Organizational Instructional Interventions in Bridging Skills Gap in Education

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Abstract

This analytical descriptive study was done to assess the effects of organizational interventions by learning institutions in bridging skills gap. The intervention activities were designed to develop information handling skills, Communication and presentation skills, planning and problem-solving skills, Social development skills, creativity and innovation skills, and entrepreneurial skills. A post-intervention evaluation was then done to assess the effectiveness of the interventions using 120 students as respondents. Analysis of data for pre and post intervention was statistically significant. This is an indication that organizational interventions in bridging the skill gap were effective. The findings showed that skill development can happen if institutions can be able to adopt appropriate strategies like the use of case studies networking, report writing, debates, speech contests, and allowing oral presentations. The study revealed that there is a need to change the behavior, attitude, and perception of educators in order to enhance change in terms of delivery. This study recommends that training programs should be revised to include skill development as part of lesson work in classrooms. Program planners should ensure that students, irrespective of module choice have a broadly similar experience of teaching and learning by establishing a set of agreed operational principles.

Introduction

In a world that is increasingly becoming global, we are challenged to take stock of our past and present activities and strategies in our educational training. Today’s challenging economic situation means that it is no longer sufficient for a new graduate to have knowledge of the academic subject. The debate on the 21st-century skills and competencies within the context of the literature review is significant on the basis of changing conditions in the personal, social and professional life (Martin, Nacu & Pinkard, 2016). The education for now and the future should focus on the development of the identity of responsible and effective national and global citizenship in students (Edwards, 2020; Van Laar et al., 2017). Increasingly, it is necessary for students to gain those skills which will enhance their prospects of employment and self-sufficiency. Details of a sessional paper 2004 on a Policy Framework for Education, Training, and Research in Kenya indicate that quality education and training contributes significantly to economic growth and expansion of employment opportunities (Ministry of Education Science and Technology [MEST], 2004). This vision, therefore, provides the rationale for major reforms in the current educational system in order to enable Kenya to have access to quality life-long education and training. This begins by decidedly endeavoring to educate and develop skills in students. However, there is a danger that purely academic focus will leave practical understanding untouched hence practicable ideas that can bring about performance improvement, merit serious analysis. The current system neglects the true goal of education; it fails to teach the young how to think clearly and logically. The system produces students who know facts but do not have ideas that motivate them (Babendreir, 2006).

The 21st century is visualized as an era majorly characterized by the evolution of technology and ICT, and a need for innovation. Consequently, this expresses the need for students to develop relevant skills and competencies (Chalkiadaki, 2018; Wallace-Spurgin, 2019). In their study, Warhurst, Irene & Ewart (2004) reveal that boosting the supply of skilled and educated employees will of itself act as a catalyst for economic change and enhance productivity and competitiveness. A paper developed by Johnston and Aileen (2004) gives a succinct account of current debates in the literature on graduate attributes. They argue that attributes related to employment and lifelong learning are given little attention in the current education system. Skill development is of paramount importance if educational goals have to be attained. For instance, history graduates are rarely employed as historians in today’s world, but if well trained, they have an opportunity to utilize their employability skills in securing a livelihood. Educational Standards are focused on global education goals as
promoted by UNESCO (Amadio et al, 2007) among them being, developing skills and knowledge for human productivity. Recent research indicates that about 72 percent of large companies and 49 percent of small to medium-sized enterprises are experiencing technical skills gaps in their workforce (Ecorys UK, 2016).

In developing its educational system the Kenyan government has also attuned its educational goals to reflect the global outlook. It can be noted from a closer look that if the Ministry of education is to succeed in achieving its goals and meet the expectation of stakeholders and the public at large, it must be innovative in its training programs. This can be achieved by specifically addressing the issue of skill development. Skills development still prevails as a research issue in our education system. It is now considered a primary goal to be achieved by the students (Lackeus, 2015; Roy and Das, 2016). In line with the global and national goals, there is a need to develop a training program that is designed specifically for the transformation of society. It is therefore imperative to innovate the delivery of programs in readiness for economic changes around the globe. After the Ministry of Education has developed a program, it is handed down to schools and colleges for implementation. This is the playing ground which is the main focus for this study. It is expected that the principals and teachers will effectively implement the prescribed program innovatively under the immediate supervision of the County education officers. The question that needs to be asked is that, are students today being prepared for the current social-economic global transformation? The study adopted the following hypothesis to be accepted or rejected at .05 alpha level: there are no significant differences in Pre and Post evaluation by the students on the following factors: Information handling, communication, and presentation, Problem-solving, Social Development, Technology, Creativity and innovation, and Entrepreneurship.

Theoretical Review

Innovative Instruction

This decade has witnessed the emergence of global challenges that call for a new paradigm of teaching and learning (Nyakito & Allida, 2018). One of the core functions of institutions is to provide quality education for its students by constantly developing and updating their training programs (Chua, 2002). Knowledge should be periodically created, challenged, defended, and eventually disseminated to the students innovatively. It is therefore necessary to change cultural or habitual and operating practices and strategies. Tyler cited in Chruscieł (2006) suggests that students should be exposed to the elements of importance geared towards skill development. In an organized training program an individual will learn and practice the proposed concept. Learners must now be subjected to meaningful inquiry-based learning that bring real-world experiences merged with opportunities for learners to construct and organize knowledge ((Wadaani et al, 2016). If students who emerge from institutions are to be genuine, skilled, and flexible individuals who can actively contribute to the work environment, then those who teach them should be able to engender this capacity to think, to question and to learn. Studies suggest pedagogical approaches like personalized learning strategies, collaborative learning, and informal learning are effective in nurturing creativity (Gijjsbers & van Schoonhoven, 2012; Redecker & Punie, 2013). A key ingredient in the strengthening of instruction is the ability of teachers to impart knowledge, develop skills, attitudes, values, appreciations, habits, and understandings to make students grow and develop into desirable members of the community (Garcia cited by Parmisana, 2000). Training should equip prospective teachers with the science and art of manipulating the learning environment to attain the learners’ maximum possibilities.

The ultimate goal of any training according to Markuerkiaga, Caiazza, Igartua, & Errasti (2016) is to improve student development which may be achieved through changing teachers’ behavior. It is a joint venture whereby people with diverse expertise work jointly with equal status and shared commitment in order to achieve mutually beneficial instructional goals. In a world that is increasingly becoming global, there is a need to change the way students are educated and trained. This can be done by breaking away from traditional customs and beliefs. The adage that “people teach as they were taught” may be extended to people design educational environments based on their experiences and perceptions of teaching and learning. It is evident that few schools teach students to create knowledge consequently making learners become experts at consuming knowledge rather than producing (Redecker & Punie, 2013). It is therefore important that teachers adopt a learner-centered pedagogy, accept the mysterious aspect of creativity, and encourage experiential learning (Carlile & Jordan, 2012). Research also shows that although teachers may be enthusiastic about fostering creativity in the classroom, their implicit theories that creativity is an inborn talent may be a hindrance (Wyse & Ferrari, 2014). This implies that, in planning training programs, the nature of total student experience needs to be considered through diversity in learning contexts. This diversity strengthens the argument that careful educational design is essential for effective skill development.
Building Competencies

The new challenge in education today is to select the highest quality of knowledge and make effective use of it (Mulenga & Kabombwe, 2019). Education institutions should begin immediately to outline specific competencies for each program they offer. There should be a program specification which spells out intended outcomes of the program in terms of knowledge and understanding that a student will be expected to have on completion. The key skills are communication, numeracy, the use of information technology, and learning how to learn, cognitive skills such as understanding of methodologies or ability in the critical analysis ((UNESCO, 2017). Many employers and examination bodies demand today that communication skills be taught and examined through college courses. Commitment to building these competencies, therefore, implies examining in detail how we design, teach, assess, and learn within structured educational programs (Curry & Docherty, 2017). Innovation in the curriculum should engender communication skills owing to the fact that oral and written communication is important because of information and attitudinal processing within the individual. Accordingly, all education depends on the understanding and effective use of language writes (Hodgkinson, 2000). While education has always emphasized fluent reading, correct speech, and clear writing, there is evidence that students are not mastering these most basic skills. Thus a necessity to consider enhancing communication skills (Surowiecki, 2004).

The competency education system should be geared towards helping learners to acquire desirable knowledge, skills, values, and attitudes to meet the demands of society and be able to compete on the global labor market (Masumba, 2019). This requires teachers to be knowledgeable be equipped with skills and desirable attitudes to teach using competency-based approaches (Musilekwa & Mulenga, 2019). Training programs should include in every discipline, strategies that will develop those abilities that will help students be able to identify problems and recognize their nature. They should be trained on how to gather available data and additional relevant information, ask questions relating to who, what, where, when, and why. They should also be trained on how to monitor the implementation of solutions and take appropriate action to ensure that problems do not recur (McNauty, 2002). The increasing use of technology is disrupting the job market of today and is not likely to stop any time soon. There is a prediction that one in three jobs will be converted to software, robots and smart machines by 2025 (Gartner, 2014). This scenario requires the up-skilling of the current students to adapt to an increasingly digital world.

In this age of digitalism and information technology, the transmission of information is becoming an important component in communication strategies. The way people send and receive information has received a tremendous boost from developments in technology (Giunta, Pericoli, & Pierucci, 2016). The revolution in the information and communication technology (ICT) arena has produced a techno-savvy and media-hungry generation that uses digital media as a way to learn and communicate with each other. Educators must prepare to bridge the gap between information technology and performance divides so that they are able to develop new pedagogy that incorporates technology to increase student performance. Terziev, Latyshev & Georgiev (2017) suggest that classroom teachers must have a firm grasp of the classroom level principles so that they may design technology integrated instruction and support student achievement. One of the most important educational aims is to develop social skills in students which are in turn expected to influence their personal, social and educational success (Morgan, Hsiao, Dobbins, Brown., & Lyons, 2015; Rawles, 2016). It is important that all students learn appropriate social skills (Agran et al., 2016; Davies, Cooper, Kettler & Elliott, 2015). Appropriate social skills provide opportunities and experiences that enable students to practice and apply social strategies and skills in actual environments and life situations (Chu & Zhang, 2015; Morgan et al., 2015). Lynch & Simpson (2010) argue that the development of social skills lays a critical foundation for later academic achievement as well as work-related skills. In essence, social skills are considered one of the important factors in the success or failure of every individual in a society.

Need for Innovation

As Ceserani (2003) remarks, the world is a messy place and the way to survive is to notice what is happening and respond to it in the best way possible. According to (Mbanefo, 2015), organizations are realizing that design, creativity, and innovation are going to be the key things in the future. It is time for students to be trained on how to differentiate between a problem and an opportunity. The learning process should be designed to encourage students to innovate experimentally by facing the ambiguity and uncertainty of open-ended change. Peddler cited by McHardy & Teresa (2000) says that this can be done by emulating the way practitioners learn. They should be required to design make-believe situations that are open-ended with no obvious answers for students to participate in creative decision making.
Decisions are impossible without information and people are constantly seeking more and better information to support their decision making. Hence, Wilson (2005) says the growth of information systems, a term that generally means networks of computers but strictly speaking, should also include non-computerized channels of communication such as regular meetings, in and out trays full of memos and reports and of course the phone. Accordingly, students should be made to understand that knowledge is dialogic (Elmborg, 2003); that it is negotiated in discussions, disputes, and disagreements of specialists. It is not a matter of wanting facts that can be memorized.

Creating an Entrepreneurship Culture

Addressing the current economic crisis, the World Economic Forum of 2009 recommended the development of entrepreneurship skills in education as a vehicle for economic growth. The Forum laid emphasis on developing innovative tools, approaches and delivery methods for advancing entrepreneurship by redesigning training programs (Volkman and Wuppertal et al., 2009). To make a success of a new business venture demands a certain type of person. The ability to spot the right product and the right market at the right time is just as much a gift as musical talent or an artistic flair (Wright et al., 2017). The whole process should constitute an ecosystem conducive to student entrepreneurship including business plan competition, grants, and accelerators (Wright et al., 2017). Today, the definition of entrepreneurship includes more than the mere creation of business; it also includes the generation and implementation of an idea. A document presented in the youth employment summit in Nairobi as reported by Wamari (2006) says that there are inherent cultural values that respond differently to entrepreneurship. Some societies have traditionally considered themselves good workers and have tended to wait to be employed. They get into entrepreneurship only after all else fails. The level of success in entrepreneurship even among societies that have traditionally taken it up at will is dependent on the kind of education and training people receive.

Whiteley (2004) suggests that the curriculum in all disciplines should spell out the pros and cons of self-employment; assess the risk involved and offer solutions to raising finance, managing resources, and complying with regulations. It should also acquaint students with information on how to get help, how to deal with book keeping, administration, and how to get ahead of competitors. Integrating student start-ups in academic entrepreneurship leads to a broader vision of entrepreneurship (Matt & Schaeffer, 2018). Young people need a life purpose in which they are aware of and can draw on their talents and abilities (Akuegwu & Nwi-Ue, 2016). Entrepreneurship skills shape, actualize, and bring the developmental dreams and economy of any nation to reality (Moemeke, 2013). In order to be successful entrepreneurs, the most important element is risk-taking. Preparing the students and developing their mindset as risk-takers is the most crucial part (Din, Anuar, & Usman, 2016). Therefore, it is eminent that entrepreneurial skills should be inculcated in students.

Methodology

The researcher used an action research model that involved diagnosis of the organizational problems and evaluation of the effects of selected interventions. A descriptive approach was also used in supporting the obtained data after hypothesis testing. Research participants were 21 teachers drawn from two Technical Training Institutes in Machakos County, located in Eastern Kenya. The institutions operate a training program prescribed and supervised by the Ministry of Education. The respondents who participated in the pre and post intervention were 120 final year students. To determine the extent to which the training program meets students’ needs, a researcher-made questionnaire consisting of 39 items was used in both the pre and post-intervention. The questionnaire was derived from Connolly and Connolly (2005) collection of questionnaires. The questionnaire was based on the Likert scale consisting of Strongly Agree, Agree, Neutral, Disagree, and Strongly Disagree. Its validity was obtained through a pilot study on 16 final year students and an open item that was giving varied responses was dropped. The internal consistency reliability coefficient of the questionnaire was obtained by computing Cronbach’s alpha using Statistical Package for Social Sciences (SPSS). Internal consistency of seven sub-scales; Information handling, communication and presentation, Problem-solving, Social Development, Technology, Creativity and innovation, and Entrepreneurship was assessed using Cronbach’s alpha, which enabled the researcher to study the properties of measurement scales and the items that compose the scales. On average, a Cronbach’s alpha level of .84 was obtained. Given that the minimum acceptable value for Cronbach’s alpha is .70 and a maximum .90 (Abraham & Barker, 2014), all the subscales reached a threshold and were within this range. This is a clear indication that the questionnaire was generally suitable for data collection because it adequately measured the constructs it was intended to
The skill development items in the questionnaire were interpreted as follows: 4.20 – 5.00 fully met, 3.40 – 4.19 met, 2.60 – 3.39 need improvement, 1.80 – 2.59 not met, and 1.00 – 1.79 fully not met.

In order to improve on the current training program in terms of skill development an organizational intervention (OI) program involving a set of activities was planned and executed over a period of two quarters made of 14 weeks each. The OI comprised of activities tailored to develop and enhance transferable skills in students by the teachers. The activities were: fieldworks, case studies, and network building for information handling; report writing, writing contents, debates and speech contests and oral presentations addressed communication needs. Peer counseling and project work were for planning and problem solving; social development was addressed by role-playing, teamwork, and peer assessment. Video shows, computer practice, and academic trips to industries addressed technology skills. On the other hand scenario building, real-world situations, and brainstorming sessions were arranged for creativity and innovation. Finally, entrepreneurial skills were carried out using resource personnel and business projects. During the diagnosis, the researcher administered the questionnaire to 120 respondents who were students from the selected institutions to obtain the pre-intervention data. Intervention activities were then undertaken by the 21 research subjects who were teachers for a duration of two quarters. After this, a post-intervention evaluation was done to test the effectiveness of the interventions. The obtained data were then analyzed and the computed means were compared using a t-test. In analyzing the collected data, means were computed to give the profile of the data before and after the interventions. The weighted average value determined the exact position of the students’ responses on the Likert scale. The standard deviation was then computed to ascertain the validity of the means. Finally, a t-test was carried out in comparing the data in order to establish the significance of the differences before and after the interventions.

Findings

Table 1 shows that there was a remarkable improvement as indicated by the means from (2.19) to 4.21. This shows that after the OI, participants improved in their performance in developing information handling skills in students and the respondents were able to notice a change in the delivery style of their teachers. The profile of the pre and post intervention scores showed that the participants were able to meet the communication and presentations skills of students from a mean of (2.44) to (4.33). Students showed a remarkable improvement in report writing and were excited to express their ideas orally. In developing Planning Skills, the exposure of students to different situations made them expand their perception and also develop self-confidence in handling uncertainties. They also showed creativity in solving disputes by being understanding and willing to help others overcome their problems. The result of pre and post OI scores show that the planning and problem-solving skills were met from (2.85) need improvement to (4.02) met. The profile of the pre and post OI scores on the social development of students improved from (2.41) need improvement to (4.26) met. On technological skills, the use of computers enabled them to be able to type, store, and retrieve information. The internet availed students with a lot of information. They also found it easier to access information and carry out assignments fast. The results of the pre and post OI intervention show that the technological needs of

<table>
<thead>
<tr>
<th>Skills</th>
<th>Pre OI Interpretation</th>
<th>Post OI Interpretation</th>
<th>t-value Obtained</th>
<th>t-Critical value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Information Handling</td>
<td>2.19 Not meet</td>
<td>4.21 Fully Meet</td>
<td>9.18</td>
<td>1.645</td>
</tr>
<tr>
<td>Communication and presentation</td>
<td>2.44 Not meet</td>
<td>4.33 Fully Meet</td>
<td>9.00</td>
<td>1.645</td>
</tr>
<tr>
<td>Planning and Problem solving skills</td>
<td>2.85 Need improvement</td>
<td>4.02 Meet</td>
<td>5.57</td>
<td>1.645</td>
</tr>
<tr>
<td>Social Development</td>
<td>2.41 Need improvement</td>
<td>4.26 Fully Meet</td>
<td>8.41</td>
<td>1.645</td>
</tr>
<tr>
<td>Technology needs</td>
<td>1.72 Fully meet</td>
<td>4.19 Meet</td>
<td>9.15</td>
<td>1.645</td>
</tr>
<tr>
<td>Creativity and innovation skills</td>
<td>2.62 Need improvement</td>
<td>4.19 Meet</td>
<td>7.14</td>
<td>1.645</td>
</tr>
<tr>
<td>Entrepreneurial skills</td>
<td>2.51 Not meet</td>
<td>6.21 Fully Meet</td>
<td>7.73</td>
<td>1.645</td>
</tr>
<tr>
<td>Average</td>
<td>2.39</td>
<td>4.20 Fully Meet</td>
<td>8.03</td>
<td>1.645</td>
</tr>
</tbody>
</table>

OI: Organizational Interventions

On technological skills, the use of computers enabled them to be able to type, store, and retrieve information.
students were met as they changed from (1.72) to (4.19). The profile of pre and post OI scores show that creativity and innovation skills were met. This was proved with a mean of (2.62) against 4.19. Brainstorming sessions enabled learners to come up with many ideas and showed confidence that they can be creative. They showed a change in perception of the things around them by discovering that they can actually transform many things if they can utilize their imagination power. The profile of the pre and post-OI indicates that the entrepreneurial needs of students were met due to the change in behavior by the participants. This was evident with a mean of (2.15) against (4.21). The results indicate that there is a need to shift the focus of training into a more practical oriented training by developing entrepreneurial skills. Table 1 shows that, the t-test values in all the seven problem areas were greater than the critical value 1.64 and therefore were significant at 0.05 level of significance. The mean scores indicate an improvement in performance from not being met to fully met. From the data analyzed, the null hypothesis was rejected meaning that there is a significant improvement that was realized as a result of the introduction of the organizational interventions.

Discussion

All the proposed interventions were implemented in groups and found to be exciting and effective. They were more interactive in design and focused on students’ needs. The participants considered working in groups as a key strength of the entire exercise. In particular, they valued the experience of the group organization, designing their own group structure and meeting without specific investment from their teachers. They also valued the opportunity of applying the theoretical concepts and techniques to practical settings as a way of enabling them to prepare for global challenges. Interventions on information handling, students were able to gather data in a variety of ways, analyze and present it both in the form of tables and charts. The resource personnel enlightened students on what is happening in the world by addressing issues that affect students and the use of library enabled students to research and gather information that may not be available during teaching. Information gathering skills can be improved by establishing networks in enabling students to exchange ideas. Case study methods and the use of fieldworks were found to be helpful. The primary objective of gathering information is to answer questions, which are diverse and depend on the situation with which one is faced with. This finding confirms Elmberg's theory that developing communication skills enables students to appreciate learning (Elmberg, 2003).

In reference to communication skills, exposure to interviews, and conducting meetings helped students in developing their personalities and also in responding to questions logically. This shows that it is extremely important for students to be able to write and converse with others and present ideas and opinions. This can be accomplished by organizing debates, speech contests, and training students to make oral presentations. The participants showed that when these activities are planned for and made part of classwork students learn better. These results confirm Barras theory that oral and written communication is important because all education depends on the understanding and effective use of language (Cruz & Orange, 2016). Effective communication is essential in today’s world. It is imperative that tomorrow’s graduates communicate clearly and effectively in a variety of languages. (Robinson, 2001). On planning and problem solving, the result showed that teachers should engage students in small group tasks in projects that are linked to their future roles. The work assigned to them should involve tangible problems in society that will require them to plan and come up with workable solutions. Learners should be taken through different stages of identifying, planning, coming up with solutions, implementing them, and evaluating their effects. The participants showed that problem-solving skills can be better developed if the training program can factor in real-life problems that will actively engage the learners (Dvane, 2007).

Deep learning requires that in addition to learning subject content, students are also able to apply these to other situations through problem-solving, critical thinking and communication skills (National Research Council, 2012). Traditionally, critical thinking and problem-solving were considered the domain of gifted students. Not anymore. Teaching critical thinking and problem-solving effectively is today vital for students (Paul, Richard & Linda Elder, 2006). Mbanefo & Chiaha (2014) observe that innovative learning environments focus on the utilization of new knowledge acquisition modes and the adoption of problem-solving strategies. Social development is significant in students’ personalities. These findings show that strategies like role-playing, teamwork peer mentoring, community work and peer assessment make students engage with feelings, values, and motives. This has a particular connection with the value placed on students as people. It would also lead to the provision of learning opportunities and encounters which involve the whole person’s feelings, values, and motives. The performance of participants showed that if educational goals have to be met, then education in Kenya must prepare students for the change in attitude and relationships. Findings confirm the theory that, active and co-operative learning with major importance being attached to social and emotional climate in which
students work develop them socially. In turn, these skills if seriously considered will make students to accept responsibility for their actions (Costes-Onishi & Caleon, 2016). In their view, Slaby & Gaura (2003) portend that social skills consist of the ability to create interactions with others in a social background according to societal norms.

Education should give priority to the development of social skills because numerous investigations indicate that insufficiency in social skills has a negative influence on students’ educational performance (Yılmaz, 2015; Cawthon et al., 2015). Social skills not only help in establishing positive relations but also facilitate in achieving communication goals (Chen, Wang, & Chen, 2001). The findings of Yılmaz (2015), Rasmussen & Rasmussen (2015), confirm that, if social skill training continues with regular and continual planning during students’ training periods, it would result in students’ development from all aspects. On the development of technology skills, the findings indicate that students were able to appreciate the use of computers. Watching of Videotapes on advancement in technology also helped to improve students’ awareness. Training programs today need to provide young people with technological knowledge and skills that will prepare them to make the transition to employment. From the findings the theory that failure to take seriously new developments lead to not seizing the best opportunity made meaning. Students should, therefore, make possible benefits of technology (Wilkens, 2015). More day-to-day routine activities cannot be done without the support of digital technologies and it is increasingly difficult to live in contemporary society without using these technologies (Rust, 2014). This implies that it of necessity for students to have the right skills to exploit the benefits and avoid the pitfalls of this new way of living. There is an argument that using technology alters our brain plasticity, cogitation, and concentration (Carr, 2010). It is therefore important to recognize these changes in the delivery of education and skills development. Computers and the Internet have the potential to engage students more than traditional teaching methods do (Boyaci & Atalay, 2016). Further, the use of game mechanics in learning or teaching using computers motivates students to improve their achievement (Cuban, 2001).

In nurturing creativity and innovation, results show that teachers should use situations that are unique to trigger creativity. Teachers should also be able to develop scenarios that develop imagination abilities. Educators can also borrow from Senge’s (1990) concept of creative tension. Creating micro worlds which are a microcosm of real business that give students an experiential taste. Students need to be innovative to succeed at work and in life. This confirms that when teachers actively model innovative behavior in school, students learn why innovations matter and are something they can do (Harris & Daniel, 2005). Students leaving school without knowing how to continuously create and innovate will be considered underprepared for the challenges of the workforce. In a world of global competition, innovative capacity is fast becoming a requirement for a person’s success (Gardner, 2007). Researchers observe that innovation is a discipline that can be taught from the earliest years of school to the highest level (Kuratko, 2005; Hindle, 2007). It a mind opener that enables students to explore new opportunities (Arasti et al., 2012). It is generally accepted that for economic growth to continue at accelerated levels, there should be a greater emphasis on creativity and innovation. These skills are in extremely short supply and our education system should be prepared to exploit this new emphasis (Pink, 2005).

In developing entrepreneurial skills, students were able to realize that they can actually start their own business after school, they were able to keep their own accounts and were able to identify many business opportunities in their home areas. They also sensed the need of becoming self-reliant due to few jobs in the market. This was done by participants making learning to have a link with the world of business concepts for them to compete globally. In order to internalize and create in students an entrepreneurship culture, business projects can be carried out and form part of learning and that teachers highlight the current business trends and opportunities available and train students on how to identify them. This is consistent with the view that, young people need a life of purpose in which they are aware of and can draw on their talents and abilities (Akuegwu, & Nwi-Ue, 2016). The study clearly imply that, knowledge should be periodically created, challenged defended and eventually disseminated to the students innovatively by cultural changing operation practices and strategies (Chua, 2002). This is in line with the strategies stated by Adikwu (2015) for inculcating entrepreneurial skills in students through stimulation methods that will enable students to explore opportunities for innovation and creative ideas. Obasi & Ohio (2014) also stated that entrepreneurship skills are packaged to equip students with knowledge and orientation toward self-reliance.

**Research Implications**

If competency-based learning is to be given priority then there is a need for a re-examination of assessment practices. This kind of summative evaluation encourages teachers to focus their instruction on exams rather than concentrating on skill development. This approach exerts undue pressure on both students and teachers to rush
through the syllabus by use of drills, lectures, and memorization thus giving less time to personal development. Change can be achieved if education institutions can concentrate on skill development alongside theory. Further, findings reveal the need to vary methods of instruction. This can be accomplished by defining the context of instruction within the organizational structures to enhance student learning. Schools should also be made to redesign their work on instruction in ways that would in time change the ways teachers interact with students for them to learn more. Each course should, therefore, spell out the skills to be developed, provide specific time for them and specify how they will be evaluated as part of the student’s academic work.

Conclusion and Recommendations

The analysis of the data for pre and post intervention was statistically significant indicating that, organizational interventions in bridging the skill gap were effective. The findings showed that skill development can happen if teachers can be able to adopt appropriate strategies like the use of case studies networking, report writing, debates, speech contests, and allowing oral presentations. They can also use peer counseling, projects, teamwork, use of computers, scenario building, and real-world experiences in the classroom in order to improve learning. The study revealed that there is a need to change the behavior, attitude, and perception of educators to be able to enhance change in terms of delivery. This can be done by directing teaching and other school activities towards the attainment of educational goals. The results on the importance of social development, further indicate that the opportunity to work in groups for the exchange of ideas, theories and insights provide students with valuable learning experiences. Students’ involvement in assessment of their own work can also heighten their appreciation of the learner-centered approach and enable them to make more rational and objective judgments of themselves. Designing exercises, which place students in real-life experiential learning situations, and require them to apply knowledge to actual industrial circumstances, help to facilitate deep learning and develop transferable skills. It can also be concluded that students are becoming more aware of their personal responsibilities as learners and not merely sinks for facts and opinions. They have also realized that being skilled and able to take advantage of the opportunities offered is the only way to position oneself to face challenges.

This study recommends that training Programs should be revised to include skill development as part of lesson work that occurs in classrooms. Traditional assessment systems should change to take account of that to enable learners to provide evidence that shows that they can acquire and apply knowledge. Program planners should ensure that students, irrespective of module choice have a broadly similar experience of teaching and learning by establishing a set of agreed operational principles. There should be a shift from mere policy formulation to active implementation at the grass-root level. This can be done by modifying classroom practice and adopting the management arrangements within training institutions to support teaching and learning. Finally, due to global changes, program planners should partner with teachers in academic institutions and practitioners in other organizations in developing an explicit set of capabilities, which learners will need in the future.

References


Babendreir, J. (2006, Oct. 22), Our students know the facts but they may have no idea. Nairobi: Daily Nation


Ceserani, J (2003). Big Ideas; Putting the Zest into Creativity & Innovation at Work. Great Britain: Kogan Page Limited.


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