The use of Computers in Secondary Schools:

A Survey of Schools in Western Province

By

Levis Kavagi

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Department of Educational Communication and Technology

Faculty of Education

MOI UNIVERSITY

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ABSTRACT

The purpose of this study was to determine factors that influence the use of computers by secondary school teachers of Western Province in the Republic of Kenya. Given that the teacher is an important determinant of the success of any innovation in schools, it was important to investigate this on the following three research questions:

Q1. Is there any significant difference between the way teachers use computers and the potential use of computers as identified from literature?

Q2. Is there any significant relationship between the teacher's type of training, experience, or qualification and their level of use of computers?

Q3. Is there any significant relationship between the attitude of teachers towards computers and the teachers' experience and type of training and qualification?

Six secondary schools that had introduced computers were selected by convenient sampling in a survey research design in which questionnaires, interviews and a checklist were used to collect data. Two hundred and fifteen (215) teachers, 9 Principals of schools and 6 teachers in charge of computers in the six schools were used. The data was analysed using descriptive and inferential statistics. The F statistic for significance of relationships between groups, at .05 level of confidence was used. Where significant, the relationship between groups was further subjected to Scheffe's test to determine the exact groups responsible for this relationship.

The study found no clear rationale for introduction of computer in schools. It lies between social and vocational rationales. Results show that schools mainly acquired computers through donations without prior planning. Teachers in these schools thought that the most urgent need for their schools was the purchase of additional textbooks. Over 88% of the respondents did not use computers for at least one hour per week. However, the level of use of computers for teachers with Diploma certificates was found to be higher than for untrained teachers and degree holders. The most important reason for not using, or learning how to use computers, as ranked by the teachers, was lack of time due to too much work. The general attitude towards the use of computers was however found to be positive. There were no significant differences regarding attitude towards the use of computers between teachers in terms of gender, and one's teaching subject. The attitude of Experienced (3 to 5 years) and Mature-Experience (6 to 10 years) teachers was more positive than that of inexperienced teachers and those who had served for more than 11 years (Long Service).

Basing on these findings the researcher recommends in-service of all teachers on the use of computers. This training should be carried out by qualified educational technologists who should help the teacher realise how the computer can reduce lesson preparation and delivery time. A national policy that will make regional education officers involved in the introduction of computers in schools is urgently required. There should be concerted efforts for successful introduction of computers. The possibility of setting up communal computers or computer centres should be explored so as to relieve schools of the high capital required for the purchase of computers. A further study to develop a model for the development, management and maintenance of such a system is recommended