Reflect-Action method to develop skills in business and tax management

Método Reflect Acción para desarrollar capacidades en gestión empresarial y tributaria

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Abstract

This research has as general objective to determine if the application of the Reflect Action method achieves the skills development in business and tributary management of the farmers at Monsefú, Reque and Eten. Specific objectives: to perform the validity and reliability test of the data collection instruments, to apply the reflect action method in pre-test and post-test to evaluate the skills in business and tax management. This study is important because literacy method and its approach influence insignificant learning of business and fiscal management to illiterate people. In this perspective, a pre - explanatory research was developed, the data collection was carried out by applying a pre test and a post to the sample, the research development was addressed from an educational perspective, observing present situation of the farmers, regarding development of skills in business and fiscal management.

Key words: Reflect-Action method, capacities in business management, skills in fiscal management.

Resumen

La presente investigación tiene como objetivo general determinar en qué medida la aplicación del Método Reflect Acción logra el desarrollo de capacidades en gestión empresarial y tributaria de los campesinos de Monsefú, Reque y Eten; y como objetivos específicos: realizar la prueba de validez y confiabilidad de los instrumentos de recolección de datos, aplicar el pre test y post test para evaluar las capacidades en Gestión empresarial y tributaria, aplicar el Reflect acción. Esta investigación es importante porque el método de alfabetización y su enfoque, influye en el aprendizaje significativo de la gestión empresarial y tributaria entre personas analfabetas. En esta perspectiva se desarrolló una investigación de tipo explicativo – pre, la recolección de datos se realizó aplicando un pre test y un post a la muestra, el desarrollo la investigación se abordó desde una perspectiva educativa, observando la situación actual de los campesinos, con respecto al desarrollo de capacidades de la gestión empresarial y tributaria.

Palabras clave: Método Reflect acción, capacidades en gestión empresarial, capacidades en gestión tributaria.

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Introduction

Agriculture in developing nations face up to countries that have great development in the industry and that have applied strategies in agriculture, which now deal with TLC[4] and to the policies that have been recently implemented in the world. Today, it faces two important challenges: agrarian policies.

In peasant communities, development can be achieved by applying organization modern strategies, productivity and social programs. Nowadays, in most South American countries, farmland development is applied to family groups, which often have productivity and financing problems that prevents them from developing and growing permanently. For this reason, it is important to develop skills of business and fiscal management in peasants; because they must have a business vision to be able to include themselves and have a market share. Nowadays, peasant communities are beginning to respond to a new market dynamic, for which they must be prepared to lead a new type of company.

In the world, peasant communities have the role of being economic actors that have business vision, this way they can be more competitive in this world of dynamic markets. This means that peasant communities must search and apply new knowledge that allows them to have a better management of their businesses and to become the most competitive. That is why, now we research to strengthen producers skills in business and fiscal management. Business management is the company activity that researches to improve productivity and therefore the competitiveness of companies or businesses, through people (such as institutional directors, managers, producers, consultants and experts). León, C. and others (2007).

Fiscal management consists on the exercise of administrative functions directed, fundamentally, to the reception and processing declarations, self-assessments and data communications, as well as the control actions development, such as the data, values, limited or formal obligations verification.

In the last decades, emphasis has been done on business development of peasant communities in Peru, but unfortunately this is a point against, because it becomes an obstacle. The illiteracy rate of 7.1% nationwide and 19.7% in rural areas, (INEI[5]-National Censuses: XI Population and VI Housing 2007), generate that the farmers do not manage to develop entrepreneurially. In the Department of Lambayeque, the illiteracy rate is 6.5%; in Eten, Monsefú and Reque it is 11.9%, 11.5% and 5.8% respectively. (INEI-National Censuses: XI Population and VI Housing 2007), these statistical data show that farmers do not have sufficient capacity to understand and apply efficient tax strategies in the company, cannot perform a taxes economic analysis, do not have knowledge about the income rate, general sales and municipal rate. Which has an impact on the company directly, because the decision-making at the economic-financial level are deficient.

With the purpose of achieving development skills in business and fiscal management in the farmers of Reque, Monsefú and Eten, and taking into account the illiteracy and

[4] TLC (Tratado Libre Comercio): FTA (Free Trade Agreements)

[5] INEI (Instituto Nacional de Estadística e Informática): NISI (National Institute of Statistics and Informatics)

academic level of them, who are mostly adults and living in poverty. Due to lack of education, many people are deprived of their educative and health rights, without the opportunity to face an increasingly competitive world. A publication by "Ayuda en Acción Perú" informs that the Reflect-Action Method has been applied in more than 50 culture circles currently active in different regions of Peru with great success in adult literacy in rural areas of Peru.

All this problem helped to formulate the research question: How will the skills be develop in business and fiscal management by applying the Reflect-Action method in the farmers of Reque, Monsefú and Eten, 2015? the same that is supported and justified in the work carried out by INTSOL (2009), which is applied in its social work processes. The perspective of Reflect-Action as a participative approach is for adult education in 350 organizations, in 60 countries around the world. The main objective of this research is to concretize a democratic participation of the people and group. INTSOL concluded that: Reflect-Action method is an innovative approach to literacy and social change, which puts together Paulo Freire theories and the Participatory Rural Appraisal methodology; the application of this method facilitates and accompanies inter learning considering the development processes of each person and their collective.

The approach to community development and social change became one of the most used tools in the world. The establishment of its basic principles is a part of the explanation about why the approach is so widespread. In the thesis, regarding with the area proposed in the research, we found that illiteracy in Reque, Monsefú and Eten has a rate of 11.9%, 11.5% and 5.8%. (INEI-National Censuses: XI Population and VI Housing

2007), situation that becomes an illiterate marginalization element, limiting their possibilities of empowerment and access to better living conditions.

The percentages increase considerably when it is referred to women in the intervention area, which is a reflection of the discrimination where they find themselves. This problem, beyond disappearing in rural areas, has become a cycle passed from father to son, where the first ones just expect their children to get an education that includes only to learn how to read and write. This is reflected in the high repetition and school dropout level. This situation has lead to weaken the role of the illiterate citizen, which has often turned them into an easy-to-manipulate population for politics, especially through the use of welfare policies.

It also means that they significantly reduce the possibilities of assuming leadership in their community. The application of the Reflect - Action method for skills in business and fiscal management among farmers from the district of Reque (La Calera), Monsefú (Pomape) and Eten (Eten City) is searched. With this reality, the Reflect method is a way to focus on learning and social change.

The key of Reflect-Action method is to create spaces where people feel comfortable to meet and discuss issues that concern them and affect their social life. This method seeks to improve the useful participation of people in decisions that affect their lives, strengthening their skills to communicate. The process tries to incorporate entrepreneurs into their community workforce, seeking self-management and consolidation of their organizations and integrate them into solid and self-managed organizations in a formal way. Finally, to demonstrate that the tools used in the Reflect-Action method have been

developed through a process of interaction with the participants. As the workshops have been carried out, some adaptations have been made to the images to reflect the different situations and used short dramatizations and role plays, some even conceived by the participants.

Method

Regarding to the type of study, this research is applied,. It is an applied type, because the Reflect Action method will be used to farmers in Reque, Monsefú and Eten districts, and then it will be determined if they achieve or not the development of skills in business and fiscal management. The hypothesis testing design is pre-experimental. According to Cook and Campbell (1986) they declare that this designs apply a pre test (O) to a group of subjects, then the treatment (X) and finally the post test (O). The result is the assessment of the change that occurred from the pre-test to the post test. (p.142).

The research is pre-experimental, because is a single group conformed by 302 farmers, selected by stratified random sampling of a population with 4642 individuals. The analysis methods that applied were: the synthesis method which has allowed to discriminate each of the elements of the sample, with the purpose of identifying the characteristics that they have in common and thus be able to relate them, allowing to apply the Reflect-Action method. The Empirical Method, which at first has been made an exhaustive observation of the problematic reality, then the information was collected through the application of techniques and data collection instruments, the data was collected through a pretest and a post test validated by three experts and with a Cronbach's Alpha of 0.830. The data

collection instruments was constituted by 38 questions each one, measured in Likert scale from 1 to 5, the maximum score is 190 and the minimum is 38.

In order to establish if the farmer managed to develop or not skills in business and fiscal management, we used a vigesimal scale conversion of the scores obtained, the measurement criterion being: 0-10 (It does not achieve development of skills in business and fiscal management), 11-16 (It achieves skills development of business and fiscal management and 17-20 (It achieves development of skills in business and fiscal management in a remarkable way.)

After the data collection was carried out the data analysis. First, a descriptive analysis was made, presenting the data in tables and statistical figures, the truth of hypothesis was proved by the hypothesis test referring to the difference of two means. Then, for the reliability test, a model sample of 25 farmers was taken and the Cronbach's Alpha was used to measure the reliability (Table 1).

Table 1

RELIABILITY STATISTICS		
Cronbach´s alpha	Cronbach´s alpha base on typified elements	Number of elements
0.830	0.830	25

Source: Evaluation result in SPSS.

Results of the Pre-Test application

The results of the Pre Test were presented in tables and two-dimensional statistical graphs.

Table 2

Skills Development in business and tax management of the farmers of Reque, Monsefú and Eten.

| SKILLS | DISTRICT | | | | | |
| | MONSEFU | | REQUE | | ETEN | |
	N°	%	N°	%	N°	%
Achieve skills development of business and tax management	1	0.5	0	0	0	0
Doesn´t achieve skills development of business and tax management	196	99.5	72	100	33	100
TOTAL	197	100	72	100	33	100

Source. Pre-test applied to the farmers of Reque, Monsefú and Eten.
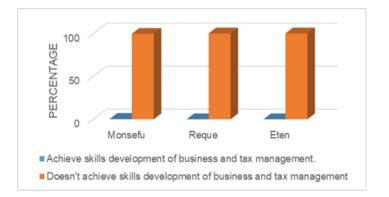

Figure 1. Development of skills in business and fiscal management of the farmers of Reque, Monsefú and Eten.

The data obtained in the statistical table that 99.5%, 100%, 100% of farmers of Monsefú, Reque and Eten, it doesn't achieve the development of skills in business and fiscal management. This shows that is necessary to apply strategies to achieve these capacities in the farmers; taking into account that in the study group everyone is illiterate. It is essential for the application of the Reflect-Action method.

Results of the application of the Post-test

Through the post- test applied to the farmers of Reque, Monsefú and Eten, after applying the Reflect- Action method, the following results were obtained that are shown in the table.

Table 3

Development of skills in business and fiscal management of the farmers of Reque, Monsefú and Eten.

| SKILLS | DISTRICT | | | | | |
| | MONSEFU | | REQUE | | ETEN | |
	N°	%	N°	%	N°	%

Achieve skills development of business and tax management	185	94	63	87	26	79
Doesn´t achieve skills development of business and tax management	12	6	9	13	7	21
TOTAL	197	100	72	100	33	100

Source. Pre-test applied to the farmers of Reque (La Calera), Monsefú (Pomape) and Eten (Ciudad Eten).

Achieve skills development of business and tax management.
Doesn't achieve skills development of business and tax management

Figure 2. Development of skills in business and fiscal management of the farmers of Reque, Monsefú and Eten.

Table 3 shows that 94% of the farmers in Monsefú, 87% in Reque and 79% in Eten, achieve the development of skills in business and fiscal management. This shows that the Reflect- Action method works perfectly in illiterate populations of our Region.

Reflect Action method Validation

Descriptive measures in the Pre and Post test.

Table 4

Development of skills in business and fiscal management of the farmers of Reque, Monsefú and Eten.

Statisticians	PRE TEST			POST TEST		
	Reque	Monsefu	Eten	Reque	Monsefu	Eten
X	8.8	8.7	8.5	15.4	13.3	12.42
S	1.7	1.4	1.7	2.6	2.1	2.7
C.V	0.2	0.2	0.2	0.2	0.2	0.22

In this table is verified that in the Pre Test the farmers obtained an average 8,654 (8,828 Reque; 8.666 Monsefú; 8.469 Eten), demonstrating that farmers do not develop skills in business and fiscal management, while in the Post-Test the results improved, obtaining an average equal 15,437 Reque; 13,250 Monsefú; 12,412 Eten, which shows that the Reflect action method does allow development of skills in business and fiscal management of the farmers.

Hypothesis testing:

Test of difference of two means to compare the groups in the Pre Test.

Test of difference between the average score obtained by the farmers of Reque and Monsefu.

Statistical hypotheses formulation:

H0: μReque Pre Test = μMonsefú Pre Test (The average mark obtained by the farmers of Reque is equal to the farmers of Monsefú)

Hl: μReque Pre Test ≠ μMonsefú Pre Test (The average mark obtained by the farmers of Reque is not equal to the farmers of Monsefú).

Critical region:

i) Statistical test: bilateral

ii) Hypothesis testing: Z

iii) Confidence level= 1-α = 0.95 (95%)

iv) Significance level= α = 0.05 (5%)

v)   Null hypothesis is rejected: if Z calculated< -1.96 or Z calculated > 1.96

vi) Null hypothesis is accepted: -1.96 <=Z calculated<= 1.96

vii) Arithmetic average : $\overline{X}1 = 8.828$; $\overline{X}2 = 8.666$

viii) Variances: $\sigma1\ 2 = 1.6972$; $\sigma2\ 2 = 1.3562$

ix) Sample sizes: $n1 = 72$; $n2 = 197$

Statistical test:

$$Z = \frac{(\overline{X}_{Reque\ Pre\ Test} - \overline{X}_{Monsefu\ Pre\ Test}) - (\mu_{Reque\ Pre\ Test} - \mu_{Monsefu\ Pre\ Test})}{\sqrt{\frac{\sigma_1^2}{\sqrt{n_1}} + \frac{\sigma_2^2}{\sqrt{n_2}}}}$$

$$Z = \frac{(8.828 - 8.666)}{\sqrt{\left(\frac{2.879809}{72}\right) + \left(\frac{1.838736}{197}\right)}}$$

$$Z = 0.729$$

Statistical decision:

H0 should not be rejected.

Decision in terms of the problem:

At 5% of statistical significance level, it can be said that there is sufficient evidence that the average mark obtained by farmers of Reque is equal to the farmers of Monsefú. This means that the same training strategy can be applied for both groups.

Test of difference between the average score obtained by the farmers of Reque and Eten.

Formulation of statistical hypotheses:

H0: μReque Pre Test = μMonsefú Pre Test (The average mark obtained by the farmers of Reque is equal to the farmers of Eten)

Hl: μReque Pre Test ≠ μMonsefú Pre Test (The average mark obtained by the farmers of Reque is not equal to the farmers of Eten).

Critical region:

i) Statistical test: bilateral.

ii) Hypothesis testing: Z

iii) Confidence level = 1-α = 0.95 (95%)

iv) Significance level = α = 0.05 (5%)

v) Null hypothesis is rejected: if Z calculated < -1.96 or N calculated > 1.96

vi) Null hypothesis is accepted: -1.96 <=Z calculated<= 1.96

vii) Arithmetic average : $\overline{1}$ = 8.828 ; $X\overline{2}$ = 8.469

viii) Variances: $\sigma1\ 2$ = 1.6972 ; $\sigma2\ 2$ = 1.6702

ix) Sample sizes:: $n1 = 72; n2 = 33$

Statistical test:

$$Z = \frac{(X_{Reque\ Pre\ Test} - X_{Eten\ Pre\ Test}) - (\mu_{Reque\ Pre\ Test} - \mu_{Et}}{\sqrt{\frac{\sigma_1^2}{\sqrt{n_1}} + \frac{\sigma_2^2}{\sqrt{n_2}}}}$$

$$Z = \frac{(8.828 - 8.469)}{\sqrt{\left(\frac{2.879809}{72}\right) + \left(\frac{2.7889}{33}\right)}}$$

$$Z = 1.017$$

Statistical decision:

H0 should not be rejected.

Decision in terms of the problem:

At 5% of statistical significance level, it can be said that there is sufficient evidence that the average mark obtained by farmers of Reque is equal to the farmers of Eten. This means that the same training strategy can be applied for both groups.

Test of difference between the average mark obtained by the farmers of Monsefu and Eten.

Statistical hypotheses formulation:

H0: µMonsefú Pre Test = µEten Pre-Test (The average mark obtained by the farmers of Monsefu is equal to the farmers of Eten).

H1: µMonsefú Pre Test ≠ µEten Pre-Test (The average mark obtained by the farmers of Monsefu is not equal to the farmers of Eten).

Critical region:

i) Statistical test: bilateral

ii) Hypothesis testing: Z

iii) Confidence level = 1-α = 0.95 (95%)

iv) Significance level = α = 0.05 (5%)

v) Null hypothesis is rejected: if Z calculated < -1.96 or Z calculated > 1.96

vi) Null hypothesis is accepted: -1.96 <=Z calculated<= 1.96

vii) Arithmetic average : $\overline{1}$ = 8.666 ; $X\overline{2}$ = 8.469

viii) Variances: $\sigma1\ 2$ = 1.3562 ; $\sigma2\ 2$ = 1.6702

ix) Sample sizes: $n1 = 197; n2 = 33$

Statistical test:

$$Z = \frac{(\bar{X}_{Monsefu\ Pre\ Test} - \bar{X}_{Eten\ Pre\ Test}) - (\mu_{Monsefu\ Pre\ Test} - \mu_{Eten})}{\sqrt{\frac{\sigma_1^2}{\sqrt{n_1}} + \frac{\sigma_2^2}{\sqrt{n_2}}}}$$

$$Z = \frac{(8.666 - 8.469)}{\sqrt{\left(\frac{1.838736}{197}\right) + \left(\frac{2.7889}{33}\right)}}$$

$$Z = 0.643$$

Statistical decision:

H0 should not be rejected.

Decision in terms of the problem:

At 5% of statistical significance level, it can be said that there is sufficient evidence that the average mark obtained by farmers of Monsefu is equal to the farmers of Eten. This means that the same training strategy can be applied for both groups

Test of difference between two-average to compare the groups in Pre-test and Post-test.

Test of difference between the average mark obtained by the farmers of Reque in Pre-test and Eten in Post-test.

Statistical hypotheses formulation:

H0: μReque Pre Test >= μReque Post Test (The average mark obtained by the farmers of Reque in Pre –test is equal to the farmers of Reque in Post-test).

H1: μReque Pre Test < μReque Post Test (The average mark obtained by the farmers of Reque in Pre –test is less than the farmers of Reque in Post-test).

Critical region:

i) Statistical test: bilateral

ii) Hypothesis testing: Z

iii) Confidence level = 1-α = 0.95 (95%)

iv) Significance level = α = 0.05 (5%)

v) Null hypothesis is rejected: if Z calculated < -1.645

vi) Null hypothesis is accepted: : Z calculated >= -1.645

vii) Arithmetic average : $\bar{X}1 = 8.828$; $\bar{X}2 = 15.437$

viii) Variances: $\sigma1\ 2 = 1.6972$; $\sigma2\ 2 = 2.6002$

ix) Sample sizes: $n1 = 72$; $n2 = 72$

Statistical test:

$$Z = \frac{(\bar{X}_{Reque\ Pre\ Test} - \bar{X}_{Reque\ Post\ Test}) - (\mu_{Reque\ Pre\ Test} - \mu_{Reque\ Post\ Test})}{\sqrt{\frac{\sigma_1^2}{\sqrt{n_1}} + \frac{\sigma_2^2}{\sqrt{n_2}}}}$$

$$Z = \frac{(8.828 - 15.437)}{\sqrt{\left(\frac{2.879809}{72}\right) + \left(\frac{6.760}{72}\right)}}$$

$$Z = -13.9584$$

Statistical decision:

H0 should not be rejected.

Decision in terms of the problem:

At 5% of statistical significance level, it can be said that there is sufficient evidence that the average mark obtained by farmers of Reque in Pres-test is less than the farmers of

Reque in Post test. This means that the Reflect- Action method achieves the development of skills in business and Fiscal management in the farmers of Reque.

Test of difference between the average mark obtained by the farmers of Monsefu in Pre test and Monsefu in Post test.

Statistical hypotheses formulation:

H0: μPre Test >= μPost Test (Average mark obtained by farmers in the Pre Test is greater or equal than farmers in the Post Test.)

H1: μPre Test < μPost Test (Average mark obtained by farmers in the Pre Test is less than the farmers in the Post Test.)

Critical region

i)   Statistical test: bilateral

ii)   Hypothesis Testing: Z

iii)   Confidence interval level: 1-α = 0.95 (95%)

iv)   Statistical significance level: α = 0.05 (5%)

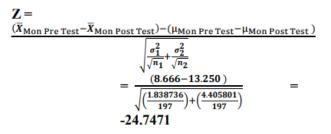v)   Null hypothesis is rejected: if Z calculated < -1.96 or Z calculated > 1.96

vi)   Null hypothesis is accepted if: -1.96 <= Z calculated<= 1.96

vii) Arithmetic average: $\bar{X}1 = 8.828$; $\bar{X}2 = 8.666$

viii) Variance: $\sigma_1^2 = 1.69722$; $\sigma_2^2 = 1.35622$

ix)   Sample sizes: $n1 = 72$; $n2 = 197$

Hypothesis testing:

$$Z = \frac{(\bar{X}_{\text{Mon Pre Test}} - \bar{X}_{\text{Mon Post Test}}) - (\mu_{\text{Mon Pre Test}} - \mu_{\text{Mon Post Test}})}{\sqrt{\frac{\sigma_1^2}{n_1} + \frac{\sigma_2^2}{n_2}}}$$

$$= \frac{(8.666 - 13.250)}{\sqrt{\left(\frac{1.838736}{197}\right) + \left(\frac{4.405801}{197}\right)}} =$$

-24.7471

Statistical decision:

H0 should not be rejected.

Decision in terms of the problem:

At 5% of statistical significance level, it can be said that there is enough evidence to recognize that the average mark of the farmers of Reque is equal to the average mark obtained by the farmers of Monsefú. This means that this same training strategy can be used for both groups.

Test of difference   between the average mark obtained by farmers of Eten in the Pre Test and the average mark obtained by farmers of Eten in the Post Test.

Statistical hypotheses formulation:

H0: μEten Pre Test >= μEten Post Test (The average mark obtained by the farmers of Eten in the Pre Test is equal to the average mark obtained by the farmers of Eten in the Post Test)

H1: μEten Pre Test < μEten Post Test (The average mark obtained by the farmers of Eten in the Pre Test is less than the average mark obtained by the farmers of Eten in the Post Test)

Critical region:

i)   Statistical test: bilateral

ii)   Hypothesis Testing: Z

iii)   Confidence interval level: 1-α = 0.95 (95%)

iv)   Statistical significance level: α = 0.05 (5%)

v)   Null hypothesis is rejected: if Z calculated < -1.645

vi)   Null hypothesis is accepted: Z calculated > = - 1.645

vii) Arithmetic average: $\bar{X}1 = 8.465$; $\bar{X}2 = 12.412$

viii) Variance: $\sigma 1^2 = 1.6702$; $\sigma 2^2 = 2.6772$

ix)   Sample sizes: $n1 = 33$; $n2 = 33$

Hypothesis testing:

$$Z = \frac{(\bar{X}_{Req\ Pre\ Test} - \bar{X}_{Req\ Post\ Test}) - (\mu_{Req\ Pre\ Test} - \mu_{Req\ Post\ Test})}{\sqrt{\frac{\sigma_1^2}{\sqrt{n_1}} + \frac{\sigma_2^2}{\sqrt{n_2}}}}$$

$$= \frac{(8.469 - 12.412)}{\sqrt{\left(\frac{2.7889}{67}\right) + \left(\frac{7.166329}{67}\right)}} = -10.2291$$

Statistical decision:

H0 should not be accepted.

Decision in terms of the problem:

At 5% of statistical significance level, it can be said that there is enough evidence to recognize that the average mark of the farmers of Eten in the Pre Test is less than the average mark obtained by the farmers of Eten in the Post Test. This means that the Reflection – Action Method develops skills in Fiscal and Business Management in farmers of Eten.

Test of difference of two arithmetic averages to compare the groups in Pre Test and Post Test.

Pre Test		Post Test	
Average	8.633	Average	13.377
Standard deviation	1.48	Standard deviation	2.46
Coefficient of variation	0.17	Coefficient of variation	0.184

Statistical hypotheses formulation:

H0: μPre Test >= μPost Test (The average mark obtained by the farmers in the Pre Test is greater than or equal to the average mark obtained by the farmers in the Post Test)

H1: μ Pre Test < μ Post Test (The average mark obtained by the farmers in the Pre Test is less than the average mark obtained by the farmers in the Post Test)

Critical region:

i)   Statistical test: bilateral

ii) Hypothesis Testing: Z

iii) Confidence interval level: 1-α = 0.95 (95%)

iv) Statistical significance level: α = 0.05 (5%)

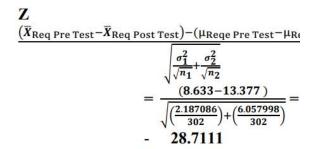v)   Null hypothesis is rejected: if Z calculated < -1.645

vi)   Null hypothesis is accepted: Z calculated> = - 1.645

vii) Arithmetic average: $\bar{X}1 = 8.633$; $\bar{X}2 = 13.377$

viii) Variance: $\sigma 1^2 = 1.478882$; $\sigma 2^2 = 2.461302$

ix) Sample sizes: $n1 = 302; n2 = 302$

Hypothesis testing:

$$Z$$
$$\frac{(\bar{X}_{\text{Req Pre Test}} - \bar{X}_{\text{Req Post Test}}) - (\mu_{\text{Reqe Pre Test}} - \mu_{\text{R}})}{\sqrt{\frac{\sigma_1^2}{\sqrt{n_1}} + \frac{\sigma_2^2}{\sqrt{n_2}}}}$$
$$= \frac{(8.633 - 13.377)}{\sqrt{\left(\frac{2.187086}{302}\right) + \left(\frac{6.057998}{302}\right)}} =$$

- **28.7111**

Statistical decision:

H0 should not be accepted.

Decision in terms of the problem:

At 5% of statistical significance level, it can be said that there is enough evidence to recognize that the average mark of the farmers in the Pre Test is less than the average mark obtained by the farmers in the Post Test. This means that the Reflection – Action Method develops abilities in Fiscal and Business Management in farmers from Reque, Monsefú and Eten.

Discussion

According to Archer, D., and Cottingham, S. (1996, p.2-17) the Reflect method is applied successfully in communities of Uganda (Africa), Bangladesh (Asia) and El Salvador (Central America), literacy circles use this method in order to produce their own learning materials, analyze their people and their immediate circumstances. This was the main reason why the Reflect – Action method was applied in illiterate farmers from Monsefú, Reque and Eten; since nowadays farmers are marginalized and exploited by large finance companies which, rather than providing resources in order to lead a sustained growth, destroy them with high interest rate loans and confiscation of property. These situations happen because they neither know their rights nor have legal assistance. Instead of starting every lesson with a so-called coding, it starts with the construction of a map, matrix, calendar or diagram. All performed in a plant with any kind of local material available to use like sticks, stones, seeds or beans. There techniques were used by Participatory Rural Evaluation internship students.

This method focuses more in writing, then reading becomes an easy task. It is developed while writing and it helps people being more confident with themselves, making them able to acquire lettered habits. Results obtained in Africa and different zones where the Reflect-Action method was applied were very positives; these results can be compared with the ones found in the thesis; which evince were successful because it allowed the development of abilities in fiscal and business management in farmers from rural zones of Monsefú, Reque and Eten. Since farmers from zones of Reque (La Calera), Monsefú (Pomape) and Eten (Ciudad Eten), live a similar reality; they are dedicated to agronomy activities. They produce, transform and commercialize agriculture and livestock products; with the sole purpose of increasing their production, incomes and achieve their economic, social and cultural objectives; but due to the wide range of illiteracy in these zones, farmers have stayed in ignorance, causing them failing to manage and market their own production; causing loss, indebtedness and definitive closure of their

activities, thereby working not as independent but dependent employees.

Conclusions

Through the investigation process the following results were obtained:

According to the opinion of three statistical, fiscal and business management experts; and through the implementation of the Cronbach's alpha (0.830) it was proved that instruments are valid and reliable for its implementation in the thesis. The Pre test shows that farmers from Reque, Monsefú and Eten, do not develop fiscal and business management abilities.

The Reflect- Action method was applied,considering competences, abilities, indicators, activities and evaluation criteria; all based on epistemological and psychological basis, and farmers as the center of the teaching-learning process. This method allows us to know more about: economic theory of taxation; distortions produced by taxes in the decisions of the individual; aspects of macroeconomic level; contentious taxes procedures as much in administrative as judicial channel; the accounting model of application in Peru for enterprises and its relationship with the taxation approach and implementation; main problems derived from tax administration proclamations, through reports and control process, and jurisprudence which establish resolutions of the Tax Court; rates; the General Sales Tax; taxation. An achievement is that farmers develop fiscal and business management abilities. The post test is indispensable to evaluate fiscal and business management abilities in farmers from Reque, Monsefú and Eten. This shows that farmers do develop fiscal and business management abilities demonstrating that

Reflect-Action method works perfectly in illiterate cities of our region.

The Reflect-Action method is valid to develop fiscal and business management skills in farmers from Reque, Monsefú and Eten. In the carrying out of this project, a Pre Test was applied first, in order to diagnose current reality; then the method was applied for 5 months in 5 sessions, one per month and lasting two chronological hours each; and finally the application of a Post Test, determined a significant negative difference between the average mark of the Pre and Post Test, showing that after the implementation of the Reflect- Action method, better results were obtained. This way, the scientific hypothesis is verified: "If the Reflect – Action method is applied, the development of fiscal and business management skills in farmers of the Reque, Monsefú and Eten Districts will be better.".

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