## RESEARCH ARTICLE

# The influence of school characteristics on attitudes towards Agriculture; The case of teachers and students of secondary schools in Baringo County, Kenya. 

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## Manuscript Info

## Manuscript History:

Received: 18 December 2015
Final Accepted: 12 January 2016
Published Online: February 2016

## Key words:

attitudes, Agriculture, Curriculum.
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#### Abstract

Attitudes are central to the education process both as ends and means depending on whether they are positively or negatively directed towards a particular subject. The objective of this paper is to determine whether school characteristics influence attitudes of teachers and students towards agriculture in secondary schools in Baringo County. Descriptive survey design was employed and questionnaire was used to collect data from a total of 222 respondents drawn from a population of 800 teachers and students of secondary schools in Baringo North Sub County. The paper concluded that


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## Introduction:-

Initiating a curriculum change encompasses human engineer, a strategy of modifying attitudes and feelings which often is a task of producing competence for curriculum development (Taba, 1962).

The students' and Teachers' appreciation of a subject is central in developing positive attitudes towards the subject.Husen and Postlewaite (1994) asserts that attitudes are central to the education process both as ends and means depending on whether they are positively or negatively directed towards a particular subject. They are considered to promote or inhibit students' behaviour in the classroom, they are also considered to influence choice to attend, respond, value, participate and make commitment to educational activities.Once attitudes of teachers and students are known would help to improve the prevocational curriculum in schools (Ongeti, 1986).

Based on Gross et al (1971) the factors that facilitate or hinder the effective implementation of education innovations include among others the teachers and pupils attitude towards the innovation. The main process involved in curriculum implementation is changing the attitude of pupils, administrators, teachers and learners (Shiundu and Omulando, 1992). Bishop (1985) suggests that the process of curriculum implementation involve changing attitudes of all the parties involved.Onyango (1982) conducted a study to examine the secondary school students' attitudes towards rural life in central province and the study established that that students had a positive attitude towards farming and Agriculture. However, differences in attitude existed in relation to age and class with older pupils in higher classes favoring Agriculture more than younger ones in lower classes. Also males appeared to favor agriculture more than female.Similarly, Ongeti (1986) carried out a research on the attitudes of teachers and students of primary schools towards prevocational subjects. The study compared the attitudes of teachers and students of urban (Nairobi) and rural (Tongaren in Bungoma) primary schools. The findings from his study revealed that teachers and pupils in both urban and rural schools had positive attitudes towards prevocational subjects. This paper examined the influence of school characteristics on attitudes of teachers and students in Baringo North Sub County.

## Results and Discussion:-

Type of school and teachers' attitudes towards agriculture:-
Teachers in the sample schools were asked to state the type of schools they were teaching whether single or mixed secondary schools. Table 1 presents a summary of the findings.

Table1:- Type of school

| Type of school | Frequency | Percentages |
| :--- | :--- | :--- |
| Mixed | 8 | 66.7 |
| Girls | 2 | 16.7 |
| Boys | 2 | 16.7 |
| Total | $\mathbf{1 2}$ | $\mathbf{1 0 0}$ |

Table 1 summarizes the results. Table 1 indicate that 8 ( $66.7 \%$ ) taught in mixed schools, 2 ( $16.7 \%$ ) taught in Girls schools while $2(16.7 \%)$ taught in Boys secondary schools. All the categories of the schools were represented in the study.

## Location of the school and Teachers' attitudes towards agriculture:-

The geographical location of school was deemed necessary in this study to establish its influence on attitudes towards Agriculture. Table 2 summarizes the results.

Table 2:- Location of school

| Location of school | Frequency | Percentages |
| :--- | :--- | :--- |
| Rural | 5 | 41.7 |
| Urban | 7 | 58.3 |
| Total | $\mathbf{1 2}$ | $\mathbf{1 0 0}$ |

The results revealed that $5(41.7 \%)$ of the teacher respondents taught in rural schools while 7 ( $58.3 \%$ ) taught in urban schools. A relationship between the location of a school and the attitudes of teachers and students towards Agriculture was determined. To address this objective effectively, the following hypothesis was formulated;
$\mathrm{Ho}_{1}$ :There is no significant relationship between the physical location of a school and the attitude of teachers and students towards Agriculture.
The contingency table was worked out and table 3 gives a summary of the results

Table 3:-Contingency table of school location and teachers' attitude towards Agriculture.

| Location of the school | Positive | Negative | Neutral | Total |
| :--- | :--- | :--- | :--- | :--- |
| Rural | 3 | 2 | 0 | 5 |
| Urban | 5 | 2 | 0 | 7 |
| Total | $\mathbf{8}$ | $\mathbf{4}$ | $\mathbf{0}$ | $\mathbf{1 2}$ |

The table values were expressed as percentages to enable the expected frequencies to rise beyond 5 . The Test was performed on both the teachers and students. Results of the teachers revealed the $\chi^{2}$ calculated value as 2.25 while critical value of $\chi^{2}$ at 2 degrees of freedom and at 0.05 level of significance was 5.99 implying that the $\chi^{2}$ calculated value (2.25) was less than the critical value of $\chi^{2}(5.99)$ hence the Null hypothesis (Ho) was accepted and it was concluded that there is no significant relationship between the location of a school (rural or urban) and the teachers attitudes towards Agriculture.

Similarly, the students' results on hypothesis testing regarding the location of the school indicated that the $\chi^{2}$ value calculated was 2.87 against the critical value of 5.99 performed at 0.05 level of significance and at 2 degrees of freedom. The results indicated that the calculated 2.87 was less than the critical value (5.99) hence a decision was taken to accept the Null hypothesis and a conclusion was drawn that indeed there is no significant relationship between the location of a school and the students' attitude towards Agriculture. Therefore, both the teachers and students attitude are not influenced by the location of the school. This is consistent with what Ongeti (1986) established in his study that school physical location (rural or urban) does not affect attitudes of teachers and students towards agriculture.

Size of the school land and teachers' attitudes towards agriculture:-
The Size of the school farm deemed necessary for investigation to establish its influence on attitudes towards Agriculture among secondary school teachers. Table 4 summarizes the finding on the variable.

Table 4:-Size of the school farm

| Size of the school farm | Frequency | Percentages |
| :--- | :--- | :--- |
| Below 5 acres | 7 | 58.3 |
| Above 6 acres | 5 | 41.7 |
| Total | $\mathbf{1 2}$ | $\mathbf{1 0 0}$ |

The findings in table 4 revealed that 7 ( $58.3 \%$ ) of the teacher respondents said their schools had below 5 acres while $5(41.7 \%)$ said their schools had 6 acres and above. Hypothesis testing was performed to establish a relationship between the school land size and the attitudes of teachers towards Agriculture.
$\mathrm{Ho}_{5}$ :There is no significant relationship between the school farm size and attitudes of teachers towards Agriculture.
The frequency counts were first expressed as percentages prior to the Chi- square calculation. Table 5 summarizes the results.

Table 5: Contingency table of the school farm size and attitudes of teachers towards Agriculture.
Attitude

| School farm size | Positive | Negative | Attitude | Total |
| :--- | :--- | :--- | :--- | :--- |
| $\mathbf{0 - 5}$ Acres | 36 | 20 | 2 | 58 |
| 6 and above | 27 | 12 | 3 | 42 |
| Total | $\mathbf{6 3}$ | $\mathbf{3 2}$ | $\mathbf{5}$ | $\mathbf{1 0 0}$ |

The $\chi^{2}$ critical values at 2 degrees of freedom and 0.05 level of significance was found to be 5.99 while the $\chi^{2}$ calculated was 1.00 .Therefore $\chi^{2}$ calculated (1.00) was found to be less than the critical value (5.99)prompting the researcher to accept the Null hypothesis that there is no significant relationship between the school farm size and the teacher's attitudes towards Agriculture. The school land size does not influence the teachers' attitudes towards Agriculture.
Type of school and students attitudes towards agriculture:-
Like the teachers, students were asked to state the type of school they schooled in. All the various categories of the schools were represented in the study. The results revealed that $86(41.0 \%)$ were in mixed secondary schools, 77 $(36.7 \%)$ said they schooled in Girls schools while 47 (22.3\%) said they schooled in Boys secondary schools. The results of the findings are summarized in table 5

Table 5: Category of school

| Type of school | Frequency | Percentages |
| :--- | :--- | :--- |
| Mixed | 86 | 41.0 |
| Girls | 77 | 36.7 |
| Boys | 47 | 22.3 |
| Total | $\mathbf{2 1 0}$ | $\mathbf{1 0 0}$ |

Table 5 indicate that majority of the respondents were drawn from mixed schools $86(41.0 \%)$ perhaps due to their large numbers. The respondents from girls and boys schools were represented by $77(36.7 \%)$ and $47(22.3 \%)$ respectively. All the categories of the schools were represented in the study.

## Class/form and students' attitudes towards agriculture

Information on class was sought from students. The results are summarized in table 6

Table 6: Class of students

| Class | Frequency | Percentages |
| :--- | :--- | :--- |
| Form 1 | 73 | 34.8 |
| Form 2 | 62 | 29.5 |
| Form 3 | 55 | 26.2 |
| Form 4 | 20 | 9.5 |
| Total | $\mathbf{2 1 0}$ | $\mathbf{1 0 0}$ |

The findings revealed that 73 (34.8\%) were in form one class, 62 ( $29.5 \%$ ) were in form two class, 55 ( $26.2 \%$ ) were in form three class while $20(9.5 \%)$ were in form four class. All the classes in secondary schools were thus represented.
e) Location of the school and students' attitudes towards Agriculture

On the physical location of the school, the results are summarized in table 7.
Table 7:-Location of the school

| Location of the school | Frequency | Percentages |
| :--- | :--- | :--- |
| Rural | 108 | 51.4 |
| Urban | 100 | 47.6 |
| Unstated | 2 | 1.0 |
| Total | $\mathbf{2 1 0}$ | $\mathbf{1 0 0}$ |

Table 7 indicate that 108 (51.4\%) were in rural schools, 100 (47.6\%) said they were schooling in urban schools while $2(1.0 \%)$ did not state the location of their schools. The results of the study

## Conclusion and Recommendations:-

Location of a school (Rural or urban) and school land size were also found not to have a significant relationship with their attitudes towards agriculture.This is consistent with what previous studies by Ongeti (1986) established that location of school does not influence attitudes towards agriculture by both teachers and students. Similarly, School land size had no effect on teachers and students attitudes towards Agriculture. A conclusion was made to say that the school farm size does not influence the attitudes of teachers towards Agriculture in secondary schools.

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