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IMPACT OF K-YAN MACHINE ON BORNO STATE SCHOOL PUPILS

RESEARCH ARTICLE

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ABSTRACT

K-Yan is a technological educational tool used in Education. In this paper, the author has studied the impact of "K-Yan" machine on pupils towards learning and the reliability of technology on the teaching/learning process. The study has been conducted based on forecast by analogy method and simple descriptive statistics. Results from the analysis have shown great positive impact possibility of this machine in the teaching/learning activities of pupils in Borno state.

Key Words: K-Yan; Education Technology; Teaching; Learning; Pupil; Reliability

1. INTRODUCTION

In today's world, pupils in schools have advanced technologically with tools that help in day to day learning ranging from computers, interactive boards, mobile devices and the internet. They are used to learning and teaching activities with the use of these devices [1].

Computer aided teaching with the help of interactive content has changed the perspective of teaching. In conventional schools, the teacher is vested with the responsibility of transferring knowledge (teaching) to the students. However, the second phase of the teaching/learning process which is learning has been virtually neglected because the student is not fully involved in the process. Learning happens to be a dynamic phenomenon that varies from person to person. A student's mode of learning can be through life experiences, practical demonstrations, guided self-trials and some other methods of learning. The level of participation of a given pupil or student positively impacts in the learning process because the more they are involved, the more the enthusiasm and capability to assimilate [2]. This entire scenario changed and improved with the advent of computer-based teaching/learning process. It is assumed that through the use of K-Yan machine, the student shall be more involved in the process since it is a fully multimedia oriented technology that targets students' need in the development of new concepts, and gain strong understanding of what is being taught [3]. There is a strong believe that with the integration of this machine in schools in Borno state shall enliven the learning zeal of the pupils and also improve the teachers' method of teaching.

2. literature survey

A. ***K-Yan*****:** K-Yan machine is a single power cable computer which easily converts any light coloured background into an interactive classroom. Knowledge-Yan, also known as K-Yan, is a product of collaboration between a company named IL&FS Education and Indian Institute of Technology, Bombay. The machine was invented with the intention to give sense of belonging to classrooms that do not have enough computers to go round because it can be shared effectively among pupils. With the advent of K-Yan teachers can interactively teach and display information to entire class [4].

The K-Yan has several features that make it an effective technological tool in the classroom for teaching/learning purposes. It can be used to access educational materials that are available on the internet, and can be used as a large screen television in schools and communities [5]. The K-Yan has an in-built optical drives that can be used to share resources like lecture plans amongst teachers and administrators. Web cameras and microphones are also available to allow the machine to serve as a medium for open/distance learning and for enlightenment across communities, without geographical barriers. With the K-Yan machine, a server is not require to create local area networks within the school thereby reducing cost and facilities requirements. It can simultaneously be used as a computer, thereby improving overall operational and administrative efficiencies within schools [6].

B. *Education:* Education, in its broadest sense, can be defined as a process designed to inhibit knowledge, enhance skills and change attitudes that are necessary to make individuals adapt effectively to their environment. The primary objective is to foster and promote individual self-realization for all people. To achieve these goals, it is required to understand that education is the primary instruments that help in the socio-economic of human beings [7].

C. *Educational Technology*: Educational technology is a complex phenomenon that involves the integration of processes ranging from people, machines, devices and procedures to effectively analyse problems with intension to finding solutions, deriving objective, implementing procedure and evaluating outcomes, in all segments of learning. In educational technology, solutions to problems take the form of all learning resources that are designed and/or selected to bring about learning [8].

3. OBJECTIVES: This study aims to satisfy the following objectives

i. To assess the effect of computer-based method enthusiasm for learning
ii. To verify why K-Yan based teaching method is more effective for teaching and learning
iii. To correlate the pros and cons of K-Yan based teaching method in Borno state?

4. Study background

In the conducted investigation, it was revealed how the inclusion of technology in learning process of pupils improved in greater ways which is better than the conventional method. Enthusiasm for learning can be termed as the students' readiness to fully participate in class activities. Through the conventional method, there were cases of pupil drop out, low performance and little intra-pupil interaction. Governments and educational administrators around the globe are under intense pressure to initiate information and communication technologies in teaching their students the basic skills and get prepared for the needs of the 21st century [3].

K-Yan based Schools curriculum scheme was introduced in 2013 by Borno state government with intent to provide ample opportunities for pupils to develop their ICT skills as well as enhance the ICT aided Teaching Learning process. The first attempt was made by training teachers and educational administrators within the study area who in-turn were to train co-teachers and subsequently the pupils. It is an appreciated fact that learners seek for teachers to prepare them for the technologically dynamic world. In the cause of this study, teachers and students had great opportunity to interact with various multimedia devices as they get to know the level of familiarity they had. With the ample opportunity, they realized that more was to be deduced from these and more.

5. METHODOLOGY

In conducting the survey, step in some certain steps were followed in both data acquiring and result analysis. Firstly, descriptive statistics involving fifty (50) teachers was used to find out the viability of the conventional teaching/learning method, computer based method and teacher observation. Secondly, forecasting by analogy was used to compare the computer based method and K-Yan based method. The average forecasting method employed the use of readings of reliability of the existing computer based technology over a period of eight (8) weeks and then trend results were derived as forecast for the subsequent four (4) weeks [9]. The formula for calculating the forecast is given as $\hat{y}T + \frac{h}{T} = \hat{y} = (y_1 + \cdots y_T)/T$ …(1)

where $y_1, \ldots, y_T$ is the past data.

All the above steps were used to realize the impact of using K-Yan based teaching/learning of Borno State pupils.

6. RESULTS AND DISCUSSION

After analysing and comparing all data collected for conventional method, computer based teaching method, it was seen that computer based teaching method is more impactful for pupils. This was reflected by table 1 below;

Table 1. How reliable is the computer based teaching/learning method?

Responses	Frequency	Percentage (%)
Very Reliable	36	72
Reliable	10	20
Not Reliable	1	2
No Idea	3	6
	50	**100**

From table 1 above, it can be seen that about 72% of the respondents alluded that computer based method of teaching was very reliable, while about 20% confirmed that it was just reliable. About 2% said the method was not reliable while about 6% had no idea about its reliability or otherwise. This confirms that computer based method is reliable in the teaching/learning process.

The level of achievement of the existing computer based method is a commendable one with respect to the respondents' impression as seen from table 2 below;

Table 2. What is the level of achievement of purpose in the computer based method?

Responses	Frequency	Percentage (%)
Achieved	43	86
Not Achieved	1	2
Indifferent	3	6
No Idea	3	6
	50	**100**

About 86% of the respondents affirmed that the method has achieved its purpose of usage, about 2% responded that it has not done so, while about 6% responded that they were either indifferent or had no idea respectively. This clearly shows that a greater percentage have agreed that technology based method of teaching is worth implementing because it achieves the purpose of usage.

With the descriptive statistic derived, it was then ready to identify analogies that would help forecast the positive impact of K-Yan when fully deployed, from the successful analysis of the identified analogies and comparisons, a forecast of the impact of use of impact is presented below;

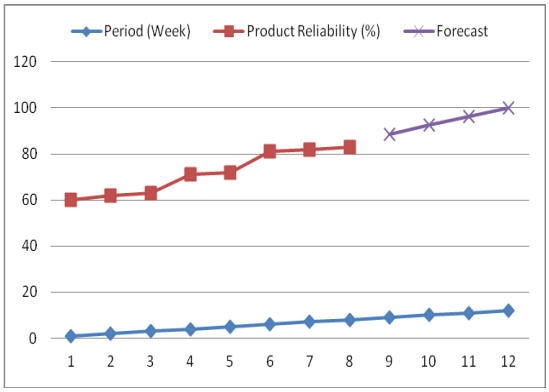

Fig. 1: Forecast of perceived reliability of K-Yan Machine

It can be seen from the chart above that there is a forecast of growth in the perception of increased reliability when K-Yan machine is fully deployed in comparison to the existing computer based teaching method that has an increasing but not steady trend. The percentage of perceived reliability is greater (80% - 99%) in the forecast as compare to existing technology which is less (60% - 80%).

CONCLUSION

There is an increase in the use of technology in education classrooms. These new technologies have been playing positive roles in the teaching/learning processes of both the teachers and pupils and it also improves their basic skills in the information and communication technology. However, the introduction of K-Yan technology into the educational system in Borno State is bound to help in the exponential growth of this trend, which in-turn shall improve the entire educational system in the state.

This study was aimed at forecasting the positive impact or otherwise of introducing this machine into the educational system, this was done by having a feel of the existing technology and then running a forecasting by analogy technique to predict the impact it may have. It was found out that there shall be great positive outcomes when this technology is fully deployed to schools in the state and this shows that the whole idea of this project is worth introducing. Further study on this shall be on the cost effectiveness, technical maintenance/improvements and power management capabilities of the models and entire system.

References

[1]. Krull, E. and Leijen, Ä. Perspectives for Defining Student Teacher Performance-Based Teaching Skills Indicators to Provide Formative Feedback through Learning Analytics. *Creative Education*, 2015, *6*(10), p.914

[2]. Mondal P. "Effect Of K-Yan Technology on Enthusiasm For Learning Geography", Golden Research Thoughts, 2014, 4(1)

[3]. Anderson, J. ed., Information and communication technology in education: A curriculum for schools and programme of teacher development. Unesco. 2002

[4]. Kennedy, P. ICTs in Urdu Medium Schools in Hyderabad: An Evaluative Study. *American International Journal of Research in Humanities,* Arts and Social Sciences, 2013, pp 138-141

[5]. Sarkar, P.R., Halder, M.K. and Maiti, N.C., Information and Communication Technology: Evolution and Constraints for Transaction in School Education. *Indian Journal of Education Research* 2014, *3*, pp.164-179

[6]. Dileepkumar, G. and Senthilkumaran, S., Empowering rural communities through virtual academies: Experiences from India. 2008

[7]. Verma, D. "Administration of technical vocational education". Poland Sterling Pvt. Ltd. 1990

[8]. Rivadeneyra-Espinoza, L., Rivera-Grados, D., Sedeño-Monge, V., López-García, C. and Soto-Vega, E., 2016. La capacitación del profesorado universitario/Training for professors at universities. *Tendencias Pedagógicas*, (28).

[9]. Bozarth C. Qualitative Methods: Measuring Forecast Accuracy: A Tutorial. 2011.

[10]. Jhurree, V.,. Technology Integration in Education in Developing Countries: Guidelines to Policy Makers. *International Education Journal*, *6*(4), 2005 pp.467-483.