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Author's Template for Paper Submissions

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These guidelines include complete description of fonts, spacing and related information for producing the conference proceedings. Please follow the guidelines as given.

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 Paper title should be 10-point conitalize the Paper title should be 10-point, capitalize the first letter of nouns, pronouns, verbs, adjectives, and adverbs; do not capitalize articles, coordinate conjunctions or prepositions (unless the title begins with such a word). After the main title leave one 12-point blank line.
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Knowledge Management as a Strategy for Achieving High Entrepreneurial Performance and Competitiveness

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Abstract

Enterprises operate in a dynamic environment and to remain relevant and competitive, there is need for adequate knowledge of their environment and effective management of resources for the achievement of high entrepreneurial performance. This paper focused on knowledge management as a strategy for achieving high entrepreneurial performance and competitiveness. It sought to find out if there is significant relationship between variables used in measuring knowledge management (independent variable), and entrepreneurial performance and competitiveness (dependent variables). Survey research was used in a cross sectional design method through the use of self-administered questionnaires to some selected enterprises in Ota, Ogun State. The data collected were subjected to simple regression analysis to measure the various effects of the independent variables on the dependent variables. The results of the analysis showed that the entrepreneur's ability to evaluate and utilize knowledge has positive relationship with the enterprise competitive position. The result also showed that the enterprise learning, knowledge and skills have positive relationship with the organizational product development. Based on these findings, the study among others recommends that entrepreneurs should not only embrace knowledge management but must continue to improve on their ability to evaluate and utilize knowledge in order to enhance their performance and competitiveness in their business environment.

Keywords: Knowledge Management, Enterprise, Entrepreneurial Performance, Competitiveness

Introduction

The concept of knowledge management is becoming more prominent in the business world due to its importance on issues such as creation, management and sustainability of organizational resources (Drucker, 1993; Grant, 1996;Teece, 2000). Quite a number of organizations are embracing knowledge management as a key strategic initiative by introducing knowledge management techniques (to improve the flow of knowledge around their organization, make it accessible when and where needed, and use it to add value) for the attainment of increased productivity, better customer service, improved business processes, product leadership, operational excellence and innovation in products and services (Teece, 2000). Despite the fact that interest in the source, nature, and quality of knowledge has been expressed since the times of Socrates, Plato, and Aristotle (Nonaka and Takeuchi, 1995), the idea of knowledge management (KM) is very recent (Davenport & Prusak, 1998; Alvesson & Karreman, 2001).

Several researchers recognized the impact of knowledge management on business as a system (Beer, 1994; Nonaka & Takeuchi, 1995; Alavi & Leidner, 2001; Becerra-Fernandez, Gonzalez, & Sabherwal, 2004) but few of these research works have been carried out on the impact of knowledge management initiatives on entrepreneurial performance and competiveness especially in the Nigerian business environment. The objective of this paper is to examine the relationships among knowledge management practices, performance and competitiveness of enterprises, using selected enterprises in Ota, Ogun State, Nigeria as a case study.

Literature Review

The Concept of Knowledge

According to Webster dictionary (1998) knowledge is the fact or condition of knowing something with the familiarity gained through experience or association. It is the understanding of a science or a technique and circumstance of apprehending truth of fact through reasoning and cognition. Knowledge includes commitments, reasoning/judgment, familiarity, awareness, understanding, learning, information, context, truth, and personal beliefs gained through experience or study, and results from making comparisons, identifying consequences, and making connections (Nonaka, 1995; Webster, 1998; Davenports, 1998). Knowledge is a fluid mix of framed experience, values, contextual information,

Conclusion

Basing on the data collected and analyzed in this study, the study findings revealed that, the student related factors affecting performance of Biology in Eldoret Municipality were; interest in Biology (theory and practical) provided a force within learners to participate in the learning process, their ability to carry out the practical effectively promoted good performance in addition to ambition and attitude which contributed to students output as it cultivated independence among students influencing performance positively.

Recommendations

1. Students should be encouraged to do co-operate learning to sharpen their understanding in the subject matter, thus building their interest hence improving performance.

2. Students to be encouraged to develop interest in practical so as to improve their performance. Practical contribute 40% of the overall score.

3. Ambitions should be high so as to perform highly allowing them to enter into careers that fulfill the vision 2030 that will solve global issues on food shortage, climate change and better healthcare.

4. Positive attitude should be cultivated to enhance students' ambition thus better performance.

5. Students should be encouraged to develop personal experiences in the learning process through practical because they are able to retain a great percentage (80%) of the knowledge learnt hence better performance.

References

Aikenhead, G.S. (1997). Toward a First Nations Cross-Cultural Science and Technology: Curriculum Science Education, 81, 217 – 238.

Aikenhead, G.S & Jegede, O.J. (1997). A Cognitive Explanation of a Cultural Phenomenon: Cross Cultural Science Education, 36, 269-287.

Bakke, D.W. (2005). Joy at work: A revolutionary approach to fun on job. Seattle: WA:PVG.

- Christie, T. & Afzaal, M. (2005). Rote memorization as a scientific explanation of secondary school examination achievement in Pakistan: an empirical investigation f a widespread assumption, paper presented at IAEA International conference – Assessment and the future of schooling and learning, Abuja, Nigeria, September, 4-9.
- Driver, R. & Bell, B. (1986). Students' thinking and learning of Science: a Constructivist View: School Science Review, 67(240), 443-456.
- Eshiwani, G. S. (1982). Mathematics and Science Education in Kenya: Issues and Problems; 3045. Nairobi: The Kenya Bureau of Educational Research.
- Fensham, P. (Ed). (1988). Development and Dilemmas in Science Education, 2, 1-41.
- Jegede, O. J. (1995). Collateral learning and the eco-cultural paradigm in science and Mathematics education in Africa: *Studies in Science Education*, 25, 97-137.

KNEC. (2007). The Year 2006 KCSE Examination Report. Nairobi: Kenya National Examinations Council.

- Munn, M.L, Fernald, L.D. & Fernald, P.S. (1972). Introduction to psychology, (3rded.). New Delhi: Oxford and IBH publishing company limited.
- Njuguna, S. (1998). The relationship between attitudes and academic achievement in Science subjects of form four students in Kigumo Division, Kenya. Unpublished M.phil. Thesis. Eldoret: Moi University, Kenya.
- Norwich, B & Jaeger, M. (1989) The predictive relationship between beliefs, attitudes, intentions and secondary school mathematics learning: A theory of Reasoned Action Approach: The British Journal of Educational Psychology, 59 (3) 313-315.
- Owiti, D.S.O. (2001). Gender Difference in attitude towards Mathematics: A case study of secondary school students in Eldoret Municipality Uasin – Gishu District, Kenya. Unpublished- M.phil. Thesis. Eldoret: Moi University, Kenya.
- Shumba, O. (1993). Attitude towards science: An exploratory survey of pupils preparing for National Examinations. Zimbabwe Journal of education research5 (1), 63-89, 1013 – 3445.
- SMASSE project. (2004). Project paper presented on Baseline studies at the INSET SMASSE cycle 1, Uasin-Gishu district. Eldoret, August 2004. Unpublished.

Does Students Attitude towards Biology Influence Performance?

Positive attitudes in students help to improve performance. It was found that majority of the respondents (89.5%) agreed that attitude influences performance. On the other hand, negative attitude contributed to lack of motivation in learners hence hindered them from performing well. Positive attitude cultivated students' ambitions and morale of what they wanted to be in future hence, worked hard under minimum supervision. The problem the researcher noted lied in the attitude; if the attitude was positive there was good performance and if negative, there was poor performance.



Figure 3. Does Students Attitudes Influence Performance?

Does Students Ability to do Practicals Influences Performance in Biology?

Biology practical forms paper three of the Biology KCSE exam. Bakke (2005) notes that having a personal experience in the learning process accounts for 80% of knowledge retention. It was found that 75.5% of the respondents agreed that ability to do practicals had an influence in performance in Biology.



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Figure 1. Does Students Interest in Practical Influence Performance in Biology?

Do Students Ambition Influences Performance?

Most students have got a personal ambition/dream for the future career and therefore, work towards accomplishing the ambition. Therefore, the study sought to establish whether students' ambition influences performance in Biology. The study found that majority (76.5%) of the respondents indicated that student ambition influences performance in Biology.

Majority of the respondents argued that most students have already set the target that they want to achieve, such that the desire within them acts as a drive to work hard for success or an achievement. Thus, great performance in the subject will be achieved if students' ambitions are linked to it. For example, students opting to pursue the medical profession will be more interested in studying Biology than those opting for the engineering field and thus, influencing performance of the subject. One respondent said; "*mimi napenda bio sana kwa sababu ningependa kuwa daktari maishani ilinisaidie wagonjwa*." Meaning that, I love Biology so much because I want to be a doctor so that I may help those who are sick. The findings also showed that 28 student and three teacher respondents indicated that students' ambition could influence performance in Biology because according to them, it was still early for students to decide what they wanted to be in life, this could be done at college level thus, to them, ambition was not the issue as far as performance in the discipline was concerned. It emerged from the study that ambition contributes to performance; it cultivates independence, building the desire to study thus posting good results. The researcher noted the dream of learners influences their output.



Figure 2. Does Student Ambition Influence Performance?

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achievement". Further, Shumba (1993) agrees that attitude is related to achievement. Those who have positive attitudes are viewed as people who achieve highly while those holding negative attitudes have low achievement. Shumba (1993) also notes that it is generally assumed that attitudes influence future behaviour and career choices. Considering the above, it is worth launching an endeavour based on a rationale that, a child's attitudes may be related to his/her achievement in Science subject; specifically, in Biology. This paper, thus, sought to establish whether student characteristics such as interest, ambition, attitude and ability to perform practical tasks influence their performance in Biology.

Materials and Methods

The paper adopted an ex-post-facto design. This is a design in which the study variables are not exposed to direct manipulation or intervention on part of the research. However, the researcher provided as much control as possible under the existing conditions. The research control was limited to the responses to specific category of form three students in the selected schools.

The study was conducted in 10 selected secondary schools in Eldoret municipality, Uasin-Gishu county. There were 30 secondary schools within the municipality at the time of the study, schools were selected on basis of whether they were boys', girls', or mixed schools using stratified sampling. During sampling, 75% of girls' and 100% boys' schools were selected while 20% of the mixed category were sampled. Simple random sampling was used to select the girls', and mixed category. Purposive sampling was used to pick twenty students in the sampled stream because only students who studied Biology were used for the study.

Data was collected from the sample selected using questionnaires and interviews. Both qualitative and quantitative data analyses were used. Qualitative analysis involved derivation of explanations and interpretations of results and trying to establish relationships from gathered information. Quantitative analysis involved derivation of statistical descriptions and interpretation of data by use of descriptive statistics.

This study sought to answer the following questions:

- 1. Do Students' Interest in Biology influence performance?
- 2. Do Students' Interest in Practical Influence Performance in biology?
- 3. Do Students Ambition Influences Performance?
- 4. Do Students Attitude towards Biology Influence Performance?
- 5. Do Students Ability to do Practical Influences Performance in biology?

Results and Discussions

Do Students' Interest in Biology Influence Performance?

The study sought to establish whether students' interest influences performance in the subject. It was found that majority (92%) of the respondents agreed that students' interest influences performance in Biology. This is so because having interest in Biology cultivates students' positive attitude towards the subject, hence enabling the student to work hard. Respondents mentioned doing self study on the subject, asking for assistance from teachers in areas of difficulty, forming discussion groups, high scores in the subject, dedicating more revision time for the subject, having a personal time table which guides students' private studies, and working under less supervision, as some of the attributes that trigger improved performance in Biology. The study established that an interest in Biology influences performance because it provides the drive within students to participate in the learning process.

Do Students' Interest in Practicals Influence Performance in biology?

Practical exercise entails application of theoretical concepts by performing experiments. Having interest in something drives an individual towards working hard to achieving it. The study therefore, sought to establish whether student having interest in practical exercises influences performance in Biology. The findings showed that 81.5% of the respondents indicated that student interest in practical influences performance in Biology.

Student's willingness to participate in practical activities especially when in groups improves the performance in Biology (SMASSE INSET, 2004). Through participation, scientific skills for hands on/practical skills are developed. Moreover, Biology practicals supplement good marks to those students who are weak in theory (KNEC, 2007), hence influencing the performance. One student respondent in an interview said, "*Biology practical is my savior, I love it since I am weak in the theory section*". From the findings, respondents indicated that other than an interest in the subject, an interest in the practicals greatly influences performance in Biology.

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prepare the future scientists and technicians. The skills acquired by such people will be useful in areas such as health, agriculture and industry.

The study sought to look into the student characteristics that influence students' performance in Biology subject in secondary schools in Eldoret Municipality of the former Uasin-Gishu district, now Uasin-Gishu County. Uasin-Gishu is part of Rift Valley region which is regarded as the food basket for the country, due to its production of maize, wheat and livestock farming. This area of production requires adequate knowledge in Biology among students most of whom will revert to farming after school. Biology subject has been characterized by poor performance in national examinations (MoEST, 2005). There is a nation-wide outcry that performance in Sciences (Biology included) is poor and the trend has been observed for some years. An outcry was expressed through a press statement by the minister of education after the 2008 KCSE results were released. The minister lamented over the poor performance in Biology among other Sciences (Aduda, 2009).

It is difficult to envision a developing nation being unable to achieve technological advancement with a large manpower base ignorant or unable to handle the same technology, owing to inherent phobia to Sciences. It calls for concerted efforts to reverse this trend, if the projected growth is to be achieved. Education stakeholders continue to invest heavily in the education of young Kenyans year after year with the hope that the inputs would be equivalent to the outputs if not better. The immediate expected output from the education system is good performance in examinations. However, the performance continues to be poor in general. Of great concern is the learners' performance in Science given that it is core to the attainment of the national goal of industrialization by the year 2030.

Attitudes affect achievement and achievement affects attitudes (Owiti, 2001). Owiti in his study revealed that attitude influences performance and performance influences attitude. This study will determine whether students' attitude (positive or negative) influence their performance in Biology. Njuguna (1998) argues that, emotional attitudes can have a profound effect on our learning efficiency. The kind of attitude one holds in a learning situation therefore is of great significance. The attitude aspect has caused considerable concern in education. Munn, Fernald and Fernald (1972, p.606) argue that "attitudes are learnt predispositions towards aspects of our environment". They involve the tendency to evaluate something in a positive or negative way. An attitude consists of three basic components these are, thinking, feeling and reacting. The thinking component involves self-belief. Feeling component involves issues related to value. Reacting component involves tendency to behave in a certain way.

Njuguna (1998), further argues that a human infant is born without any concept of themselves, any attitude or value system. Their self-concept and attitudes towards other objects develops with the development and their interaction with their "significant others". Such persons are teachers, peers and parents. A child who receives positive perceptions and expectations from their significant others develops a positive self-concept influences motivation and performance in tasks. If a child is motivated and achieves highly in a task, that child will have positive attitudes towards that task. However, low motivation leads to negative attitudes thus low performance. Children in our schools fail to benefit from teaching, not because they do not have the ability but because of their self-view, which determines to a great extent what they do or avoid, and what they see or ignore (Njuguna, 1998). The home, school and society offer varied and important conditions for the child's acquisition of values, cultures and or development of self-concept all of which influence academic performance.

One major problem of Science education in developing countries, identified by students, is the feeling that school Science is like a foreign culture to them (Maddock, 1981) cited by Aikenhead (1997) and Jegede (1995). Their feelings stems from fundamental differences between the culture of western Science and their indigenous cultures.

One may wonder whether the kind of attitudes held towards learning by students is related to the failure or passing usually noted in many examination situations. A clear answer to such an issue may help us to know how to respond to both encouraging and discouraging learning situations. Physiological factors play a major role in learning. Driver and Bell (1986) as quoted by Fensham says:

"Learning outcomes depend not only on the environment, but on the knowledge, purposes and motivations that the learner brings to the task. That is, the ideas and beliefs we already hold will be of major influence on the interpretation we place on what we are taught"(Fensham, 1988, p.77).

According to Driver and Bell (1986 in Fensham 1988, p.78), "the learners have the final responsibility for their learning.... in that they decide what attention they give to a learning task, construct their own interpretations of meaning for the task and evaluate those meanings". Norwich and Jaeger (1989, p.314) indicate that, "there is at best an explicit or implicit assumption that the attitude to school subjects should be related to achievement, if only on the grounds that positive attitude leads to greater

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