F	Percent
PNSS	(a) 15 (9.66)	12.9	(b) 17 (15.8)	13.82	(c) 4 (10.54)	3.25	36	29.27
PSS	(d) 13 (10.46)	10.57	(e) 14 (17.12)	11.38	(f) 12 (11.41)	9.76	39	31.70
GS	(g) 5 (12.88)	4.06	(h) 23 (21.07)	18.70	(i) 20 (14.05)	16.26	48	39.02
Total	33	26.82	54	43.90	36	29.27	123	99.99*.

*due to the rounding of figures

N 123 (for High Change Adaptability Only)

X^2 = 16.70 df = 4
P = > .01 C = .35

Table 13 illustrates that extrinsic motivation is positively correlated with change adaptability at better than .01 level of significance. This finding is consistently shown when tested with the three types of school. The strength of correlation which is .31 further outstressed the theory that extrinsic motivation is positively correlated with change adaptability group. In plain language, working climate, for example, as an extrinsic motivation makes a teacher adaptable to change, and in effect, improves his teaching performance.

It is also interesting to note the correlation of extrinsic motivation and change adaptability variable among the "low" change adaptability group. See Table 14.

TABLE 14

Low Change Adaptability, Extrinsic Motivation and the Types of School

	High		Average		Low		Total	
Types of School	F	Percent	F	Percent	F	Percent	F	Percent
PNSS	(a) 9	7.69	(b) 30	25.64	(c) 5	4.27	44	37.60
PSS	(d) 8 (7.01)	6.84	(e) 20 (22.43)	17.09	(f) 13 (11.56)	11.11	41	35.04
OS	(g) 3 (5.47)	2.56	(h) 14 (17.5)	22.97	(i) 15 (19.03)	12.07	32	27.35
Total	20	17.09	64	54.70	33	28.20	117	99.99*

* due to the rounding of figures

N = 117 (for low change adaptability group only)

X^2 = 12.478 df = 4

P = > .05 C = .31

The preceding table suggests that extrinsic motivation correlates with change adaptability even when it is tested with the "low" change adaptability group. The correlation which is better at .05 level of significance attests to this presentation.

Leadership style of the administrators in this study is anchored on the definition of Keith Davis, (1972:109) which he called power styles. Leadership as defined is classified into three styles, namely: Autocratic, democratic and free rein. After the statistical test, the following findings were revealed.

1) There is no significant correlation between "high" change adaptability and leadership style; and 2) the computed chi-square is lesser than the value at .05 level of significance. These findings suggest that those who are highly adaptable to change will remain to be the same regardless of the administrator's leadership style. Quite interestingly, a significant correlation (.01) was revealed between low change adaptability and the leadership style of the administrators. This finding suggests that those with low change adaptability are highly sensitive to leadership style.

RESUME OF FINDINGS

Considering all the variables included in this investigation, a summary table is presented.

TABLE 15
Resume of Findings

Variables Compared/ Related	Statistical Test Used	Computed Value	df	Level of Significance
1. Teaching Efficiency & Change Adaptability (High & low for the two variables composed)	t-test of independent samples	4.59	116	> .001
2. Teaching and Change Adaptability Correlated	Pearson	.82		very high
3. Difference Between and Within Change Adap. Among the Three Types of Sch.	One-Way Analysis of Variance	9.41	239	> .01
3.1 GS & PSS	Scheffe test	3.22	2	> .05
3.2 GS & PNSS	Scheffe test	18.33	2	> .001
3.3 PNSS & PSS	Scheffe test	7.84	2	> .01
4. Change Adap. & some socio-educ. variables				
4.1 Educ. qualifications	Chi-square	19.95	1	> .001
4.2 Seminars	Chi-square	10.805	2	> .01
4.3 Teaching exp.	Chi-square	6.92	2	> .05
5. Standard of Living				
5.1 Salary	Chi-square	1.26	2	N.S.
5.2 Other economic Indicators	Chi-square	2.26	2	N.S.

Variables Compared/ Related	Statistical Test Used	Computed Value	df	Level of Significance
6. Motivational Factors				
6.1 Intrinsic Motivations				
with High C.A.	Chi-square	7.030	4	N.S.
with Low C.A.	Chi-square	12.478	4	N.S.
6.2 Extrinsic Motivations				
with High C.A.	Chi-square	16.7	4	.01
with Low C.A.	Chi-square	12.478	4	.05
6.3 Leadership Style (Autocratic, democratic & Free Rein				
with High C.A. Leadership Style	Chi-square	6.488	4	N.S.
with Low C.A. Leadership Style	Chi-square	15.913	4	N.S.

CONCLUSIONS

On Null bypothesis 1. Inasmuch as the findings through a t-test indicated a high significant difference in the teaching efficiency between the "high" change adaptability group and the "low" change adaptability group, the null hypothesis is *rejected.*

On Null bypothesis 2. The findings disclosed that there is a high degree of correlation between change adaptability and teaching efficiency; therefore, the null hypothesis is *rejected.*

On Null bypothesis 3. A big difference in the change adaptability levels of the three types of school is established based on the findings through a one-way analysis of variance. In effect, the null hypothesis is also *rejected.*

On Null bypothesis. 4. The hypothesis consisted of two sub-hypotheses. Each had its own findings. On educational qualification: The findings indicated that educational qualification greatly affects change adaptability. Those whose educational qualifications were high were more adaptable to change; while those with low, were less adaptable to change. As a result, the first sub-hypothesis is rejected. *On Seminars Attended:* The study found out that seminars affect change adaptability. There-

fore, the null hypothesis is *rejected*. *On Teaching Experience:* Since the findings revealed that teaching experience affects change adaptability, the null sub-hypothesis is also *rejected*.

On Null hypothesis 5. Salary and other Economic Indicators.

On Salary: The findings disclosed that salary does not affect change adaptability, therefore, the null hypothesis is *accepted*. *On other Economic Indicators:* The findings manifested that other economic indicators do not affect change adaptability. As a result, the null sub-hypothesis is *accepted*.

On Null hypothesis 6.

1. Intrinsic Motivation does not affect change adaptability. This is seen through the findings. Thus, the null hypothesis is *accepted*.
2. Extrinsic Motivation. There seems to be a different result on the extrinsic motivational factors compared with the intrinsic motivational factors. Findings established a significant correlation between extrinsic motivation and change adaptability, therefore the null hypothesis is *rejected*.
3. Leadership Style. There is no significant correlation between high change adaptability and leadership style, but there lies a significant correlation between low change adaptability and leadership style.

RECOMMENDATIONS

On the basis of all the information that this study has gathered, and under the circumstances it was undertaken, a list of recommendations is made to the following sectors:

Researchers. It is recommended that a replication of this study be done on other areas of the teaching profession and other fields of study. More exhaustive investigations shall be done on other subjects related to teaching efficiency and change adaptability. For example, it would be interesting to find out if change adaptability is correlated with teaching efficiency among teachers in the exact sciences or mathematics and natural sciences.

More studies should be done not only on change adaptability but also on the effects of rapid change. There would be a tremendous effect if a study is done to find out if there really is a deterioration of human values as an effect of change caused by the impact of scientific and technological progress.

Teachers. It is recommended that teachers should learn to be more adaptable to change. Since educational qualifications affect change adaptability, it is suggested that teachers should not stop learning or studying.

Pursuing graduate studies, attending seminars religiously, taking up in-service trainings to acquire some experiences and novel strategies in teaching would undoubtedly make one adaptable to change (from his/her present ability) and thereby, provide him/her with a chance to become a more efficient teacher. It will be

recalled that educational qualifications, teaching experience and attendance of seminars have high positive correlations with change adaptability. Being open-minded to new approaches acquiring new methods of teaching will certainly help one to become efficient in his profession.

In addition, teachers should constantly read good literature, such as educational journals, books and researches. When new information and data are available, they should not hesitate to make good use of it.

School Administrators. Since economic factors do not affect change adaptability, administrators should come up with incentives over and above economic considerations. Promotion in ranks, giving of citations and awards or recognition of commendable services are very helpful and positive incentives. A more systematic and effective faculty upgrading program for the faculty is also recommended. A school administrator can adequately come up with such faculty development programs and implement it among the faculty equitably so that everyone will have the chance to grow professionally.

Something can be done concerning the leadership style of the administrators. A more democratic type of leadership can work well if the faculty are highly adaptable to change. Recent findings show that teachers continue to be adaptable to change regardless of the leadership style.

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