Knowledge Management and Development of Entrepreneurial Skills Among Students in Vocational Technical Institutions in Lagos, Nigeria

Stella Ify Anumnu
Federal College of Education (Technical) Akoka, Lagos, Nigeria
anumnustella@yahoo.com

Abstract: This study examined the extent to which learners in vocational technical institutions, capture, distribute, network and effectively use information made available to them during and after lectures that are entrepreneurially and skill oriented in order to furnish the labour market with relevant school products. Development of an entrepreneurial skill is capable of equipping the Nigerian students to fit into different aspects of the economy after graduation. The study adopted a descriptive design. A twenty-item unstructured questionnaire was used to assess 150 randomly selected final year students’ capacity to transform ideas gained in class into creative problem-solving strategies in three vocational technical colleges in Lagos in south west Nigeria. Three research questions and one hypothesis were used as guides to the study. Data obtained were analyzed using descriptive statistics Pearson Product Moment Correlation. The major findings revealed that there is a significant relationship between knowledge management and the development of entrepreneurial skills among vocational technical students in the area of knowledge gathering, sharing, networking and students’ capacity to translate some curriculum elements into the world of work among others. Given the importance of knowledge sharing, creativity, innovations and connectivity through networking in today’s competitive world of work, it was recommended that students be linked up with several entrepreneurs who serve as mentors to students during and after training. Students should be made to participate in seminars and workshops that are entrepreneurially oriented. There should also be regular visits of students to small cottage industries in the form of field trips. Vocational and Technical Institutions should establish an appropriate culture that encourages students to create and share knowledge within and outside the school. There should be a collaborative effort between vocational institutions and some government agencies, for example Small and Medium Entrepreneurial Development Agency of Nigeria (SMEDAN)

Keywords: Knowledge, Knowledge Sharing, Management, Entrepreneurship, Entrepreneurial Skills, Creativity

1. Introduction

What makes the difference among academics all over the world is their ability to use acquired knowledge to solve real life problems in the society. Drucker (1993) considers the knowledge one has today as knowledge that enables action. And such knowledge is information in action and information focused on results. These results are seen outside the person – in society and economy, or in the advancement of knowledge itself. To accomplish anything, this knowledge has to be highly specialized. Knowledge is created through the conversion of data into meaningful information that allows the world to be understood in new ways resulting in new ideas, research, innovation, inventions, (Ahunanya, et al, 2011:491).

Tertiary institutions are pioneers in knowledge-based societies for information development. They are considered as centers and sources of consuming and producing information and most raw materials used in academic trainings are allocated to information exchange process. Therefore, there is need to harness and manage holistically the available wealth of knowledge assets (databases, policies, procedures, lecturers’ expertise, curriculum and course contents, lectures and training lessons, libraries, etc) towards producing students that on graduation would either become entrepreneurs or professionals and consultants in their areas of specialization.

Knowledge is an indispensable asset to any organization that when it is properly harnessed, managed and utilized, will not only bring about increased productivity, but also expansion, growth and sustained profitability to the organization. Koenig (2012) proposed three categories of knowledge: explicit, implicit and tacit. Explicit is the information or knowledge that is set out in tangible form. Implicit is the information or knowledge that is not set out in tangible form but could be made explicit; while tacit is the information or knowledge that one would have extreme difficulty operationally setting out in tangible form. Tacit knowledge also represents internalized knowledge that an individual may not be consciously aware of, such as how he or she accomplishes particular tasks, while explicit knowledge is the one an individual holds consciously in mental focus, in a form that can easily be communicated to others. (Alavi & Leidner 2001). The concern of this study is the ability of students to convert internalized tacit knowledge into explicit knowledge in order to share it. Such tacit knowledge as subject matter knowledge, curriculum design knowledge, knowledge of learning processes and styles, knowledge of current trends, instructional methods, learning resources, rudimentary knowledge of chosen course of study and subject matter expertise etc.
2. Literature Review

2.1 What is Knowledge Management?

Knowledge Management is the practice of organizing, storing and sharing vital information, so that everyone can benefit from its use. According to Davenport (1994), Knowledge Management is the process of capturing, distributing and effectively using knowledge. Similarly, Duhon in Koenig (2012) in his broader definition notes that knowledge management is a discipline that promotes an integrated approach to identifying, capturing, evaluating, retrieving, and sharing all of an enterprise’s information assets, which include databases, documents, policies, procedures, and previously un-captured expertise and experience in individual workers. The above definitions of knowledge management have three major things in common about knowledge. These include knowledge identification and integration, knowledge acquisition and knowledge application or use. KM is the process of discovery, achievement, development and creation, maintenance, assessment and appropriate usage of knowledge in appropriate time by the fit person in the organization, which is done by having the joint between human source, information technology communications and the suitable organization schedule in order to achieve the goal (Afrazah, 2010). King in Taleghani (2011), believed that one of the most beds for the development of organizational entrepreneurship process is knowledge Management. Knowledge Management is not only associated with managing knowledge as a resource, but also manage business processes that take place using that resource (Danijela, 2011). According to Danijela(2011),KM should involve the analysis of existing knowledge as a resource, as well as defining the objectives regarding the generation, protection and application of new knowledge, then transfer, exchange and dissemination of knowledge, effective use of knowledge and performance measurement (Danijela,2011)

The major benefit of knowledge management in the school is that information is easily shared between teachers and students, and that knowledge is not lost if teachers go on vacation, get sick or leave the school. KM may also increase innovation among students and also help them create better student – student and teacher – students relationship. When students get knowledge, it gives them the power to take action on lesson learned. In this study therefore, KM is defined as students’ ability to gather information, share, analyze and apply it to develop their entrepreneurial skill so as to fit into the labour market.

3. Entrepreneurship

Entrepreneurship is the act of pursuing new ways of doing thing in a real context (Lumpkin & Dess, 1996). According to Lumpkin et al, (1996) the essential act of entrepreneurship is new entry. Put succinctly, ‘the essential act of entrepreneurship is a process of exploiting opportunities that exist in the environment or that are created through innovation in an attempt to create value’ (Brown & Ulijn,2004: 5). Dana (2001: 405) highlights the fact that ‘there is no universally-accepted definition of entrepreneurs or of entrepreneurship’ in the literature. This evident lack of a comprehensive and widely accepted definition does not detract from the reality that entrepreneurs possess distinctive features including ‘a capacity for innovation’. It refers to an individual’s ability to turn ideas into action and helping young people to be more creative and self-confident in whatever they undertake (Dana 2001: 405). According to Mundra, (2012), entrepreneurship is the engine fuelling innovation, employment generation and economic growth. The General Assembly of the United Nations, during its 48th session, adopted a resolution - Entrepreneurship and Privatization for Economic Growth and Sustainable Development - encouraging members to promote and facilitate the growth of entrepreneurship and the support to local entrepreneurs (Mundra, 2012:112). This resolution is a reflection of the growing international realization that “Lighting the flame of the entrepreneurial spirit empowers nations and peoples, with ‘the knowledge and ability to fish, rather than just giving them a fish’ [Timmons, in Mundra, 2012:112].”

Entrepreneurs are individuals with entrepreneurship ability ( Ilo 1995) and entrepreneurship ability as defined by Schumpeter (1994) is the ability to perceive and undertake business opportunities, taking advantage of scarce resource utilization. According to Schumpeter, it involves direct willingness and ability to seek out investment opportunities and to run an enterprise for profit. One of major tasks of any tertiary institution is to address entrepreneurship and to define training of graduates. Unfortunately, this task is not fulfilled (Monfaredi Raz, Ghorbani, & Elahi, 2012).

Entrepreneurship education has been embedded into the Nigerian system of education on the basis of peculiar need of unemployment and deficient self reliant skills. One of the major objectives of the Nigeria’s National Policy on Education (2004) on Vocational Technical Education is to produce students who will not only be equipped with
functional contemporary technological knowledge, but also, will either be self-employed on graduation or entrepreneurs and employers of labour and not job seekers. This objective was occasioned by Nigerian government’s enthusiasm for increasing the manpower stock of the country for industrial growth and development as well as for the reduction of unemployment through the production of student entrepreneurs.

4. Entrepreneurial Skills

Entrepreneurial skill refers to entrepreneurial competencies which enable an entrepreneur to be successful in his or her field. Entrepreneurship ability is a function of several skills, which must be acquired for one to qualify as an entrepreneur. These skills include the following: creative skill (ability to visualize and identify new problem areas in the society and try to generate new ideas or concepts in that line); innovative skill (ability to generate and apply creative ideas in some specific content to solve identified problem for the benefit of society); managerial skill (ability to define goals and objectives, plan and stipulate strategies to organize, motivate, direct and control resources to attain stated objectives); analytical skill (ability of numeracy, generation and analysis of data for relevant decision making); marketing skill (ability of book keeping and accounting, integrating business logistics to increase sale of goods and services); communicative skill (ability to use relevant language to negotiate, persuade and convince) and career skill (ability to assess self, career planning techniques and self-directed learning); knowledge (computer literacy and business related knowledge); attitudes (sensitivity to needs and consequences and perception ) and personality variables (such as achievement, motivation, imagination and entrepreneurial drive) (Idowu 2004; Adepoju & Adedeji 2012; and Caird in Mundra,2012). Bloom’s (1956) revised taxonomy is found relevant in this area (revised by Anderson and Krathwohl, http://edorigami.wikispaces.com). The taxonomic elements are associated with Lower order thinking skills, (LOTS) and higher order thinking skills (HOTS). LOTS includes: Remembering – (recognizing, listing, describing, identifying, retrieving, naming), Understanding– (interpreting, summarizing, inferring, paraphrasing, classifying), Applying– (Implementing, carrying out, using, executing). Higher order thinking skills (HOTS) include: Analyzing– (comparing, organizing, deconstructing, attributing, outlining, finding), Evaluating– (checking, hypothesizing, critiquing, experimenting, judging, testing), Creating – (designing, constructing, planning, producing, inventing, devising). These thinking skills are needed for entrepreneurial skill development. In the higher order thinking skills, the Nigerian education system is yet to be at the creative skills level and that is one of the causes of unemployment. A student who is exposed to a modicum or body of knowledge is more disposed to being creative than otherwise. This body of knowledge can either be formal (within classroom milieu) or non-formal outside the classroom. It is the development of these skills in students that is the main thrust of this study.

5. Developing Entrepreneurial Skills

Determining what needs to be taught in terms of entrepreneurship education is no easy task as no formula exists for what constitutes entrepreneurship to begin with (Dana 2001: 414). ‘Entrepreneurship development depends on the quality of education provided and the presence of an environment that encourages innovation (Mundra, 2012:113)’. ‘Education is indispensable for entrepreneurship skill development as the multi dimensional nature of the required entrepreneurial skills originates in education and involves a combination of critical (objective, analytical and logical) as well as creative and empathetic (lateral, imaginative and emotional) thinking (Mundra,2012:113)’. This skill development helps in creating an environment which encourages innovation. These innovations catalyses and flourish entrepreneurship by providing marketing opportunities which can be converted into wealth.

However, Plumy et al (2008) state that ‘reality-based pedagogies’ embedded in courses anchored to skill-building are better suited to entrepreneurship education than more traditional methodologies that focus on knowledge building, such as in accounting or management. Therefore, bringing together the students and learning, while ‘integrating theory and practice’, which are key to implementing effective entrepreneurship education. While Taatila (2010: 56) highlights the need for learning to take place in a relevant school or business environment, while also detailing the need for real-life case studies based around student-centred and pragmatic pedagogical approaches. Given that entrepreneurship represents an ongoing dynamic cycle of learning, it is surprising that there is somewhat of a gap in the school learning literature on entrepreneurship (Franco & Haase: 2009). Furthermore, Plumy et al (2008: 19) recommended a detailed range of key skill building areas such as communication, leadership, teamwork, negotiation, strategic planning, basic business law, innovation and technology, and product life-cycle and development.

Today, Nigeria and many other developing countries have shown immense interest in the development of student entrepreneurs through entrepreneurship education and training in vocational institutions and universities, using it as a new strategy in tackling the high rate of unemployment bedeviling their countries. However, for Nigerian vocational
institutions, especially the technical ones and universities to successfully produce the desired quality of student entrepreneurs, there is need for the effective management of the knowledge assets available to those institutions. This is because the development of the multidimensional entrepreneurial skills explained above could start with the process of identifying, capturing, evaluating, retrieving, and sharing of knowledge. It is against this background that this paper examines the relationship between knowledge management and entrepreneurial skill development among students in vocational technical institutions in Nigeria.

6. Institutional Culture and Knowledge Management Process

DeLong and Fahey (2000) identify four comprehensive ways in which culture influences the behaviours central to knowledge creation, sharing, and use. Firstly, culture shapes assumptions about what knowledge is and which knowledge is worth managing. Secondly, culture defines relationships between individual and organizational knowledge, determining who is expected to control specific knowledge, as well as who must share it and who can board it. Thirdly, culture creates the context for social interaction that determines how knowledge will be used in particular situations and finally, culture shapes the processes by which new knowledge with its accompanying uncertainties is created, and distributed in organizations. (DeLong et al, 2000).

Similarly, Turban and Aronson (2001:355) concluded that ‘the ability of an organization to learn, develop memory, and share knowledge is dependent on culture’. School should establish an appropriate culture that encourages students to create and share knowledge within the school (Holsapple & Joshi 2001). Therefore to stimulate the development and application of knowledge, the key elements of a knowledge culture are required, that is a climate of trust, confidence, and openness in an environment where constant learning and experimentation are highly valued, appreciated and supported (Moffett, et al, 2003).

Knowledge management creates a culture where every student continuously assesses his/her learning habit and lesson learned in the school and looking for ways to improve. After every class activity a team of students may review assignments, identify successes and failures and seek ways to perform better the next time. This approach to capture learning from experience builds knowledge that can be used to develop entrepreneurial skills operation and improve teaching and learning processes. Actively managing students’ knowledge can stimulate cultural change and innovation and creativity by encouraging the free flow of ideas.

7. Relationship between Knowledge Management and Development of Entrepreneurial Skills

Studies have shown that there is a link between knowledge management and entrepreneurship. For example, the result of Liebowitz (1999) study shows there is relationship between knowledge based strategies and entrepreneurship. He believes that one of the important factors for successful knowledge management is having a clear strategy and planned program. Similarly, Wong and Chin (2007) Study results showed that the beliefs and culture of organizations is one of the key factors in entrepreneurship development. Nazem et al in Ghorbani et al, (2012) study also confirms the relationship between knowledge management and entrepreneurship. They achieved these results in their study that there is a relationship between knowledge management and entrepreneurship in employees of insurance organization of Tehran. In the same vein, Taleghani (2011) study revealed that there is meaningful relationship between knowledge management with an organizational entrepreneurship. Ghorbani, et al (2012) study results revealed that there is significant relationship between knowledge management and individual entrepreneurship and that knowledge creation and teamwork have a linear relationship with individual development. So also Hannu littunen in Ghorbani et al (2012) believes that risk, innovation business knowledge and marketing, the ability of hunting opportunities and positive attitude. Monfaredi Raz, Ghorbani, and Elahi (2012) study found no positive relationship between knowledge management and entrepreneurship with a 0.95 assurance. Their study also found no positive relation between innovation and entrepreneurship but displayed a meaningful relationship between knowledge and insight with entrepreneurship While Akhavan et al, (2006) study revealed that organizational culture has a positive effect on creativity and entrepreneurship.

8. Statement of Problem

It is well established that successful courses of formal education tend to be those that are relevant and meaningful to the lives of the students. But how to encourage prospective students into such study when their formal schooling is not considered sufficient to gain direct entry into the world of work is a great challenge to all stakeholders in education.
This study is premised on the view of employers of labour that large numbers of graduates of tertiary institutions are jobless because majority of them learn through lectures and academic textbooks and are academically sound but they have limited opportunity of acquiring practical experience by using machinery, equipment and practical techniques associated with a profession. This is a serious problem. Graduates of different levels of education go about looking for jobs that are non-existent. Consequently, government has recently directed its policy actions towards initiating entrepreneurship education and training in Nigerian universities, technical and vocational institutions to enable them to start producing students with entrepreneurial skills. The achievement of this new educational objective calls for the effective management of knowledge assets available to the universities and vocational technical institutions in the country. This study therefore examines the extent to which the development of entrepreneurial skills among vocational technical students is susceptible to knowledge management.

9. Conceptual Framework

Conceptual frameworks and theory-based knowledge are essential to ground the practical learning activities (Fiet, in Mundra, 2012). A teaching concept that integrates the major requirements for effective entrepreneurship education is the pedagogical concept of project-based learning. In project-based learning approaches, students have to take responsibility and complete a realistic task by independently gathering information and by building up, transforming, and constructing knowledge (Ahunanya et al, 2011).

However for better understanding of the link between knowledge management and development of entrepreneurial skill, this study adopted and modified Zahra and George (2002) knowledge management process as shown below. In the knowledge management process, there are four main abilities that refer to skills acquisition, assimilation, transformation of knowledge and ability to use and exploit knowledge (Zahra et al, 2002).

![Diagram of Knowledge Management Process]

Figure 1: The main abilities in the knowledge management process.

Source: Adapted from Zahra and George, in Daniela (2011).

In the school, students faced with data and information (based on lesson learned) need to have a knowledge management process to make useful decision. In figure 1 the acquisition of knowledge involves group or team work, brainstorming (knowledge sharing), interactions between a teacher and students, students to students through effective communication. The purpose of use of knowledge is the ability of students to embark on measurable projects based on what is learned. That is, making use of their psychomotor domain and transferring the knowledge acquired into real life situations. Knowledge assimilation is using knowledge in the right way (entrepreneurship) in order to achieve their desire or benefits. This ultimately reduces the gap between knowledge that is needed (entrepreneurial skill) and the knowledge that is currently available. The transformation of knowledge includes the ability of a student to combine elements of knowledge in new ways. That is, ability to create wealth through entrepreneurship. This process equips a student to create an entirely new knowledge, providing him or her fresh ideas for further application of knowledge and new solutions to meet market needs. Research has shown that the connection between knowledge assimilation and transformation is particularly important because the greater the
students’ assimilation of knowledge, their ability to transform knowledge becomes more effective (Danijela 2011). The ability to use knowledge includes student’s ability to incorporate knowledge gained into their learning processes and it is reflected into the development of ideas on how, when and where knowledge can be used to meet market needs (entrepreneurial skills).

9.1 Research Objectives
This study sets out to achieve the following purposes

- To determine the perception of students about the lesson learned in their schools toward entrepreneurial skill development.
- To assess the relevance of knowledge management to entrepreneurial skill development.
- To ascertain the extent to which students’ perception of the relevance of knowledge gained, or comprehended and managed as a factor for development of identifiable entrepreneurial skills.

9.2 Research Questions
The following research questions were raised to guide this study.

1. What is the perception of students about the lesson learned in their schools toward the entrepreneurial skill development?
2. How do students perceive the relevance of knowledge management to entrepreneurial skill development?
3. To what extent has exposure to knowledge assets equipped students with the entrepreneurial skills (creative, innovative, managerial, analytical, marketing, communicative and career skills) of an entrepreneur?

9.3 Research Hypothesis
The research hypothesis below was stated and tested for the study.

$H_0$: There is no significant relationship between knowledge management and the development of entrepreneurial skills among vocational technical students in Lagos, Nigeria.

9.4 Justification of the Study
This study attempts to provide concrete data that would enable students, teachers, educational managers, policy makers and other stakeholders in education with a better understanding of knowledge management processes toward the development of entrepreneurial skills for wealth creation.

10. Methodology
This study is out to establish the relationship between knowledge management and development of entrepreneurial skills. The study adopted descriptive survey. The sample of 150 students was selected randomly from final year students from three vocational technical institutions in Lagos, Nigeria. The institutions used were Federal College of Education (Technical) Akoka; Yaba College of Technology and Lagos State Polytechnic. The choice of Federal College of Education (Technical) Akoka, and Yaba College of Technology, Lagos, stemmed from the fact that they are the first established Technical Colleges in Nigeria. While Lagos Polytechnic is the first in Lagos state. Student from Colleges of education in Nigeria have homogenous curriculum and that Polytechnics or Colleges of Technology also have homogenous curriculum. It is therefore assumed that the results obtained from these institutions will to some extent be generalized. The students are studying vocational and technical courses such as Agriculture, Home Economics, Fine and Applied Arts, Accounting, Elect/Elect, Building, Automobile, Metal Work, Architecture among others in 2012-2013 academic sessions. Final year students were selected because they are on the verge of going into the world of work or labour market.

Research instrument: The instrument used for data collection was a self-designed questionnaire titled: the Knowledge Management and Development of Entrepreneurial Skill Questionnaire (KMADESQ). The questionnaire comprises two sections. Section A solicits for responses on name of institutions and personal data of the respondents while section B contains items that elicit information from learners about knowledge management and development of entrepreneurial skills using a 4 point Likert-type response formula ($4 = $strongly agree$, $3 = $agree$, $2 = $disagree$ and $strongly disagree$ $1$). Data collected were analyzed using descriptive and inferential statistics. The content validity of the instrument was conducted by some experts in research methodology and evaluation. Inputs from these experts were used to modify some of the items. While the test-retest (pilot study) was conducted using some students outside the
respondents for the study. The reliability of the instrument was computed and a reliability coefficient of 0.65 and 0.67 were obtained. These values portray moderately high level of reliability and were accepted for the study.

11. Results Presentation

Research Question 1: To determine the perception of students about the lesson learned in their schools toward entrepreneurial skill development.

Table 1: Perception of students of the about the lesson learned in their schools toward entrepreneurial skill development.

<table>
<thead>
<tr>
<th>Statement items</th>
<th>SA</th>
<th>A</th>
<th>D</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Students’ are exposed to workshops and seminars that enhance their entrepreneurial skills.</td>
<td>58</td>
<td>64</td>
<td>17</td>
<td>11</td>
</tr>
<tr>
<td>The school’s entrepreneurial training provides students with the skills to identify business opportunities.</td>
<td>52</td>
<td>71</td>
<td>12</td>
<td>15</td>
</tr>
<tr>
<td>I have acquired the skills to test my creativity in business ideas.</td>
<td>56</td>
<td>59</td>
<td>17</td>
<td>18</td>
</tr>
<tr>
<td>The school’s student industrial work experience scheme (SIWES) exposes the students to the practical challenges of owning a business venture.</td>
<td>58</td>
<td>63</td>
<td>16</td>
<td>13</td>
</tr>
<tr>
<td>The experiences gathered from SIWES also equip students with the skills of managing business successfully.</td>
<td>58</td>
<td>65</td>
<td>11</td>
<td>16</td>
</tr>
<tr>
<td>I have learnt how to get financial support to start a business.</td>
<td>55</td>
<td>68</td>
<td>10</td>
<td>17</td>
</tr>
<tr>
<td>Having acquired the training, I can boast of starting my own business on graduation.</td>
<td>53</td>
<td>65</td>
<td>18</td>
<td>14</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>390</td>
<td>455</td>
<td>101</td>
<td>104</td>
</tr>
<tr>
<td><strong>Aggregate Percent</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>845(80.5%)</td>
<td>205(19.5%)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Key: SA = (Strongly agree), A = (Agree), D = (Disagree) and SD = (Strongly disagree)  
N = 150

Research Question 2: How do students perceive the relevance of knowledge management to entrepreneurial skill development?

Table 2: Perception of students of the relevance of knowledge and information sharing to entrepreneurial skill development

<table>
<thead>
<tr>
<th>Statement items</th>
<th>SA</th>
<th>A</th>
<th>D</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sharing of information with other students helps in knowledge dissemination.</td>
<td>53</td>
<td>68</td>
<td>17</td>
<td>12</td>
</tr>
<tr>
<td>Sharing of knowledge and information on business formation with other students help them in developing creative and innovative business ideas.</td>
<td>55</td>
<td>62</td>
<td>18</td>
<td>15</td>
</tr>
<tr>
<td>Students have acquired a lot of entrepreneurial ideas through knowledge and information sharing among themselves.</td>
<td>49</td>
<td>78</td>
<td>13</td>
<td>10</td>
</tr>
<tr>
<td>I always clarify my entrepreneurial thought through sharing knowledge and information with other students and mentors.</td>
<td>54</td>
<td>61</td>
<td>16</td>
<td>19</td>
</tr>
<tr>
<td>Students’ entrepreneurial thought and skill are nurtured through networking and group brainstorming.</td>
<td>37</td>
<td>85</td>
<td>12</td>
<td>16</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>248</td>
<td>354</td>
<td>76</td>
<td>72</td>
</tr>
<tr>
<td><strong>Aggregate Percent</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>602(80.3%)</td>
<td>148(19.7%)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Key: SA = (Strongly agree), A = (Agree), D = (Disagree) and SD = (Strongly disagree)  
N = 150
Table 2, shows that 80.3% of the respondents (80.3%) admitted that: sharing of information among themselves help in knowledge dissemination in relation to business formation. That it also helps them in developing creative and innovative business ideas. The result also indicates that through networking and group brainstorming students’ entrepreneurial thought and skill are nurtured; but a small number of the respondents (19.7%) indicated a contrary opinion to the above submissions.

Research Question 3: To what extent has exposure to knowledge assets equipped you with entrepreneurial.

This research question is answered using the following skills; creative, innovative, managerial, analytical, marketing, communicative and career skills of an entrepreneur?

Table 3: Students’ perception to the extent they are exposed to knowledge assets that equipped them to develop entrepreneurial skills

<table>
<thead>
<tr>
<th>To what extent has exposure to all the knowledge assets of your department and school equipped you with the following skills:</th>
<th>High extent</th>
<th>Percentage %</th>
<th>Low extent</th>
<th>Percentage %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Creative skill (ability to visualize and identify new problem areas in the society and try to generate new ideas or concepts in that line);</td>
<td>138</td>
<td>13.14</td>
<td>12</td>
<td>1.14</td>
</tr>
<tr>
<td>Innovative skill (ability to generate and apply creative ideas in some specific content to solve identified problem for the benefit of society);</td>
<td>129</td>
<td>12.29</td>
<td>21</td>
<td>2.00</td>
</tr>
<tr>
<td>Managerial skill (ability to define goals and objectives, plan and stipulate strategies to organize, motivate, direct and control resources to attain stated objectives)</td>
<td>133</td>
<td>12.67</td>
<td>17</td>
<td>1.62</td>
</tr>
<tr>
<td>Analytical skill (ability of numeracy, generation and analysis of data for relevant decision making)</td>
<td>124</td>
<td>11.81</td>
<td>26</td>
<td>2.48</td>
</tr>
<tr>
<td>Marketing skill (ability of book keeping and accounting, integrating business logistics to increase sale of goods and services)</td>
<td>141</td>
<td>13.43</td>
<td>9</td>
<td>0.86</td>
</tr>
<tr>
<td>Communicative skill (ability to use relevant language to negotiate, persuade and convince)</td>
<td>143</td>
<td>13.62</td>
<td>7</td>
<td>0.67</td>
</tr>
<tr>
<td>career skill (ability to assess self, plan techniques and self-directed learning knowledge, such computer literacy, etc)</td>
<td>135</td>
<td>12.86</td>
<td>15</td>
<td>1.42</td>
</tr>
<tr>
<td><strong>Total/Percent =</strong></td>
<td><strong>943</strong></td>
<td><strong>89.81%</strong></td>
<td><strong>107</strong></td>
<td><strong>10.19%</strong></td>
</tr>
</tbody>
</table>

N =150

Table 3, shows that 89.8% of the respondents affirmed that exposure to their departments and schools’ knowledge assets have immensely equipped them with all the skills to engage in entrepreneurship, while 10.2% of the responses expressed a contrary opinion to the submission. This result therefore infers that knowledge management enhances greatly the development of entrepreneurial skills.

Information on Table 3 is further summarized in a pie chart (figure 2) showing the high extent to which the learners intend to develop their entrepreneurial skills to become entrepreneurs after schooling.
12. Result of Hypothesis Tested

$H_{01}$: There is no significant relationship between knowledge management and the development of entrepreneurial skills among vocational technical students in Lagos. This hypothesis is tested using Pearson’s Product Moment Correlation ($r$).

Table 4: Knowledge management and entrepreneurial skill development among vocational technical student

<table>
<thead>
<tr>
<th>Variables</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
<th>$\text{Df = (n-2)}$</th>
<th>$P$-value</th>
<th>$r$-calculated</th>
<th>$r$-critical</th>
</tr>
</thead>
<tbody>
<tr>
<td>Students’ Entrepreneurial Skill Development</td>
<td>150</td>
<td>20.55</td>
<td>2.357</td>
<td></td>
<td>148</td>
<td>0.05</td>
<td>0.614</td>
</tr>
<tr>
<td>Knowledge Management</td>
<td>150</td>
<td>15.44</td>
<td>2.673</td>
<td></td>
<td></td>
<td>0.1946</td>
<td></td>
</tr>
</tbody>
</table>

***$\alpha = 5\%$ significance level***

Table 4 shows that the calculated $r$-value of 0.614 is greater than the critical $r$-value of 0.1946 given 148 degree of freedom at 5% level of significance. This result supports the rejection of null hypothesis in acceptance of its alternative that a significant relationship exists between knowledge management (information capturing, sharing, analyzing, evaluating, storing, etc.) and entrepreneurial skill development among the students in vocational technical institutions.

13. Discussion of the Results

Having the right knowledge in the right people (students) is one of the most common issues in knowledge management. This present study investigated effect of knowledge management on the development of entrepreneurial skills. Three research questions on one hypothesis were discussed.

Table 1 shows that 80.5% of the respondents affirmed that they are exposed to workshops, seminars and field trips (where they exchange information) equipped them to identify business opportunities or strategies, have creative business ideas, knowledgeable on how to get financial support to start off a business of their own and some levels of managerial experiences while 19.5% express a contrary opinion. This finding corroborate those of (Holsapple, et al 2001; Akhavan et al,2006; and Hannu littunen in Ghorbani et al 2012).
Table 2 reveals that 80.3% of the learners who shared information, brainstorm among themselves or learn as team tend to develop enthusiasm toward starting their own businesses after graduation while 19.7% felt otherwise. This result supports Taleghani (2011) study that found a meaningful link between knowledge shared, used with organization entrepreneurship and Ghorbani et al (2012) finding that meaningful relationship exist between teamwork and development of individual entrepreneurship.

Information on Table 3 reveals that 89.8% affirmed that their exposure to knowledge asset immensely equipped them with all the skills to engage in entrepreneurship. This result supports Idowu (2004), Adepoju and Adeedeji (2012) and Caird (1992) in Mundra, (2012) submissions that entrepreneurship ability is a function of several skills.

The result on Table 4 indicates that there is a significant relationship between knowledge management and the development of entrepreneurial skills among vocational technical students in Nigeria. This finding supports those of DeLong et al, (2000), Turban et al, (2001) as well as Nazem et al, in Ghorbani,(2012). These studies had earlier established that knowledge management impacts positively on entrepreneurship development. The implication of this finding is that if immense effort is directed at making knowledge management in Nigerian vocational technical institutions to be more effective, Nigerian vocational technical students will turnout great entrepreneurs in future.

14. Conclusion

Encouraging the youth to become entrepreneurs has a lot of advantages for them and the economy as well as preparing the way for innovation and growth of the country. The ability to promote entrepreneurship requires an enquiring mind that is able to make connections between theory and practice.

15. Recommendations

The main submission of this presentation is that KM is a response to the general complaint that the school system has failed to produce products that are capable of linking what is learnt in schools with practical situations at the workplace and solve practical problems in the society. It is based on the above statement and the findings of this study that the following recommendations are proffered.

- Schools and teachers should invest more on curriculum and activities that can foster entrepreneurship and innovations; refocus their methods of teaching towards practical engagements and discovery techniques, reinvigorate research culture [critical thinking] especially at tertiary level, and emphasize lateral thinking that would make students replicate best practices and transfer of learning to wherever they find themselves in life.
- Vocational institutions should initiate regular visits to small and medium scale enterprises to give students mentoring education in their areas of specialization.
- Encourage students to go on field trips and network through the media on how to access microcredit facilities.
- Engage the students into collaborative effort between vocational institutions and some government agencies, for example small and Medium Entrepreneurial Development Agency of Nigeria (SMEDAN)
- Entrepreneurship should be closely linked with practice. Encourage teachers’ productivity areas, attendance of conferences, workshops and excursions and reach out to the business community and integrate lesson learned into the learning process.
- Expose students to some activities and learning tools used inside and outside the classroom, for example; workshop on business plans and business model, student’s business start-up, consultation with practicing entrepreneurs [mentoring], computer simulations, environmental scans, and use of videos and films.
- Call for more action-orientation in entrepreneurship education. In order to overcome the limitations of traditional theory-based learning approaches, creating entrepreneurial awareness among the students, and designing a learning environment that is close to reality is a priority.
- Vocational and Technical Institutions should establish an appropriate culture that encourages students to create and share knowledge within the school.

References


Massaro, M., Bardy, R. & Michael, P. (online) Knowledge Sharing and Intellectual Liabilities in a Global Perspective.


