DETERMINANTS OF EFFECTIVE IMPLEMENTATION OF ARTISAN AND CRAFT CURRICULUM IN CATHOLIC SPONSORED COMMUNITY COLLEGES IN NAIROBI REGION, KENYA

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Faculty of Education

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DECLARATION

I, the undersigned, declare that this dissertation is my original work and has not been presented to any other University for academic credit. Information from other sources has been duly acknowledged.

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This dissertation has been submitted with our approval as University Supervisors.

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ABSTRACT

The study examined the determinants of effective implementation of Artisan and Craft courses in Catholic sponsored community colleges in Nairobi region. Nine research questions built around the topic guided the study. The study was underpinned in two theoretical orientations and adopted the mixed methods research design. The study sample comprised 18 Artisan and Craft teachers and 172 Artisan and Craft students and four directors of Catholic sponsored community colleges. The study triangulated questionnaires and interview guides which were content-and face-validated and reliability was determined using Cronbach’s alpha. Quantitative data were analyzed using descriptive statistics while qualitative data were analyzed and presented in form of narratives and direct quotations. The study established that attitude of teachers and students, teaching strategies, adequacy of teaching and learning resources, teacher motivation, teaching workload and attending of in-service courses had a high influence on the implementation of Artisan and Craft curriculum. On the contrary, industrial attachment, field practice and college-community collaborations were found to have a low influence on the implementation of Artisan and Craft curriculum. The study recommends constant monitoring of Artisan and Craft curriculum implementation, provision of adequate facilities, employment of qualified teachers, development of strong networks and collaborations with relevant stakeholders, and sourcing for more funding from the government and or its agencies. Other recommendations include enacting policies that foster good relationships among teachers, students and college management, enriching guidance and counseling programs, and enhancing motivational talks in community colleges. The study also recommends further investigation into the perceptions of students on management of community colleges, a similar study on a wider geographic scope and graduate tracer studies to determine the employment and skills utilization rates among the graduates of community colleges.
DEDICATION

To my wife, Loyce, son, Andrew and daughter, Faith.
ACKNOWLEDGEMENTS

The completion of my PhD studies at The Catholic University of Eastern Africa would not have been possible without the love, care and divine provision from the Almighty God. In addition, the unwavering support, encouragement and inspiration from many people motivated me in the actualization on my academic endeavor. I thank you all.

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Special thanks go to the directors and principal of the community colleges for their willingness to partake in the interviews. Last but not least, I salute the teachers and learners of the community colleges who so graciously cooperated in completing the questionnaires for the study.
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<th>Description</th>
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<tbody>
<tr>
<td>CATs</td>
<td>Continuous Assessment Tests</td>
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<tr>
<td>CBO</td>
<td>Community Based Organization</td>
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<tr>
<td>DIT</td>
<td>Department of Industrial Training</td>
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<td>DTE</td>
<td>Directorate of Technical Education</td>
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<td>EACCS</td>
<td>East Africa Community Colleges Secretariat</td>
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<td>ECVET</td>
<td>European Commission Vocational Education and Training</td>
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<td>ESD</td>
<td>Education for Sustainable Development</td>
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<td>EU</td>
<td>European Union</td>
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<tr>
<td>ICT</td>
<td>Information and Communication Technology</td>
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<tr>
<td>ITs</td>
<td>Institutes of Technology</td>
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<tr>
<td>HoD</td>
<td>Head of Department</td>
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<tr>
<td>KESSP</td>
<td>Kenya Education Sector Support Program</td>
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<td>KNEC</td>
<td>Kenya National Examinations Council</td>
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<tr>
<td>KP</td>
<td>Kenya Polytechnic</td>
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<tr>
<td>MOE</td>
<td>Ministry of Education</td>
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<td>MSE</td>
<td>Medium and Small Enterprises</td>
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<td>MOYA</td>
<td>Ministry of State for Youth Affairs</td>
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<tr>
<td>MOEST</td>
<td>Ministry of Education, Science and Technology</td>
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<tr>
<td>MOHEST</td>
<td>Ministry of Higher Education, Science and Technology</td>
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<tr>
<td>NCEOP</td>
<td>National Committee on Educational Objectives and Policies</td>
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<tr>
<td>NGOs</td>
<td>Non Governmental Organizations</td>
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<tr>
<td>NITD</td>
<td>Native Industrial Training Depot</td>
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<tr>
<td>NTTI</td>
<td>Nyeri Technical Training Institute</td>
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<td>PhD</td>
<td>Doctor of Philosophy</td>
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<td>Acronym</td>
<td>Description</td>
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<tr>
<td>PTA</td>
<td>Parents Teachers Association</td>
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<td>RoK</td>
<td>Republic of Kenya</td>
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<tr>
<td>TIVET</td>
<td>Technical, Industrial and Vocational Education and Training</td>
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<tr>
<td>TVET</td>
<td>Technical and Vocational Education and Training</td>
</tr>
<tr>
<td>TTIs</td>
<td>Technical Training Institutes</td>
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<tr>
<td>UNESCO</td>
<td>United Nations Educational, Scientific and Cultural Organization</td>
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<tr>
<td>VET</td>
<td>Vocational Education and Training</td>
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<tr>
<td>VTCs</td>
<td>Vocational Training Centers</td>
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<td>YPs</td>
<td>Youth Polytechnics</td>
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CHAPETR ONE
INTRODUCTION

1.1 Background to the Problem

This section is sub-divided into four parts. The first part discusses the global and local perspectives of the place of Technical and Vocational Education and Training (TVET) in national and international development agenda. It is then followed by an analysis of the objectives of TVET in Kenya. Thereafter, a background to the concept of Community colleges is made. The section culminates in a discussion of the status of Artisan and Craft curriculum in Kenya.

1.1.1 Global and Local Perspectives on TVET

The role of education in shaping the livelihood of individuals, communities and societies cannot be over-emphasized (Education International, 2009; Simiyu, 2009). In particular, technical and vocational education and training (TVET) remains a key development strategy for international development agencies and governments (King & Palmer, 2010; McGrath, 2002). Yet long-lived and intense debates have surrounded the efficacy of TVET programmes in meeting the ever-changing individual and societal needs (UNESCO, 2009; Ryan, 2001; Ziman, 2000). In Kenya, evidence shows that transition rates to TVET institutions remain low (Nyerere, 2009; Republic of Kenya, 2007; MOEST, 2004). Furthermore, graduates of Kenya’s education system have been criticized as lacking the technical and vocational skills required by the labour market (Mwinzi & Kelemba, 2009; Olomi, 2007; MOYA, 2006; Ngumbi, 2004). One of the major challenges facing technical and vocational education has been the irrelevance of the curriculum offered in TVET institutions (Lauglo & Maclean, 2005; MOEST, 2005; Republic of Kenya, 2003).

Existing evidence shows that Kenya lays a lot of emphasis on the relevance of TVET in meeting the needs of the labor market with concerns about students' preparation for work and...
the impact of education on productivity and competitiveness (African Union, 2007; Korpi, De Graaf, Hendrick & Layte, 2003; Atchoarena & Delluc, 2001). Moreover, the attainment of her Vision 2030 goals are hinged on the provision of quality education and training, more so among the majority youth who enroll in TVET courses. Thus the manner in which TVET is implemented becomes a critical determinant to the realization of the economic development goals of the country.

However, the provision of TVET in Kenya is highly fragmented and delivered by different groups such as profit and non-profit institutions, Non-Governmental Organizations (NGOs) and faith-based institutions (Atchoarena & Esquieu, 2002; UNESCO, 2000). Over the years, private provision of TVET in Kenya has steadily been on the rise both in terms of the number of institutions as well as students. Several reasons account for this increase. First, private providers train for the rapidly expanding informal sector while public institutions train mostly for relatively stagnant industrial sector (Africa Union, 2007). Second, private providers target “soft” business and service sector skills like secretarial practice, cookery and dressmaking that do not require huge capital outlays to deliver (Lannert, Munbodh & Verma, 1999). Third, employers prefer graduates of private training colleges over graduates of public colleges, especially in the blue collar jobs (Meer, 2007; Chandra, Moorty, Rajaratnam & Schaefer, 2000). Nevertheless, a close examination at the aforesaid reasons revealed that they are more end-user oriented than provider-oriented and fail to examine how the implementation of curriculum can result in upsurge in demand for graduates from private TVET institutions.

Geographically, TVET institutions in Kenya are categorized into six regions: Western, Nyanza, North Rift, Central, Nairobi, and Coast (MOHEST, 2000). Of concern to this study is Nairobi region which covers TVET institutions in Nairobi County, Machakos County and Kajiado County. The organization of TVET institutions in any of the six regions is anchored in the Technical and Vocational Education and Training Bill (2012). According to the Bill,
institutions offering TVET are organized at five levels namely: Vocational Training Centers (VTCs), which offer Artisan Certificate; Technical Colleges which offer Craft Certificate and Technician Diploma; Technical Teacher Training Colleges, which offer awards up to diploma level on technical and vocational education and training; National Polytechnics, which offer Technician Diploma; and Technical Universities established in accordance with the provisions of the Universities Act (2012). The study probed curriculum implementation in community colleges offering Artisan and Craft courses that fall within the category of VTCs, Youth Polytechnics and Technical Colleges.

Local communities, religious and non-governmental organizations with the support from the Kenya government and development partners have over the years continued to support Youth Polytechnics and VTCs in Kenya. On the religious front, the Catholic Church, with the support of Stitching Porticus Foundation, has set up community colleges that offer Artisan and Craft courses to youth. These community colleges therefore operate as VTCs, Youth Polytechnics or Technical Colleges.

Basically, these colleges emphasize the promotion of job-oriented, work-related, skill-based and life-coping education. The underlying intent is that students should acquire skills which they can use to earn a living in their local community and simultaneously contribute to its development (East African Community Colleges Secretariat, EACCS, 2010; Christian Organization Research Advisory Trust of Africa, CORAT, 2011). The community colleges are usually established by the communities and/or financed and administered by the communities themselves. However, some community colleges have outside sponsors including churches and other NGOs, which participate in the financing and, at times, management of the colleges. The study focused on those community colleges that were established under a joint initiative of the Catholic Church and Stitching Porticus Foundation. These were St. Theresa Community College
in Nairobi, Apostles of Jesus Community College in Nairobi, Marengoni Community College in Kajiado and Catholic Technical College in Machakos County.

Empirical studies have indicated that generally, enrolments in TVET institutions have been declining over the years (Simiyu 2007). On the contrary, anecdotal evidence suggests that Church sponsored youth polytechnics and institutions enjoy high enrolment and great demand for their graduates perhaps due to better facilities, equipment, funding and management practices existing in these institutions (Republic of Kenya, 1999). Furthermore, studies such as Lannert, Munbodh and Verma (1999) and Simiyu (2009) attribute the high enrolment to great emphasis laid by these institutions on the notions of access, flexibility in curriculum and teaching methodology, cost effectiveness, good student-teacher relationships and equal opportunity. The cited studies fall short of currency of information and they therefore do not present a clear picture of what influences student enrolment and graduate demand in community colleges. It therefore remains unclear what curriculum implementation factors determine students’ enrolment in, completion of and performance in Artisan and Craft courses in community colleges in Kajiado, Machakos and Nairobi counties.

An evaluation study by CORAT (2011) that examined the operations of community colleges in Kenya, Uganda and Tanzania was perhaps the only documented study on community colleges in East Africa. The evaluation sought to establish the strengths, weaknesses, achievements and challenges within community colleges in East Africa. The study used interviews, focused group discussions and observations to collect data from 77 informants in the 10 community colleges in the three countries. The informants of the study included directors, teachers, students, industrial partners and local community representatives. The study established that some community colleges had adequate facilities which were acquired through partnership with international partners, some of the community colleges had good relationships
with industrial partners, and parents had positive attitudes towards community colleges as they no longer regarded technical education as a domain for academic failures.

However, the generality of the findings in the cited study did not unearth the challenges that impinged curriculum implementation in community colleges in a particular country or region of the country. For instance, the adequacy of facilities and good industrial partnerships were identified in selected community colleges in Uganda and Tanzania respectively. Furthermore, the evaluation merely identified the challenges faced by community colleges and barely analyzed the influence of the challenges on curriculum implementation in the colleges. Hence there was need to interrogate the aforesaid determinants in the sampled community colleges in the current study in order to generate specific findings on the implementation of Artisan and Craft curriculum in Kajiado, Machakos and Nairobi counties.

1.1.2 Objectives of TVET in Kenya

A country’s TVET system is developed and implemented around the established objectives for technical and vocational education. Such objectives have a global character but with peculiar local implications. Indeed, Kerre (1995) contends that the objective of TVET in most countries is to provide, alongside general education, knowledge and skills in technical and vocational fields in order to meet national human resource requirements in agriculture, business, industry and other technical services. In Kenya, the main objective of TVET is to produce quality skilled human resource with the right attitudes and values required for growth and prosperity of the various sectors of the economy (Republic of Kenya, 2005, 2012). More specifically, TVET endeavors to attain the following objectives:

(i) Provide adequate and appropriate skilled artisans, craftsmen, technicians and technologists at all levels of the economy through practical training and work experience;
(ii) Impart marketable skills, technical know-how and attitudes that respond to contemporary labour market demands by the industry, informal sector and for self-employment;

(iii) Build on gains acquired in prior learning by promoting and sustaining entrepreneurial and technological innovations among the youth in TVET;

(iv) Provide life skills to learners that will enable them to cope with the challenges of adulthood and working life.

(v) Transfer technology continuously through collaborative approach between TVET institutions and the relevant industries;

(vi) Promote dignity and decency of labor, particularly manual work;

(vii) Provide increased training opportunities for the increasing school leavers and other trainees to increase employability;

(viii) Provide continuous upgrading of skills and knowledge at the pace and ability of the trainees;

(ix) Provide a dynamic curriculum responsive to the manpower needs of a dynamic economy; and

(x) Re-direct the potential of learners towards productive economic activities.

An analysis of the foregoing objectives shows the central role TVET should play in the social, economic and technological development of the country. The objectives show that TVET not only lays a foundation for the vocational skills required for socio-economic development but also seeks to develop entrepreneurial skills and positive attitudes in students for self employment and provide practical education and training that is responsive and relevant to the country’s sustainable economic and industrial development (Maina, 2007; Ngware, Onsomu & Manda, 2005; Republic of Kenya, 1999).

However, there are obvious discrepancies between the TVET policy and its subsequent implementation. For instance, whereas TVET institutions are charged with the provision of life
skills to learners, a scrutiny of the TVET courses revealed that life skills education had not been implemented in the TVET institutions. Moreover, the realization of the objectives may be hampered by unresponsiveness of the curriculum matching its content to the rapidly changing market needs. The curriculum review process is hardly aligned to the pace at which the market needs change in the country. This creates a disharmony between the intended and the learned curriculum. This raises the need to examine the extent of attainment of the TVET objectives in community colleges. Thus, in the study, the TVET objectives provided the benchmark for evaluating the effectiveness of Artisan and Craft curriculum implementation in community colleges. That is, the effectiveness of curriculum implementation was evaluated based on such outcomes as proportion of students who got employed, progressed to higher levels of training or engaged in self employment.

1.1.3 Background to the Concept of Community Colleges

The concept of community college started as movement in the USA at the beginning of the twentieth century in response to the changing needs of the society and the growing demand for higher education. It later spread to Canada, Great Britain, France, Japan, India, South Africa and other countries. In East Africa, the community college movement started in 2005, following a meeting between the Superiors of different Catholic congregations and representatives of Stitching Porticus to share the idea of community colleges as practiced in India and South Africa (EACCS, 2006).

In 2005, the superiors of different religious congregations met at Marist International College with representatives of Stitching Porticus to share the idea of community colleges as practiced in India and South Africa. The meeting resolved to replicate the concept in East Africa on a pilot basis. Upon exposing selected teachers to community colleges teacher training in India in 2005, the first four community colleges were inaugurated; three in Kenya and one Tanzania in 2006. These were: Grail Community College in Kisumu; Apostles of Jesus
Community College in Nairobi; Marengoni Community College in Kajiado; and Machui Community College in Zanzibar (CORAT, 2011).

Since then, Community Colleges concept gained popularity especially among religious institutions associated with the Roman Catholic Church. For instance, other community colleges were established in Kenya, Uganda and Tanzania while some that were already operating as YPs or VTCs ant Technical Institutes converted into community colleges (EACCS, 2006). Indeed, EACCS (2006) clarifies that some of the community colleges had been operating in various conceptual frameworks and brand names including technical training schools, polytechnics and vocational training centers. With the introduction of life skills programme, they rebranded their names and curricula adopting “community college” name tags and including life skills education as compulsory subject. All the colleges are sponsored by the Catholic Church except Grail, which is a movement for lay women but still under the Catholic Church.

The community colleges concept has since gained popularity especially among religious institutions associated with the Roman Catholic Church. These institutions are committed to offering alternative education comprising academic, life and work skills to the poor, marginalized and underprivileged communities. They offer technical and vocational skills in particular trades identified through a community needs assessment so that the acquired skills can easily be tapped by the industries and businesses within that community (CORAT, 2011; EACCS, 2006). Such trades include motor mechanics, electrical, carpentry, plumbing, metal fabrication and welding, maintenance, fitting and machining, baking, tailoring and hospitality.

1.1.4 Status of Artisan and Craft Courses in Kenya

In Kenya, Artisan courses target primary school leavers and last an average of two years. Such courses are offered in Youth Polytechnics (YPs), Institutes of Technology (IT), and Technical Training Institutes (TTI). The curriculum at Artisan level comprises 10% theory
work and 90 % practical work that include three months’ industrial experience. The Artisan syllabus entails a number of vocational courses including electrical installation, general fitter, welding, motor mechanics, land surveying, cartography, masonry, carpentry and joinery. Other courses include plumbing, painting and decorating, general agriculture, garment making, leather work and tannery. Students also take courses in agricultural mechanics, clerk-typist, salesmanship, store keeping, housekeeping and laundry, food and beverage production and services (KIE, 2009).

However, Craft courses target secondary school leavers in addition to those who already hold the Artisan certificate. The courses last an average of three years and are offered, just like Artisan courses, in YPs, ITs and TTIs. According to the KIE (2009) syllabus, the Craft curriculum entails 60 % theory work and 40 % practical work that include three month industrial experience. Courses offered at Craft level include electrical installation, textile and fabrication, welding and fabrication, masonry, carpentry and joinery, plumbing and science laboratory technology. In addition, students pursue courses in agricultural engineering, land surveying, cartography, computer studies, graphic design, food technology, fisheries technology, general agriculture, garment making, leather work and tannery, graphic reproduction, mechanical engineering production option, automotive engineering, medical engineering and medical laboratory technology. Furthermore, students take such courses as construction, electronics, machine printing, print finishing and bindery operations, weaving, spinning, road construction. Finally Craft courses are offered in accountancy, banking and finance, business administration, co-operative management, personnel management, supplies management, transport management, housekeeping and laundry and library, archives and information studies.

As the norm, the curricula and examinations for both Artisan and Craft courses are developed and administered by KIE and Kenya National Examinations Council (KNEC) respectively (Farstad, 2002; Kerre, 1998). Before 2007, Artisan courses offered in YPs were
examined by KNEC while the Craft courses were examined by the Directorate of Industrial Training (DIT). These courses included tailoring and garment making, welding and fabrication, carpentry and joinery, general fitting, panel beating, cabinet making, leatherwork, electrical installation, plumbing, masonry, upholstery, machine turning, sheet metal aligning, sign writing, bricklaying and motor vehicle mechanics (Economic Survey, 2010).

In 2007, KIE developed a new syllabus for YPs which had 12 courses namely; metal processing technology, electrical and electronics technology, motor vehicle technology, building technology, refrigeration and air conditioning technology, appropriate carpentry and joinery, information communication technology (ICT), leatherwork technology, fashion design and garment making technology, hair dressing and beauty therapy, agri-business and food processing technology (Economic Survey, 2010). The new curriculum had two main options; option one and option two. On one hand, option one is a modular program offered to candidates with KCPE certificates or any other equivalent qualification. The course takes two years and covers such areas as vocational trade, communication skills, entrepreneurship skills, life skills, ICT studies, technical drawing and mandatory industrial attachment. Upon completion of course, graduates are awarded the National Vocational Certificate in Education and Training (NAVCET). On the other hand, option two is a four year program that targets primary school leavers with KCPE certificates or its equivalent who aspire to follow the parallel secondary format and then proceed for further studies at diploma and degree levels. The option two courses are all those offered in option one in addition to mathematics, physics, chemistry and biology. This option has not been rolled out in YPs. Similarly, the non-formal education curriculum which targets persons who have never been to school has not yet been implemented.

The basic entry requirement for Artisan courses is KCPE certificate and either KCSE mean grade D or relevant Artisan certificate for Craft courses (KNEC, 2012). An examination of the courses offered at Artisan and Craft levels reveals a deliberate provision of a progression
route for Artisan graduates into Craft level courses. Thus, it is expected that primary school graduates who later on enroll for Craft level courses should have successfully completed the respective Artisan courses. This therefore ensures that the trainees acquire competency in the specific skills or trades that would enhance their productivity in either self employment or other employment. Moreover, in order to ensure quality education and training, the training is guided by the same curriculum that is developed by KIE and examined by KNEC (Farstad, 2002; Kerre, 1998).

1.2 Statement of the Problem

Kenya has placed a great emphasis on TVET as one of the vehicles for socio-economic and technological transformation especially in the realization of her Vision 2030 (Kerre, 2011; Republic of Kenya, 2007). Yet the Report on Rapid Appraisal on the Status of TVET in Kenya (Republic of Kenya, 2003) showed that job prospects of TVET graduates were hampered to a large extent by the inadequate and lack of relevant essential skills for job performance in the industry. Moreover, the TVET curriculum has been criticized as deficient in addressing the needs of the modern global economy (Mureithi, 2008). This demands TVET providers such as community colleges to provide relevant skills to the youth for self-employment, job creation and supply of skilled labor for industrialization. These expectations can be achieved if the curriculum is effectively implemented in various TVET institutions.

However, community colleges, like other TVET institutions, are currently faced with a myriad of challenges in their endeavour to train high quality graduates (Kenya Cross Sectoral Youth Assessment Revised Report, 2009). Indeed, the low levels of students’ participation in Artisan and Craft courses that is marked by low enrolment, low transition rates and inadequacy of technical and vocational skills among graduates has remained a great concern to educational institutions and industries over the years (MOEST, 2004; MOYA, 2006; Mwinzi & Kelemba, 2009; Ngumbi, 2004; Nyerere, 2009; Olomi, 2007; Republic of Kenya, 2007).
The reviewed studies do not explicitly interrogate the determinants of effective implementation of the Artisan and Craft courses and the challenges impinging the implementation process. For instance, Farstad (2002), Fietz, et al. (2007), Indoshi, et al. (2010), Sharma (2008) and UNESCO (2010) interrogated a single aspect of teacher development (in-service training) thereby making unknown the influence of pre-service teacher qualifications. Moreover, Desimone, et al. (2004) and Olatoye, et al. (2011) did not uncover who collaborated with TVET institutions nor did they identify the areas of collaboration in implementation of Artisan and Craft curriculum. In the same vein, evidence of superficial interrogation of some of the determinants cut across several studies. For instance, lack of specificity on which facilities and resources were adequate (Ayuba & Gatabazi, 2010; Farstad, 2002; Hooker, et al., 2011; Mupinga, et. al., 2006; UNESCO, 2010) and failure to investigate students’ and teachers attitudes on Artisan and Craft curriculum implementation (Aryeetey, et al., 2011; Mureithi, 2008).

An analysis of some of the related studies reveals that the studies focused more on issues of management of and investment in TVET (Ngware, Onsomu & Manda, 2005; Simiyu, 2009). Moreover, previous studies did not explore the synergistic strengths inherent in methodological triangulation in examining curriculum implementation. Indeed, the studies were either purely qualitative (Daudau, 2010; Kelemba, 2010; Simiyu, 2009) or purely quantitative (Bandele & Faremi, 2012; Damani, 2011; Hooker, et al., 2011; Mupinga, et al., 2006; Ofoha, 2011). None of the studies employed mixed methods research thereby paving way for the current study to adopt the mixed methods research design in ameliorating the weaknesses underlying the aforesaid approach. Furthermore, little empirical evidence exists on Artisan and Craft curriculum implementation in community colleges thereby creating a dearth of literature on the implementation of Artisan and Craft courses. This study therefore examined the determinants of effective implementation of Artisan and Craft courses in Catholic sponsored community colleges in Nairobi region.
1.3 Research Questions

The study was guided by the following research questions:

i. What are the professional qualifications of Artisan and Craft teachers in Catholic sponsored community colleges in Nairobi region?

ii. What are the teaching experiences of Artisan and Craft teachers in Catholic sponsored community colleges in Nairobi region?

iii. What teaching strategies are effective in enhancing the implementation of Artisan and Craft curriculum in Catholic sponsored community colleges in Nairobi region?

iv. How effective are the teaching and learning strategies in promoting the implementation of Artisan and Craft curriculum in Catholic sponsored community colleges in Nairobi region?

v. How do the existing physical facilities enhance effective implementation of Artisan and Craft curriculum in Catholic sponsored community colleges in Nairobi region?

vi. How do the existing teaching and learning resources enhance effective implementation of Artisan and Craft curriculum in Catholic sponsored community colleges in Nairobi region?

vii. How do college-community collaborations enhance effective implementation of Artisan and Craft curriculum in Catholic sponsored community colleges in Nairobi region?

viii. What are the challenges facing effective implementation of Artisan and Craft curriculum in Catholic sponsored community colleges in Nairobi region?

ix. In what ways can the challenges facing the implementation of Artisan and Craft curriculum in Catholic sponsored community colleges in Nairobi region be overcome?

1.4 Scope and Delimitations of the Study

The study was conducted in Catholic sponsored community colleges in Nairobi region that comprises Kajiado, Machakos and Nairobi Counties. Nairobi region was chosen because majority of all YPs, VTCs and Technical colleges that were later co-opted into Catholic sponsored community colleges in 2006 were located in the region. The counties had a total of
four community colleges namely Marengoni Community College in Kajiado County, Apostles of Jesus Youth Technical Training and St. Theresa Community College in Nairobi County and Catholic Technical Training Institute in Machakos County. Given that previous studies focused on management aspect of YPs and Technical colleges, this study confined itself to the curriculum implementation as an area that was under-researched. In addition, the study restricted itself to the implementation of Artisan and Craft courses since these were the only courses offered in the community colleges.

1.5 Significance of the Study

The benefits accruing from the findings of the study are varied. To begin with, MOEST and in particular the Directorate of Technical Education (DTE) may use the findings to develop policies that will ensure effective training of personnel in community colleges as a strategy to fast track the economic and technological development agenda as envisaged in Government’s development blueprints. Moreover, the DTE may use the findings to enact policies that enhance quality and relevant education and training in community colleges.

Besides, by shedding light on the factors responsible for the implementation of Artisan and Craft curriculum in community colleges, the sponsors of community colleges will be able to adapt strategies that would enhance effective implementation of Artisan and Craft courses in the community colleges. In addition, the findings will assist community colleges to put in place deliberate measures that will guarantee effective implementation of Artisan and Craft curriculum so as to produce relevant and well equipped graduates who will be productive to the society. This will thus help to avoid the effects of mismatch between curriculum and market needs of the society.

The community college teachers, who are the prime implementers of the Artisan and Craft curriculum, will find indispensable the results of the study. By bringing to the fore the challenges that impede the implementation of Artisan and Craft, the teachers will not only be
aware of the impending challenges but will adopt strategies of overcoming the said challenges in order to effectively implement the curriculum. In addition, the teachers will put into practice the suggestions on how to enhance the implementation of Artisan and Craft curriculum in community colleges that will be generated by this study.

Furthermore, it is envisaged that the findings of the study will invoke further research in the area of private provision of TVET education which is critical especially in addressing the increased need for quality post-secondary education and training. As earlier noted, this area is under-researched. Finally, given the paucity of literature on education provision in community colleges in Kenya, it is hoped that the findings will provide literature for use by scholars and practitioners in the field of Artisan and Craft education.

1.6 Theoretical Framework for the Study

The study was underpinned in a nexus of two theoretical orientations that uphold the relationship of several conditions for effective curriculum implementation namely; the capital theory of school effectiveness and improvement (Hargreaves, 2001) and theory of change (Fullan, 2001). This is illustrated in Figure 1.

Figure 1. Theoretical Approach to Implementation of Artisan and Craft Curriculum.
Adapted from Hargreaves (2001) and Fullan (2001).
1.6.1 Capital Theory of School Effectiveness and Improvement

1.6.1.1 Underpinnings of Capital Theory of School Effectiveness and Improvement

The capital theory of school effectiveness and improvement, postulated by Hargreaves (2001), is built around four key concepts: outcomes, leverage, intellectual capital (human capital) and social capital, which in effect determines the quality of education offered in learning institutions. Hargreaves defines outcomes as the extent to which a school’s goals are achieved and any unintended consequences of the processes involved. These outcomes, he contends, can be cognitive (intellectual) and moral.

The cognitive outcomes (intellectual excellences) include science, art and practical wisdom while the moral outcomes (moral excellences) include courage, justice and self-control. The modern day excellences may vary to include forms of knowledge, skills and understanding (intellectual excellences) and several aspects of social and emotional life (moral excellences). Hargreaves maintains that the education should initiate youth into intellectual and moral excellences in order for them to make sound intellectual and moral judgments and choices. Thus, in the theory, the principal outcomes of schooling, both intended and unintended, are assumed to refer to the quality of the intellectual and moral life of students.

Leverage, which is manifested through evidence-based practice and innovation, refers to the quality and quantity of effected change on students’ intellectual and moral state as a function of the level of teachers’ invested energy. This yields four possible relationships: (i) Teachers often put considerable effort into making changes with relatively little impact on students, so teachers become frustrated and exhausted; (ii) A high teacher input produces a high level of positive change, but the improvement lasts a short while since the teacher’s high input cannot be sustained for long; (iii) A low teacher input yielding a low output may be a rational response of teachers to mandated change of which teachers disapprove; and (iv) High leverage, the desirable relation between input and output, leads to a large impact on effectiveness or improvement from
relatively low levels of teacher effort. He further posits that teachers in effective schools share and regularly apply combinations of high leverage strategies and avoid low leverage strategies by working smarter, not harder (Hargreaves, 2001).

In the theory, intellectual capital is viewed as the sum of the knowledge and experience of the school’s stakeholders that they could deploy to achieve the school’s goals. The theory asserts that intellectual capital grows by two important processes: the creation of new knowledge and the capacity to transfer knowledge between situations and people. Thus, intellectual capital embodies knowledge creation and knowledge transfer. Finally, the theory conceptualizes social capital in terms of its cultural and structural components. Cultural dimension of social capital implies the level of trust between people and the generation of norms of reciprocity and collaboration whereas structural dimension entails the networks or linkages in which people are embedded by strong ties. Accordingly, a school rich in social capital will exhibit strong networks and collaborative relations among its members and stakeholders and a strengthened intellectual capital. Thus, social capital is dichotomized into trust and networks (Hargreaves, 2001).

The theory posits that an effective school (college) mobilizes its intellectual capital and social capital to achieve the desired educational outcomes of intellectual and moral excellences, through the successful use of high leverage strategies that are grounded in evidence-informed and innovative professional practice. It is also theorized that an improving school (college) increases its intellectual capital and social capital in order to achieve the educational outcomes of intellectual and moral excellences, by learning successfully to use higher leverage strategies based on evidence of what works and innovative professional practice. In either case, intellectual capital is construed to be the capacity to create and transfer knowledge whereas social capital is the capacity to generate trust and sustain networks. Consequently, the theory argues that the leader of an effective or improving school or college: (i) is committed to
achieving high levels of intellectual and moral excellences in students as main institutional outcomes; (ii) is able to achieve commitment to such outcomes in the school community; and (iii) knows how to mobilize the community’s intellectual and social capital and apply the principle of high leverage to those ends (Hargreaves, 2001).

The theory further mentions the existence of a direct relationship between social capital and human capital components such that low social capital inhibits the mobilization of the intellectual capital. The theorist contends that high social capital calls for high levels of trust among the stakeholders, that is, between head teacher and staff, among the teachers, between teachers and students, between teachers and parents, and among the students. Therefore, strong networks with norms of reciprocity and mutuality become necessary. In these circumstances, people readily share their knowledge, both intellectual and moral. For instance, teachers share their knowledge of what works professionally in classrooms and students collaborate on schoolwork. Hargreaves (2001) emphasizes that the moral domain should be cultivated to provide the conditions of successful knowledge transfer needed to sustain the optimum mobilization of intellectual capital. Thus, social capital becomes imperative to ensuring that teachers share and create professional knowledge with the learners. Again, emphasis is laid on networking among teachers through sharing pedagogic knowledge and skills gained through research or personal experience. Thus, investing in social capital of teachers is considered a critical element in enhancing student achievement.

The four concepts of social capital, intellectual capital, leverage and outcomes are linked to four educational concepts: (i) student achievement and employability are linked to outcomes; (ii) learning to intellectual capital; (iii) teaching to leverage; and (iv) social capital to the school as a community. In this case, the formal curriculum provides the intellectual excellences while the informal (hidden) curriculum provides the moral excellences. In the same vein, both teaching and learning are categorized as formal and informal. Formal teaching entails the
explicit and verbal interactions between teacher and student directed to student learning of the intended curriculum whereas modeling (imitation of the teacher) forms the core of informal teaching. Likewise, formal learning is what is intended to take place in classrooms and other settings while informal learning is generally acquired through the hidden curriculum. Thus the school (college) as a community is viewed as an academic community (promoting intellectual excellences) and a moral community (promoting moral excellences).

Another key emphasis of the theory is teacher effectiveness. Hargreaves maintains that high leverage can be achieved only by developing strong combinations of teachers’ classroom practices and enhancing the participation of teachers in school-based professional development groups. School-based professional development, he contends, necessitates the mentoring of teachers and provides them an opportunity to develop and test new teaching strategies. Thus high social capital is realized if mentoring becomes part of teachers’ social learning and collaboration is adopted in resolving professional problems that may arise. He advances the view that teacher effectiveness results in knowledge transfer, knowledge creation and innovation all of which contribute to high leverage strategies of teaching thereby ensuring high cognitive outcomes.

1.6.1.2 Strengths of Capital Theory of School Effectiveness and Improvement

The theory helps educators to realize how to improve school functioning through getting more resources through social relations and social networks (Tsang, 2009). Indeed, building strong relationships between students and teachers results in a wide range of cognitive and academic achievement to students such as higher expectations, considerations, attachments and social support from teachers. The benefits of social capital, that is embedded in strong teacher-teacher networks and teacher-student networks, on school effectiveness cannot be gainsaid. Studies have shown that social capital impacts the teaching effectiveness, teacher professionalism, continuous professional development of teachers, and students’ performance
Furthermore, the theory empowers teachers to actively and routinely collaborate collectively to innovate and share knowledge that in turn pays considerable educational dividends (Halpern, 2005). This is echoed by Hopkins (2001) who maintains that social capital of an organization is enhanced by providing opportunities for staff to work together collaboratively while they are engaged in enquiry and problem solving. Thus innovation, collaboration and research are identified as vital components of enhancing school effectiveness and improvement.

1.6.1.3 Weaknesses of Capital Theory of School Effectiveness and Improvement

However, the capital theory of school effectiveness and improvement is deficient in several ways. Firstly, the theory tends to focus on the relationship between student performance and school-based determinants only thereby ignoring the effect of other determinants of effective implementation and contexts. However, as a matter of fact, causes of school failure are often multifaceted spanning over socio-economic and socio-political factors that transcend the regulatory capacity the individual school. Indeed, Adler and Kwon (2002) agree that it is difficult to identify the cause and effect of social capital. Thus, it would be futile for schools to assume that they can enhance their effectiveness and improvement by acting singly and in isolation from the wider society.

Secondly, although building trust among the actors in a learning institution is emphasized by Hargreaves, the theory fails to explain how to generate and sustain the trust which teachers would enjoy from their students. Thirdly, the exclusion of students’ attitude to the learning institution leaves out a rather significant determinant of effective implementation of the curriculum. In fact, the theory hardly discusses the role of students in enhancing school effectiveness and improvement (Flecknoe, 2002). Instead, it assumes that the teachers alone will
leverage the human and social capital of an institution to attain the desired institutional outcomes.

Thirdly, the theory seldom discusses how schools can develop and sustain trust which is considered vital in sustaining relationships between teachers and learners for effective teaching and learning. Moreover, in discussing leverage, Hargreaves ignores that effective learning is realized not just because learners regard themselves as citizens rather than tourists, but when barriers to education are removed (Flecknoe, 2002).

1.6.1.4 Application of Capital Theory of School Effectiveness and Improvement to the Study

In relation to the study, the independent variables (determinants of effective curriculum implementation) constituted a combination of the leverage, intellectual capital and social capital concepts. For instance, inadequate teacher motivation and negative teacher attitudes towards Artisan and Craft connote the leverage concepts of a frustrated teaching force, non-sustained improvement and teacher disapproval of the implementation process. In the same vein, teacher qualifications, teaching experiences, teaching and learning strategies are aspects of the intellectual capital of an institution dealing with knowledge creation and knowledge transfer. It is important to note that alongside the teaching strategies are aspects of collaborative teaching and learning, interpersonal relationships and participation of school community all which constitute the social capital. Finally, effective implementation of Artisan and Craft curriculum, the dependent variable, is measured by the outcomes concept which is limited to aspects of student enrolment, completion and achievement in examinations.

It thus follows that the four theoretical concepts articulated by the theory impinge the quality of education provided in learning institutions. Therefore, the pursuit of effectiveness in implementation of the Artisan and Craft curriculum with the goal of enhancing quality TVET validates the adoption of the theory in the study. Contextually, quality in Artisan and Craft
courses refers to relevance of the education and training received by students to the needs of industry and self-employment needs, resulting in graduates who are ready for employment. Hence, the effectiveness of the Artisan and Craft curriculum can be said to be a measure of the quality of the teaching, usually measured by students’ achievement (academic performance). Thus, the theory was used to analyze the determinants of effective implementation of Artisan and Craft curriculum in community colleges in Nairobi region.

1.6.2 Theory of Change

1.6.2.1 Theory of Change Underpinnings

Fullan (2001) identifies five components of leadership namely: moral purpose, understanding change, relationship building, knowledge creation and sharing, and coherence making. Fullan conceptualizes moral purpose as the intentional efforts directed towards making a positive difference in the lives of employees, customers and the wider society. He contends that diversity of opinion in so far as change is concerned is inevitable hence the diversity should be embraced in fostering relationship building and enhancing of the moral purpose. Fullan argues that opportunities for effective knowledge creation and sharing within organizations are realized in situations where leaders pay attention to people and relationships. He underscores the value of such knowledge building and sharing activities as peer assistance programs, post-project meetings, visits and consultations, and learning fairs. Coherence making thus becomes the core role of the leader of the organization who should ensure that teachers are linked with the reform, the school and the community in order to boost their capacity to work as proactive agents of change (Fullan, 2001).

Three main phases of change namely initiation, implementation, and institutionalization are accentuated by the theory (Fullan, 2001; Fullan & Steigelbauer, 1991). The implementation phase of the theory entails three levels of the major determinants of curriculum implementation: (i) characteristics of the innovation or change project, (ii) local characteristics and (iii) external
characteristics. Fullan describes the characteristics of change to include the need of change, clarity about goals and needs, complexity (the extent of change required to those responsible for implementation) and the quality and practicality of the program. The local characteristics include the school district (region), board of community (management), principal (directors) and the teachers. Finally the external characteristics comprise the government and other actors in education.

Fullan (2001) argues that in each of these levels exists a constellation of stakeholders that influence the implementation process. For instance, stakeholders at the local level include the community, principals and teachers while the external level is made of the government and other agencies. Four characteristics of change that would influence each of the stakeholders are further identified as: the need for change, clarity about goals and needs, complexity, and the quality and practicality of the program. In this sense, complexity refers the extent of change required to those responsible for implementation which may include skills required, alterations in beliefs, teaching strategies and use of materials.

Fullan (2001) underscores the contribution of the identified stakeholders to curriculum implementation. He argues that the teachers’ past negative experiences about the school district (in this case the administrative region wherein the college operates) may elicit cynicism and apathy towards a new idea or program. The school boards are charged with the hiring and firing task which may indirectly affect implementation. In addition, the role of communities and in particular parent-school relationships is critical to the successful curriculum implementation. The theory further holds that the school principal shapes the organizational conditions necessary for successful curriculum implementation by undertaking such activities as the development of shared goals, collaborative work structures and climates, and procedures for monitoring results. Likewise, the teacher, either singly or collectively impinges curriculum implementation in a number of ways. Individually, the psychological state of the teacher, previous experiences,
teacher’s stage in career will all influence curriculum implementation. Collectively, the issues of collegiality, open communication, trust, support and help, learning on the job, getting results and job satisfaction will shape the process of curriculum implementation.

1.6.2.2 Strengths of Theory of Change

The theory of change is significant in a number of ways. First and foremost, the acknowledgement of the complexity of organizations and the change process places upon organizations the duty to embrace strategies that would ensure the attainment of the organizational goals in spite of the complexities. The theory can be used to create action plans to stimulate appropriate and effective organizational change. The theory of change underscores the importance of relationship-building in reinforcing change and reform in learning institutions. The theory argues that meaning-making learning to occur, the relationships within learning institutions must be improved to facilitate change (Couros, 2003). Thus, learning institutions are called upon to focus on relationships and values in schools and in classrooms in order to achieve reforms/change.

The theory has further informed learning institutions on the critical role played by individual teachers as proactive agents of change in a learning institution. Of importance is the emphasis of the theory on the moral component. The theory underscores the benefits of schools should not only accrue to the students and schools but should also trickle into the larger communities in which the schools reside. Theory of change offers valuable insight for identifying various stakeholders that might take the role of change agent in the change process. Indeed, Fullan (2001) suggests that stakeholders, working together across roles and acting as agents of change, will effect more productive change in organizations. Thus the theory underpins the role of stakeholders enhancing the success of reforms in learning institutions.
1.6.2.3 Weaknesses of Theory of Change

Fullan’s theory of educational change focused on only one facilitating factor for change namely the human resource that takes part in the change process (Ellsworth, 2001). Thus, singly the theory cannot holistically explain the implementation of a curriculum since curriculum implementation is a multifaceted concept with several implementation factors at play. Moreover, the theory views every stakeholder in education as an agent of change whereas some stakeholders are quasi to the activities taking place in learning institutions. It is therefore only those active stakeholders that will effectively contribute to the planned change through their active involvement in the curriculum implementation activities in the institutions.

Another limitation lies in the fact that Fullan’s theory barely considered the inherent organizational challenges that may impinge implementation of change. For instance, while emphasizing the component of relationship building, Fullan remains silent on the existing relationship between unions and management in organizations, including learning institutions. In an organization, incidences of employee resistance to change are bound to be exacerbated when bonds between employee unions and management are sour rather than strong. This would ultimately decelerate or halt implementation of projects in organizations. Besides, the interests of employee unions are not always aligned to those of the management in most organizations.

1.6.2.4 Application of Theory of Change to the Study

Despite the aforesaid limitations, the variables and concepts underpinning Fullan’s theory of change are related in a number of ways to the variables in the study. For instance, the theory of change emphasizes issues of school-community collaboration, interpersonal relationships, teacher’s experience and job satisfaction (motivation) as factors that would influence implementation of school curriculum. These were precisely some of the independent variables in the study hence the adoption of the theory of change.
1.7 Conceptual Framework for the Study

Figure 2 presents the conceptual framework for the study. The framework is built around the curriculum implementation determinants identified in Hargreaves (2001) and Fullan (2001) theoretical orientations to curriculum implementation. The framework identifies a number of determinants that are likely to promote or hinder Artisan and Craft curriculum implementation in community colleges.

**Independent Variables**

- Determinants of Effective Artisan and Craft Curriculum Implementation
  - Teacher qualifications
  - Teaching experience
  - Teacher motivation
  - Teaching strategies
  - Adequacy of physical facilities
  - Adequacy of teaching & learning resources
  - Attitudes
  - College-community collaborations
  - Participation in co-curricular activities

**Dependent Variables**

- Capital Theory of School Effectiveness and Improvement and Theory of Change
- Curriculum Implementation Process
  - Content
  - Teaching and learning
  - Support services
  - Monitoring and feedback
- Educational Output
  - Improved course completion
  - Improved student achievement
  - Improved student enrolment in courses
- Educational Outcomes
  - Cognitive excellences
  - Moral excellences

*Figure 2: Determinants of Artisan and Craft Curriculum Implementation*

The four components of Hargreaves theory are articulated in the framework. That is, the school improvement outcomes are linked to intellectual capital and social capital via teacher leverage. The intellectual capital determinants include the teacher qualifications and teaching experience while the social capital determinants comprise the teacher-student relationships and the existing collaborations between community colleges and stakeholders. Leverage component is defined by the teacher inputs and educational outputs (achieving more with less effort). The
teacher inputs includes teacher motivation, teaching strategies used, attitudes towards Artisan and Craft courses, and the existing facilities and resources while the educational outputs included improved student enrolment, course completion and achievement. This ultimately leads to the attainment of the intended educational outcomes which are dichotomized into cognitive excellences and moral excellences.

Likewise, Fullan’s conceptualization of the determinants into local and external are also illustrated in the framework. Thus, teacher qualifications and teaching experience are viewed as both intellectual capital and local determinants of effective Artisan and Craft curriculum implementation. Likewise, teacher motivation, teaching and learning strategies, adequacy of physical facilities, adequacy of teaching and learning resources are viewed as leverage determinants existing in both the local and external context of community colleges. Finally, collaborations with the community, government and other stakeholders are construed to be external determinants of curriculum implementation in community colleges.

Moreover, Figure 2 shows that the determinants interact with the content, teaching and learning process, assessment and support services during the implementation of the Artisan and Craft curriculum in order to yield the intended educational outcomes. The intended educational outcomes depict both cognitive excellences and moral excellences. The educational outputs include improved enrolment in Artisan and Craft courses, improved student completion rates (reduced dropout rates) and improved student achievement measured by their pass rates in terminal examinations.

The conceptual framework views Artisan and Craft curriculum implementation as a continuous interactive process with regular monitoring and review. In the framework, the determinants of Artisan and Craft curriculum implementation as identified in the two theoretical orientations interact at the curriculum implementation process stage. This stage comprises an interrelated set of activities in regard to the content, the teaching and learning process, support
services and monitoring and feedback in order to yield educational outputs. The educational outputs arising from the curriculum implementation process include the proportion of students completing the Artisan and Craft course, proportion of students who pass Artisan and Craft examinations and proportion of students enrolling in Artisan and Craft courses. Ultimately, these educational outputs translate into educational outcomes that are dichotomized into cognitive excellences and moral excellences. Whether cognitive or moral, these outcomes feed back into the determinants of the curriculum where appropriate modifications are undertaken on the determinants in order to enhance the effective implementation of Artisan and Craft curriculum.

1.8 Definition of Key Terms

**Catholic Sponsored Community Colleges** - refers to Vocational Training Centers and Technical Colleges that are sponsored by the Catholic Church and partially funded by Porticus Foundation and offer Artisan and Craft curriculum.

**Curriculum Implementation** - refers to all processes and activities undertaken in teaching and learning, monitoring, assessment and support provision for the Artisan and Craft curriculum.

**TVET** - Technical and Vocational Education and Training, refers to the study of technologies and related sciences, and the acquisition of practical skills, attitudes, values and knowledge relating to occupations in various sectors of economic and social life. This type of education is usually offered in formal post-secondary community and/or technical colleges for middle-level occupations.

**TIVET** - Technical, Industrial, Vocational Education and Training, is the officially used terminology in Kenya which encompasses courses offered in Technical Training Institutions, Institutes of Technology, Medium and Small Enterprises (MSE) Training
and Demonstration Centres, Youth Polytechnics, National Industrial Vocational Training
Centres and National Polytechnics and Universities.

**Technical Education** - refers to theoretical vocational preparation of students for jobs involving
applied science and modern technology to prepare students for occupations that are
classified above the skilled crafts but below the science and engineering occupations.

**Vocational Education** - refers to education offered to students to equip them for jobs in
designated (manual or practical) trades or occupations.
CHAPTER TWO

REVIEW OF RELATED LITERATURE

2.1 Introduction

This section presents the reviewed literature on Artisan and Craft curriculum implementation in TVET institutions. The section begins with a review of studies conducted within and outside Kenya on the determinants of Artisan and Craft curriculum implementation. Finally, a summary of reviewed literature and analysis of knowledge gap is presented.

2.2 Empirical Studies on Artisan and Craft Curriculum Implementation

Owing to the relative newness of the community colleges phenomenon in Kenya, a dearth of literature exists on curriculum implementation in community colleges. Moreover, there is a dearth of literature on Artisan and Craft curriculum implementation in Kenya. Consequently, most of the studies conducted on implementation of other courses offered in TVET institutions will be analyzed to shed light on Artisan and Craft curriculum implementation in community colleges in Kenya.

To begin with, the implementation of Artisan and Craft curriculum in Kenya has faced a plethora of challenges ranging from an inflexible and antiquated curriculum, a mismatch between skills taught and those demanded by the industries and low participation of the private sector in bridging the school-work gap (Republic of Kenya, 2003). Moreover, the setting of unrealistic purposes for TVET, failure to remedy unsystematic implementation and allowing TVET policies and reforms to be driven by economic rationale have been identified to be perennial problems in TVET curriculum implementation (Lauglo & Maclean, 2005). Other challenges include lack of policy framework for governance and management, poor infrastructure, inadequate and obsolete tools and equipment, negative perceptions towards Artisan and Craft courses, and, gender stereotyping in courses such as hairdressing (Kelemba, 2009; Gewer, 2009; African Union, 2007; Aina, 1999). The subsequent discussion delves into
the determinants of effective implementation of Artisan and Craft curriculum. The determinants reviewed were; teacher qualifications, teaching experience, teaching and learning strategies, adequacy of physical facilities, adequacy of teaching and learning resources, attitudes toward Artisan and Craft courses and students’ enrolment in Artisan and Craft courses.

2.2.1 Teaching and Learning Strategies

Studies on teaching and learning strategies have shown high teacher preference to teaching theoretical over practical aspects of the TVET subjects. An example is the study by Ferej, Kitainge and Ooko (2012) that established that majority of teachers had inadequate work experience. Out of the TVET teachers interviewed, 38% had acquired industrial work experience of only six months or less, 26% had work experience of between 12 - 36 months and 16 % had work experience of over 36 months. The importance of industrial experience for Artisan and Craft teachers cannot be gainsaid. Adequate initial work experience and regular updating enables the teacher reflect on and demonstrate the appropriate work context to his or her students. Moreover, Simiyu (2009) argued that teaching experience enables trainees to gain hands-on experience. The findings of the study showed that two thirds (67%) of the TVET teachers were more comfortable teaching theory than practical. Undoubtedly, the preference to teaching theoretical content to practical aspects of the curriculum will affect the effective implementation of curriculum. The cited study did not however investigate the teaching of Artisan and Craft courses hence the need to examine if similar findings would hold for Artisan and Craft curriculum implementation.

2.2.2 Adequacy of Physical Facilities

Few studies have examined the availability and adequacy of facilities needed for effective implementation of the curriculum in TVET institutions in Kenya. One of such studies was conducted by Simiyu (2009). The study revealed that there was ample workshop and laboratory space and machines were adequate for the number of students in the institution. Other
studies have shown that inadequacy of infrastructure and equipment affects curriculum implementation in TVET institutions (Hooker et. al; 2011, Indoshi, Wagah & Agak, 2010; Mupinga, Busby & Ngatiah, 2006).

Thus, these studies seem to suggest that the challenge of facilities cannot be divorced from the inadequacy of finances in the affected institutions. For instance, in their study on the role of technical and vocational education and training in human resource development in Rwanda, Ayuba and Gatabazi (2010) established that high cost of construction of facilities, equipment, maintenance and the provision of consumable training materials did hinder implementation of TVET in Rwanda. Given this mixed implications of adequacy of facilities on curriculum implementation, it became necessary in the current study to investigate the issue in order to establish the nature of the influence the adequacy of facilities had on curriculum implementation in community colleges.

The same challenge of facilities is echoed in other studies that show that limited school budgets for up-to-date tools and equipment, infrequent repair of old equipment; high costs of practical training materials and equipment constrained the curriculum implementation efforts in TVET institutions (Farstad, 2002; Koech, 1999; Sharma, 2008). Moreover, anecdotal evidence suggests that obsolete equipment existing in technical colleges in Kenya compromises effective training of youth for a modern economy (UNESCO, 2010). In Zambia, UNESCO (2003) established that physical facilities like classrooms, workshops, libraries, furniture and textbooks were inadequate in all institutions studied. However, to overcome the inadequacy, some institutions had signed agreements with some workshops and public institutions where they took their students for practical lessons. Thus, part of the motivation for the current study was not only to establish the adequacy of physical facilities in community colleges but also to determine if and how the community colleges addressed the inadequacies.
The facility-finance debate continues to emerge in several other studies such as Gichira (2002) and Messah and Mucai (2011). The foregoing literature seems to allude to the notion of existence of a relationship between adequacy of finances and provision of physical facilities in learning institutions. Indeed, evidence shows that inadequate investment in instructional equipment could hinder learning outcomes among students as they would have fewer opportunities to practice with these tools and machines (Hicks, Kremer, Mbiti & Miguel, 2011). However, given that these conclusions were derived on data derived from public institutions, it became necessary to examine the validity of the same in the case of the Catholic Church sponsored community colleges.

2.2.3 Adequacy of Teaching and Learning Resources

International discourses have cited teaching and learning resource inadequacy as an impediment to curriculum implementation. For instance, Daudau’s (2010) case study on teachers’ perceptions of outcomes-based Science curriculum (OBSC) in Solomon Islands showed that lack of teaching and learning resources hindered effective implementation of OBSC. In a related study, Bandele and Faremi (2012) established that lack of standard workshops for practical work and lack of related modern instructional materials were among the major challenges facing the teaching of technical and vocational education in Technical Colleges in Nigeria. The cited study also showed that there was no significant difference between the view of the instructors and teachers on the challenges facing the implementation of the curriculum. Thus, the current study examined the currency of facilities existing in community colleges in Kenya and the effect they had on effective Artisan and Craft curriculum implementation. In addition, the study tested whether respondents held convergent views on the factors they believed affect Artisan and Craft curriculum implementation.

Hailu (2011) investigated the factors that affect the implementation of TVET in selected public institutions of Southern Zone of Tigray. The sample size consisted of 37 trainers, 162
trainees, and 12 TVET officials, TVET institute coordinators, and core process owners within the TVET institutes. Stratified random sampling, simple random sampling and purposive sampling techniques were employed in selecting the respondents. Statistical methods used in analyzing data were the frequency count, %ages, and the mean score. The study identified inadequacy of training facilities and materials as some of the constraints to the implementation of TVET in selected public institutions. The aforementioned study having been conducted in public TVET institutions outside Kenya prompted the researcher to investigate whether adequacy of teaching and learning resources the affected Artisan and Craft curriculum implementation in community colleges in Kenya.

In Ghana, Damani (2011) investigated the challenges facing technical institute graduates in practical skills acquisition in the Upper East Region of Ghana. Adopting a descriptive survey, simple random and purposive sampling techniques were used to draw a sample of 434 teachers, students and technical institute graduates drawn from the two municipalities where the technical institutes were located. Data were collected through questionnaires that had an internal consistency reliability coefficient of 0.7018. The study revealed that inadequate supply of instructional materials, large class sizes and inadequate training facilities led to ineffective training of students. This study however focused on practical skills acquisition by graduates of technical institutes. In contrast, the current study sought to provide a holistic understanding of the challenges facing impinging Artisan and Craft curriculum implementation in totality as opposed to examining a single aspect of the curriculum.

Similarly, studies conducted in Kenya have reported inadequacy of teaching and learning resources as a hindrance to TVET implementation, though under different but conceptually same terms. For instance, terms such as obsolescence of equipment (Hooker et. al, 2011), shortage of material resources (Indoshi, Wagah & Agak, 2010; Mupinga, Busby & Ngatiah, 2006), less time allocation (Indoshi, Wagah & Agak (2010) have been used to refer to
inadequacy of teaching and learning resources. Tellingly, teaching and learning resource inadequacies have been found to be a major impediment to curriculum implementation in a number of studies conducted in Kenya (Farstad, 2002; Gichira, 2002; Indoshi, Wagah & Agak, 2012; Koech, 1999). Among the resources most cited as inadequate and which are relevant in teaching Artisan and Craft courses include automobile engines, sewing machines, computers, computer software, textbooks, stationery, and internet access (Mupinga, Busby & Ngatiah, 2006). However, the cited studies hardly addressed the implementation of Artisan and Craft curriculum in community colleges nor did they explore how the teaching and learning resources influence curriculum implementation. These inadequacies were therefore investigated in the current study.

2.2.4 College-Community Collaborations

Collaborations between learning institutions and the surrounding community have been shown to improve teacher’s teaching effectiveness and students’ achievement consequently leading to effective curriculum implementation (Desimone, et. al., 2004; Olatoye, Aderogba & Aanu, 2011). Furthermore, studies have shown that industry involvement in technical education exposes the needs of the market more precisely thereby enabling learning institutions to appropriately respond to the changing demand and skill expectations. In addition, studies show that industry involvement keeps down the costs of training (Dyankov, 1996; Gewer, 2009; Werum, 2003; Lauder, 2001).

Findings by Sava (2001) showed that students' educational outcomes were influenced to a great extent by the quality of teacher-student relationships. Although the cited studies suggest that collaborations contribute to effective curriculum implementation, the findings were confined to secondary schools in which the studies were conducted. The current study thus endeavored to confirm whether or not collaborative strategies were employed in teaching and
learning Artisan and Craft curriculum and their effect on the implementation of the aforesaid curriculum.

### 2.2.5 Qualifications of Artisan and Craft Teachers

Bandele and Faremi (2012) investigated the challenges facing the implementation of Technical College curriculum in South West, Nigeria. The study sought to determine whether the teachers and instructors were professionally qualified or not to teach Technical and Vocational Education in Technical Colleges. Adopting survey research design, the study sampled 120 Basic Science Teachers and Technical instructors selected from Technical Colleges in Ondo and Ekiti states using multi-stage sampling technique. Questionnaire with reliability coefficient of 0.72 was administered and data collected analyzed using descriptive and inferential statistics. The study revealed that 65.83% of the teachers and instructors were professionally qualified to teach in Technical Colleges. Despite this finding, the cited study did not examine whether the teachers’ professional qualifications influenced the implementation of Technical and Vocational curriculum in Technical Colleges in Nigeria. Thus the influence of teacher’s professional qualification on the implementation of Artisan and Craft curriculum in community colleges in Nairobi, region was investigated in the current study.

On the contrary, an analysis of the qualifications of the teaching staff in a case study on private TVET in Zambia conducted by UNESCO (2003) found that private TVET institutions faced a shortage of qualified lecturers. The survey showed that out of 159 teaching staff, only 36% had a teaching certificate. This implied that a large proportion of the teachers were not qualified to teach TVET courses thereby posing a major challenge to the effective implementation of the TVET curriculum in the country. In the Kenya context, Ferej, Kitaiinge and Ooko (2012) established that majority of the TVET teachers in Kenya possessed Diploma certificate and degree (37% and 33% respectively), about 20% and 10% held a certificate and a
Masters degree respectively as their highest qualifications. This finding showed that TVET teachers had the requisite minimum qualifications to teach in TVET programs.

However, Farstad (2002) and Koech (1999) also cited lack of qualified instructors as one of the constraints that prohibit the effective implementation of TVET in Kenya. This finding corroborates Sharma’s (2008) and Fietz, Reglin and Mouillour’s (2007) studies that showed that TVET teachers are inadequately prepared to discharge the task of curriculum implementation. Similarly, the UNESCO National Education Sector Support Strategy (UNESS) for the Republic of Kenya 2010-2011 reiterates that the lack of adequately trained tutors to teach at the TVET institutions in Kenya impedes curriculum implementation (UNESCO, 2010). Given that the TVET policy prescribes that for quality education and training, TVET courses should be taught by trained teachers, the current study sought to establish whether the Artisan and Craft teachers in community colleges had the minimum requisite qualifications to teach Artisan and Craft courses.

In a similar study, Mupinga, Busby and Ngatiah (2006) examined the needs and challenges in postsecondary technical and vocational institutions in Kenya. The study specifically sought to describe, inter alia, the challenges faced by TVET institutions and suggest ways to address the challenges. Adopting case study design, two public postsecondary technical and vocational education institutions; Kenya Polytechnic (KP) and Nyeri Technical Training Institute (NTTI) were studied. The study established that majority of the instructors at KP (80 %) held bachelor’s degrees or lower, 19.5 % held masters degrees, and one instructor in Health Science and Biotechnology had PhD qualification. However, these advanced qualifications were not evenly spread in all the academic programs. Despite the low proportion of TVET teachers with advanced degrees, it appears that for public TVET institutions, teacher qualification is not a major concern, more so for Artisan and Craft curriculum that is at the basic level in the ladder of TVET programs. This is because from the foregoing findings, 80 % of the teachers had the
minimum qualifications to teach Artisan and Craft courses. Thus, this study sought to unearth the proportion of qualified Artisan and Craft teachers in community colleges and find out whether this adequacy affected Artisan and Craft curriculum implementation.

In a study on the factors that determine teachers’ and students’ attitudes towards Art and Design curriculum in public secondary schools in Nyanza Province, Indoshi, Wagah and Agak (2010) used simple random sampling technique to select 131 students (who had dropped Art and Design) and 15 Art and Design teachers. The study found that teachers had no in-service training despite the introduction of new topics in the Art and Design syllabus. In-service training being a critical component of teacher qualifications, the findings suggested that teachers of Art and design lacked the skills and knowledge of implementing the Art and Design Curriculum.

Empirical evidence underscores the importance of in-service training for teachers. For instance, a study by Cohen and Hill (2001) found that teachers whose in-service training is focused on the curriculum can teach well when what has been learnt is applied in the classroom. Furthermore, findings of a study by Ahmad, Esa, Saleh, Kadir and Razali (n. d) showed a positive relationship between in-service training attended by the technical and vocational teachers and students’ achievement in all the technical subjects studied. The focus of the cited studies was however on in-service teacher qualifications implying that the influence of pre-service teacher qualifications on curriculum implementation has not been investigated in the area of Artisan and Craft course. Hence the current study delved into the influence of both pre-service and in-service teacher qualifications on effective implementation of Artisan and Craft curriculum and investigated whether similar or dissimilar results would hold for the case of Artisan and Craft curriculum implementation in community colleges.

Similarly, other studies have established the existence of teacher qualification inadequacies in curriculum implementation in TVET institutions. For instance, Hooker, et al. (2011) conducted a baseline survey of the level of awareness and existing practices in the use of
ICTs in TVET institutions in Kenya. The survey adopted face-to-face interviews, questionnaires and focus groups in data collection. Questionnaires were administered to 220 Heads of Department (HoDs) and lecturers. The findings showed that limited ICT skills and literacy among lecturers (mentioned by 24% of HoDs) and insufficient ICT training opportunities (mentioned by 20% of the lecturers) were some of the major challenges in integrating ICTs to TVET course provision. The low proportions of HoDs and lecturers who mentioned the aforesaid challenges indicates that generally high qualifications existed among few of the ICT lectures in TVET institutions in Kenya. Given that the reviewed study did not focus on qualification of Artisan and Craft teachers in community colleges, the current study examined the qualifications of Artisan and Craft teachers in community college in order to ascertain whether or not they are qualified to effectively implement Artisan and Craft curriculum.

Simiyu (2009) investigated the factors influencing the attractiveness of a TVET institution. The study was a case study of Kaiboi Technical Training Institute in Uasin Gishu District. Questionnaires and interview schedules were administered to the principal, the deputy principal, the registrar, the heads of departments and the heads of sections. The study revealed that the institution employed qualified and professional staff to teach the courses which were basically Artisan and Craft. Thus, the current study sought to establish any concurrence or divergence with this finding given the differential features existing between conventional technical institutes and community colleges.

2.2.6 Teaching Experience of Artisan and Craft Teachers

Teaching experience for majority of teachers has remained inadequate in TVET institutions in Kenya. For instance, Ferej, Kitaiinge and Ooko (2012) examined the challenges of quality and relevance in TVET teacher education in Kenya. The study was part of the working document prepared the Association for the Development of Education in Africa (ADEA) triennial meeting held in Ouagadougou, Burkina Faso in 2012. The study had 150 respondents
sampled from TVET institutions in Nairobi, Kisumu, Nakuru, Mombasa, Eldoret and Nyeri towns. The towns were so selected because of their relatively high numbers of TVET institutions. The respondents of the study included, TVET trainers, employers of TVET graduates TVET teacher trainees, TVET administrators and policy makers among others.

The study established that majority of teachers had inadequate work experience. Out of the TVET teachers interviewed, 38% had acquired industrial work experience of only six months or less, 26% had work experience of between 12 - 36 months and 16% had work experience of over 36 months. The importance of industrial experience for Artisan and Craft teachers cannot be gainsaid. Adequate initial work experience and regular updating enables the teacher to reflect on and demonstrate the appropriate work context to his or her students. The cited study was however not specific to community colleges in Nairobi region hence the current study sought to establish any parallelism in the findings of the reviewed study that was more national to the more unique Nairobi region.

2.2.7 Teacher Motivation

In a study on implications of teachers’ self perception as adult learners and professionals to their practices and professional development at Rift Valley University College in Ethiopia, Abebe (2012) found that TVET teachers’ perceptions negatively influenced their motivation to teach and their attitude towards their profession. In addition, the TVET teachers exhibited low motivation and morale for engaging in learning and professional development and cited such extrinsic factors as level of pay and benefits as contributing to their dissatisfaction in the work place. The study concluded that TVET teachers’ low motivation to learn affected negatively their overall performance in the TVET institutions. However, these findings reflect the experiences of TVET teachers in a geographically different setting from community colleges in Nairobi region. Furthermore, the study examined the influence of motivation on overall performance of the teachers without specifically interrogating the teachers’ task of curriculum
implementation. Thus, the current study examined the influence of motivation levels of Artisan and Craft teachers on implementation of Artisan and Craft curriculum in community colleges.

In the Kenyan context, Kelemba (2010), using a case study design, investigated how model youth polytechnics in Kenya were implementing Education for Sustainable Development (ESD). Data was collected from a sample of two out of five model youth polytechnics. The study identified lack of motivation among instructors and low rating of youth polytechnics in the communities as some of barriers to implementation of ESD. However, adoption of the case study design denied the generalization of the findings. In addition, Kelemba’s study focused on implementation of ESD in youth polytechnics. Thus, the current study employed mixed methods research design to investigate whether or not lack of teacher motivation and low rating of community colleges influenced the implementation of Artisan and Craft curriculum in community colleges.

2.2.8 Students’ Participation in Co-curricular Activities

The role of the co-curriculum in augmenting the teaching and learning strategies employed in the core curriculum cannot be gainsaid. Researchers have established positive correlation between student’s participation in co-curricular activities and school outcomes. For instance, Ismat and Saleem (n.d) found that 80% of students having active participation in co-curricular activities have also demonstrated good academic performance in their annual examination. Rose (2000) established that students who become heavily involved in co-curricular activities tend to be model students and seldom get involved in delinquency and crime. Given that the cited studies were conducted in institutions other than community colleges, this gave a basis for investigation of the influence of participation in co-curricular activities on the implementation of Artisan and Craft curriculum in community colleges.

Similarly, a study by Abdul and Sasidhar (2005) concluded that students’ involvement in co-curricular activities enhances their competencies in the four areas tested, which included
communication, cognitive, managing self and academic competency. Further studies have found positive associations between participation in co-curricular activities and academic performance of the students (Guest & Schneider, 2003). However, none of the cited studies examined the influence of co-curricular activities on educational outcomes among students in community colleges hence the current study endeavored to uncover this influence.

2.2.9 Attitudes Towards Artisan and Craft Courses

Gender prejudices have continued to shape attitudes towards Artisan and Craft curriculum in TVET institutions. For instance, the African Union (2007) documented that Artisan and Craft programs such as dressmaking, hairdressing, and cookery are associated with girls and very often girls who are less gifted academically. Furthermore, the belief by most people that TVET is meant for those who have failed to find a place in academic education negatively affects students’ motivation to enroll in Artisan and Craft programs since they are often relegated to a less prestigious strand of education (Oketch, 2009; Hill, 1991). Indeed, Arieetey, et al. (2011) contends that the social stigma associated with students who join TVET has negatively affected enrolment in TVET programs. Similar views were echoed in a study by Mureithi (2008) on the challenges facing youth polytechnics in the Rift Valley province. The study found out that parents believed that only those who fail to make it to the secondary schools should be admitted to the youth polytechnics.

In the same vein, Sharma (2008) reiterates that TVET is largely perceived as a ‘second class’ option and a temporary diversion from the main route to higher education and modern sector employment. The cited studies resonate well with the vocational school fallacy by Foster (1965). In Foster’s fallacy theory, the academically educated are believed to enjoy greater opportunities for employment and enhanced income than the graduates of vocational programs hence the low status accorded to TVET. However, it is unknown whether people do still hold such perceptions on the status of Artisan and Craft curriculum in general and female graduates
of these programs in particular. It was therefore important to determine the influence of students’ and teachers’ attitudes towards Artisan and Craft curriculum in community colleges.

Fietz, Reglin and Mouillour (2007) conducted a study on the implementation and development of a European Commission Vocational Education and Training (ECVET) system for initial vocational education and training. The respondents were drawn from all EU member countries. The methodology adopted entailed a combination of desk research, in-depth interviews, stakeholder analysis and typology building. A large proportion of the respondents had positive attitudes towards (ECVET) with 61% and 33% “strongly” and “somewhat” supporting it respectively. However, the study focused more on the creation of a common credit system for VET for European Commission member states rather than the implementation of vocational education and training, which formed the core matter in the current study. An interesting finding was that lack of trust in certificates from the private sector and lack of transparency at national level were some of the major constraints to implementation of vocational education and training in the EU member countries. It was therefore deemed necessary to investigate whether similar challenges underpin Artisan and craft curriculum implementation community colleges in Kenya.

In a related study, Ofoha (2011) assessed how the implementation of Nigerian secondary school vocational and technical education curriculum contributed to empowerment of students for self-employment. Adopting descriptive survey research design and using stratified random sampling and purposive sampling, the study sampled 380 students and 120 teachers from twelve secondary schools in three states in Nigeria. Questionnaires and observations were used to collect data.

The study established that students’ entrepreneurial capability was low particularly in such vocational areas as painting, typing and shorthand, interior decoration, tie and dye, weaving, sculpture, carving, dress making, electrical work, furniture making, mechanical work,
welding bricklaying, TV and radio work, carpentry and auto mechanic. Apparently these are the various courses offered in Artisan and Craft curriculum. Of particular interest is the finding that students from low class private schools had not learnt sufficient practical (entrepreneurial) skills to allow for self-employment, as opposed to high class private schools. The implication is that TVET was not as effectively implemented in low class private schools as it had been implemented in other school categories. Given that community colleges draw majority of their students from families with low socio-economic status, the current study sought to investigate whether or not students believed they acquired adequate practical skills that would later help them engage in entrepreneurial activities upon graduating from community colleges.

2.3 Student Enrolment in Artisan and Craft Courses

Ngware, Onsomu and Manda (2005) examined the critical, analytical and policy issues facing private investment in tertiary education in Kenya. Primary data was obtained by administering a structured questionnaire to sampled tertiary institutions across the country. The respondents included representatives or owners of various categories of private education institutions, including college principals and representatives of universities. A total of 137 private tertiary institutions were surveyed. The study utilized descriptive method (frequencies, ratios and percentages) in data analysis. Qualitative data was coded and reported in form of broad categories depending on the frequency of responses that were closely related. Data was presented mainly in tabular form, pie charts, bar and line graphs in order to show the prevailing patterns. However, the reliance of the questionnaire as the only data collection instrument in the study limited the validity of the study. Furthermore, by adopting case study design, the findings of the study could not be generalized on the larger population of private technical institutions.

The findings showed that 24.8% of the private institutions fell under the not-for profit TVET institutions that includes the Catholic Church sponsored community colleges. On average, more female students (53.5%) were enrolled in these institutions. A possible
explanation given was that the types of courses offered were more popular with female than male students. Generally, enrolment of both males and females in the sampled institutions grew by 41.2% between 1999 and 2003, which is an indication of an increasing demand for training. Cases of school withdrawal were evident but minimal in commercial colleges. The proportion of dropouts, relative to course enrolment in 2003, was moderate (8.6%).

One of the reasons for student withdrawal from TVET courses (including Artisan and Craft) is the students’ belief that their employability will not be significantly improved in the remainder of the course (Atchoarena & Delluc, 2001; Hill, 1991). Scott, Burns and Cooney (1993, 1996) found that family factors were significant in withdrawal from TVET for mature age female students with children. Similar studies conducted in United Kingdom found that financial considerations tend to more frequently influence the withdrawal of older students, working class students and younger students without parental support (Yorke, 1999; McInnis & James, 1995). Furthermore, World Learning (2002) found that parental involvement in school activities such as closely monitoring their children’s school attendance and behavior, and increased parent-teacher collaboration culminated in greater enrolment of girls in schools. The current study thus sought to establish whether or not the identified factors could account for student enrolment in and withdrawal, if any, from Artisan and Craft curriculum in community colleges.

Other studies conducted outside Kenya have shown that TVET institutions suffer from problems of low student enrolment. For example, Canagarajah, Dar and Raju’s (2002) survey of over 300 public and private TVET institutions in East Asia showed that in both vocational education as well as vocational training, close to half of the student capacity is unutilized. The results of the study showed that retention rates were unstable and job opportunities for VTEC graduates were often limited. It was thus concluded that VTEC programs were effective in getting people to school but ineffective in retaining them or finding them jobs afterward.
However, the cited study did not explore the factors contributing to the low enrolment in TVET, a gap that motivated the current study. In addition, the studies did no account for the reasons why male students enrolled for the traditionally perceived female courses and vice-versa.

An evaluation study conducted by Hicks, Kremer, Mbiti, and Miguel (2011) on the vocational education voucher delivery and labor market returns among Kenyan youth showed that men were more likely to enroll in public institutions, but there was little difference in enrollment in public and private institution among women. The study further identified the most popular courses by enrollment as tailoring (39%), motor vehicle mechanic (20%), hairdressing and beauty (9%), driving (7%) and masonry (7%). The most popular courses for male students were motor vehicle mechanic (40%), driving (17%) and masonry (16%), while the most popular courses for females were tailoring (59%), hairdressing and beauty (14%) and secretarial and computing (5%). In line with these findings, UNESCO National Education Sector Support Strategy (UNESS) for the Republic of Kenya 2010-2011 documents that more females than males are enrolled at youth polytechnics largely because these institutions offer traditional artisan courses that are attractive to females, such as tailoring and dressmaking (UNESCO, 2010). Likewise, findings of a case study on private TVET in Ghana conducted by UNESCO (2003) found that female students constituted about 76% of the total enrolment. Hence, the current study examined whether gender disparities manifested in student enrolment for various Artisan and Craft courses in community colleges and whether these gender disparities affected the implementation of Artisan and Craft curriculum in community colleges.

2.4 Summary of Reviewed Literature and Analysis of Knowledge Gap

Given the dearth of literature on implementation of Artisan and Craft curriculum in community colleges, most of the reviewed studies examined the implementation of Artisan and Craft subjects or related vocational subjects offered in tertiary institutions. Consequently, the reviewed determinants of Artisan and Craft curriculum implementation in community colleges
were limited to teacher qualifications, teaching experience, teacher motivation, adequacy of facilities, adequacy of teaching and learning resources, teaching and learning strategies, college-community collaborations, participation in co-curricular activities and attitudes towards Artisan and Craft curriculum.

Overall, the reviewed studies raised questions with respect to how the Artisan and Craft curriculum is implemented in community colleges, the determinants of effective implementation of the curriculum and the challenges facing the implementation process. The reviewed literature revealed that teachers had inadequate qualifications to effectively implement Artisan and Craft curriculum (Farstad, 2002; Fietz, et al., 2007; Indoshi, et al., 2010; Sharma, 2008; UNESCO, 2010). However, the studies did not interrogate the influence of pre-service teacher qualifications on the implementation of Artisan and Craft curriculum. Furthermore, empirical evidence showed a high teacher preference and less time allocation for teaching theoretical over practical aspects of the Artisan and Craft courses (Simiyu, 2009). In other studies such as Desimone, et al., (2004) and Olatoye, et al., (2011), collaboration strategy was shown to improve teacher’s teaching effectiveness and students’ achievement consequently leading to effective curriculum implementation. However, these studies did not uncover who collaborated with TVET institutions nor did they identify the areas of collaboration between the TVET and collaborating institutions.

Moreover, studies that showed that inadequacy of infrastructure and equipment, teaching and learning resources hindered curriculum implementation in TVET institutions (Ayuba & Gatabazi, 2010; Farstad, 2002; Hooker, et al., 2011; Indoshi, et al., 2010; Mupinga, et. al., 2006; Sharma, 2008; UNESCO, 2010). However, the studies barely interrogated the levels of inadequacy of specific facilities and resources in the institutions. Studies such as Hicks, et al. (2011) and UNESCO (2010) showed that more male students enrolled for motor vehicle mechanic, driving and masonry courses while more female students enrolled for tailoring,
In terms of research designs adopted, few studies were largely qualitative often employing the case study design (Daudau, 2010; Kelemba, 2010; Simiyu, 2009). Majority of the studies utilized quantitative designs, in particular, the survey design (Bandele & Faremi, 2012; Damani, 2011; Hooker, et al., 2011; Mupinga, et al., 2006; Ofoha, 2011). In so far as sampling was concerned, stratified and simple random sampling techniques were employed to select the sample for the studies. Furthermore, most of the reviewed studies combined questionnaires, interview schedules and document analysis guides in data collection. Therefore the current study adopted mixed methods research design in order to overcome the deficiencies of relying solely on either quantitative or qualitative designs. This ensured that the weaknesses of either designs were made up for by the other design.

From the foregoing, it can be deduced that evidence on the determinants of Artisan and Craft curriculum implementation is quite mixed; studies have shown differing influences of the determinants on Artisan and Craft curriculum implementation. As such, it remained uncertain what actually determines the effective implementation of Artisan and Craft courses. Moreover, the reviewed studies focused more on the general management of and investment in TVET. In addition, there was a dearth of information on Artisan and Craft curriculum implementation at post-secondary education in Kenya. Finally, given the relative newness of community colleges concept in the country’s TVET system, none of the reviewed studies had investigated Artisan and Craft curriculum implementation in the said community colleges thereby creating a motivation for the current study.
CHAPTER THREE
RESEARCH DESIGN AND METHODOLOGY

3.1 Introduction

This chapter presents the research design for the study. The target population, sample size and sampling procedures are also presented. A description of data collection instruments namely questionnaires and interview guide is made. The procedures in determining the validity and reliability of the instruments are also discussed. Finally, the data collection procedures, data analysis and ethical considerations underpinning the study are discussed.

3.2 Research Design

The current study adopted mixed methods research. In mixed methods research, the researcher mixes or combines quantitative and qualitative research techniques, methods, or approaches to a single study (Johnson & Onwuegbuzie, 2004). The combination of quantitative and qualitative techniques allowed the researcher to examine more closely experiences encountered in the implementation of the Artisan and Craft curriculum in the community colleges in Nairobi region. In particular, the concurrent mixed methods research was adopted. Using this approach, quantitative and qualitative data are merged in order to provide a comprehensive analysis of the research problem (Creswell, 2002). Quantitative data was gathered through cross-sectional survey research design while phenomenological design was employed in generating qualitative data for the study.

Survey research designs are used in preliminary and exploratory studies to allow researchers to gather information, summarize, present and interpret for the purpose of clarification (Orodho, 2002). In addition, survey research provides a quantitative or numeric description of trends, attitudes, or opinions of a population by studying a sample of that population in order to provide suggestions for improvement of educational practice and instruction (Koul, 1992: Babbie, 1990). Moreover, the design can be used to describe, explain or
explore the existing status of and relationships between variables at a given time (Mugenda & Mugenda, 2003). Survey research design was found suitable because the study sought to obtain information that described the participants’ views about the implementation of Artisan and Craft curriculum in community colleges.

Phenomenological research design was used to identify the lived experiences of the directors about Artisan and Craft curriculum implementation Catholic sponsored community colleges through engaging them in extensive interviews. Creswell and Plano Clark (2007) maintain that phenomenological designs involve studying a small number of subjects through extensive engagement to develop patterns and relationships of meaning. The qualitative data collected was then used to enrich and support the quantitative data obtained from the cross-sectional survey.

### 3.3 Target Population

The target population comprised all students taking Artisan and Craft courses, Artisan and Craft teachers and directors of the community colleges in Nairobi region. Table 1 shows the distribution of the target population.

**Table 1**

**Distribution of Target Population**

<table>
<thead>
<tr>
<th>Community College</th>
<th>Teachers</th>
<th>Directors</th>
<th>Students</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>6</td>
<td>1</td>
<td>130</td>
<td>137</td>
</tr>
<tr>
<td>B</td>
<td>4</td>
<td>1</td>
<td>115</td>
<td>120</td>
</tr>
<tr>
<td>C</td>
<td>7</td>
<td>1</td>
<td>46</td>
<td>54</td>
</tr>
<tr>
<td>D</td>
<td>8</td>
<td>1</td>
<td>40</td>
<td>49</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>25</strong></td>
<td><strong>4</strong></td>
<td><strong>331</strong></td>
<td><strong>360</strong></td>
</tr>
</tbody>
</table>

*Source: East Africa Community College Secretariat Coordinating Office (2012).*
The teachers who participated in the study were full-time staff with at least six month’s stay in the selected community colleges. A minimum period of six months’ stay in the community colleges was considered adequate in providing critical information pertaining to the objectives of the study. For purposes of safeguarding the confidentiality of the participants, the community colleges were assigned letters A, B, C, and D to replace the actual names of the colleges.

3.4 Sample Size and Sampling Procedures

The sample comprised 172 Artisan and Craft students, 18 Artisan and Craft teachers and 4 directors from the four community colleges. Both probability and non-probability sampling techniques were use to select the sample for the study. Probability sampling techniques namely stratified random sampling and simple random sampling were used to select students and teachers whereas non-probability sampling technique (purposive sampling) was used in selecting the directors of the community colleges.

Proportional stratified random sampling was used to select students and teachers to ensure that proportionate number of students and teachers from each of the four community colleges participated in the study. Saunders, Lewis and Thornhill (2007) argue that stratified random sampling ensures that the stratified heterogeneous sub-groups of the population are represented in the sample. There were 331 students, 25 teachers and four directors giving a total of 360 individuals. Bartlett, Kotrlik, and Higgins (2001) recommend sample sizes of 169 and 196 for populations of 300 and 400 respectively at margin of error of 0.05. This shows that for a population of 331, the sample size would lie between 169 and 196. Other researchers such as Krejcie and Morgan (1970) recommend a sample size of 186 individuals for a population of 360 individuals. However, since oversampling is recommended to make up for the shortfall between the expected sample size and the actual sample size reached (Cochran, 1977; Salkind, 1997), the current study had a sample size of 194 participants.
3.4.1 Sampling of Students

The student population in each community college was divided by the aggregate population of students in all the community colleges and then multiplied by the required sample size. For instance, for community college A, the sample size of 68 was obtained by dividing the student population in the community college (130) over the aggregate student population (330) then multiplying the quotient by the required sample size (172). A similar computation approach was done for community colleges B, C, and D yielding sample sizes of 59, 24, and 21 respectively.

In each community college, the students were then stratified by gender and simple random sampling used to select the students in each gender stratum. The use of simple random sampling ensured that each individual in the population had an equal chance of being selected for the sample. To use this technique, every individual in the sampling frame was assigned a random number which was written on pieces of paper. The papers were then folded and thoroughly mixed in a container. From this container, the required number of papers was drawn, one at a time, until the required number of individuals was obtained. The papers were then opened and the individuals on the sampling frame corresponding to the numbers on the papers were included in the study.

3.4.2 Sampling of Teachers

The teachers were also sampled in a similar manner as the students. The teacher population in each community college was divided by the aggregate teacher population in all the community colleges and then multiplied by the required sample size. This yielded a sample of four, three, five and six teachers for community colleges A, B, C and D respectively. To ensure proportionate gender representation in the sample, the teacher population in each community college was stratified by gender and simple random sampling used to select the teachers in each gender stratum. The teachers were further categorized in respect to whether they taught Artisan
courses or Craft courses and sampled to ensure proportional representation of the two courses. The procedure adopted for selection of students using this technique was also used in the selection of the teachers.

3.4.3 Selection of Directors

All the four directors of community colleges were purposively included in the sample since they were believed to have in-depth understanding of the operations of community colleges. The directors’ administrative roles in the colleges qualified them to be the key informants in the study. They provided information on such issues as the organization of the Artisan and Craft curriculum in the colleges, strategies employed in its implementation such as teacher motivation strategies, student enrolment, completion and performance, resources and collaboration strategies used by the colleges. This enabled in-depth understanding of the determinants of implementation of the Artisan and Craft curriculum in the community colleges. Overall, the study thus sampled 172 students and 18 teachers in addition to the four directors thus yielding 194 participants as shown in Table 2.

Table 2

Sample Size for Participants

<table>
<thead>
<tr>
<th>Community College</th>
<th>Students</th>
<th>Teachers</th>
<th>Directors</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
<td>n</td>
<td>N</td>
<td>N</td>
</tr>
<tr>
<td>A</td>
<td>130</td>
<td>68</td>
<td>6</td>
<td>4</td>
</tr>
<tr>
<td>B</td>
<td>115</td>
<td>59</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>C</td>
<td>46</td>
<td>24</td>
<td>7</td>
<td>5</td>
</tr>
<tr>
<td>D</td>
<td>40</td>
<td>21</td>
<td>8</td>
<td>6</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>331</strong></td>
<td><strong>172</strong></td>
<td><strong>25</strong></td>
<td><strong>18</strong></td>
</tr>
</tbody>
</table>

*Note. N= Number of cases in population; n = Number of cases in sample.*

3.5 Description of Data Collection Instruments

The study triangulated questionnaires and in-depth interview guides for data collection. Punch (2009) and Patton (2002) contend that instrument triangulation strengthens a study by
offering the possibility of the strengths of the combined instruments and compensating for the weaknesses of either instrument. Information from the qualitative tools helped to triangulate and add value to the findings emanating from the questionnaires.

3.5.1 Questionnaires

Other than the questions seeking demographic information and the open-ended questions in the questionnaire, all other questions were prepared in the form of a three-point rating scale or a five-point rating scale. Each area of the rating scale had an assigned value from one to three (or one to five), such that the higher the rating the higher the degree of response to the item. The subsequent discussion provides a detailed description of the questionnaires.

3.5.1.1 Teachers’ Questionnaire

The teachers’ questionnaire was divided into four parts. Part A dealt with demographic information about the teachers such as gender, age, academic qualification, professional qualification and work experience. Part B interrogated the strategies employed in implementation of Artisan and Craft curriculum in community colleges. Part C sought to determine factors that influence the implementation of Artisan and Craft curriculum. Finally, Part D examined challenges faced in the implementation of Artisan and Craft curriculum in community colleges and measures that could be taken to avert the challenges.

3.5.1.2 Students’ Questionnaire

The students’ questionnaire was also divided into four parts. Part A solicited background information about the students in the community colleges. Part B sought information on the adequacy of teaching and learning resources and physical facilities in community colleges. Part C sought to determine the factors influencing the implementation of Artisan and Craft curriculum. Finally, Part D explored the challenges faced in the implementation Artisan and Craft curriculum and the measures that could be taken to overcome the challenges.
3.5.2 Interview Guide for Directors

The interview guide for directors of community colleges sought information on the implementation of Artisan and Craft curriculum in the community colleges. In addition, it sought to find out whether Artisan and Craft curriculum is implemented in community colleges as intended and to what extent. In addition, information concerning student enrolment in and completion of Artisan and Craft courses and effectiveness of college-industry collaborations was captured through interviews. Finally, the interviews gathered information on the challenges faced in implementing Artisan and Craft curriculum in community colleges and the possible measures of overcoming the challenges.

Interviews were preferred in soliciting information from the directors of community colleges due to a number of reasons. The use of interview technique permitted the researcher to easily follow up ideas, probe responses and investigate motives and feelings from the interviewees (Bell, 2006). In addition, interview technique enabled the researcher to undertake in-depth analysis and obtain detailed information from each interviewee (Anderson, 2002). According to Patton (1987) and Johnson and Christensen (2008), the researcher has the ability to control the interview by asking and rephrasing questions during the interview. As such, the use of interviewing technique was significant in this study.

Despite the merits, there are some inherent limitations in using interviews to collect data. For instance, in face-to-face interviews, the interviewee can appear intimidated by the presence of the researcher, a factor that may affect the procedure of the interview (Johnson & Christensen, 2008; Wengraf, 2001). However, this demerit was overcome by the researcher first establishing a cordial rapport with the interviewees before interviewing them.

3.6 Piloting of Instruments

The questionnaires were piloted in three of the community colleges within Nairobi region to teachers and students who were thereafter deliberately excluded in the actual study.
The main purpose of the pilot study was to determine whether the instruments would yield consistent results when administered at different times. The pilot sample comprised 28 students and five teachers selected from three of the community colleges. The researcher administered the instruments and collected them immediately to ensure that the rest of the students and teachers were not privy to the content of the instruments. Furthermore, those who participated in the study were not aware that the instruments would be administered in their community colleges at a later date. The collected data was then analyzed to test reliability of the questionnaires.

3.7 Validity of Instruments

Validity is the degree to which results obtained from the analysis of the data actually represents the phenomenon under study (Mugenda, 2003). If such data were a true reflection of the variable, then the inferences based on such data will be accurate and meaningful. The instruments were content-and face-validated by subjecting them to thorough scrutiny from experts in curriculum studies and specialists in Artisan and Craft courses.

3.7.1 Content Validity

Content validity seeks to find out if the data collection instrument is a good representation of the content which needs to be measured (Seliger & Shohamy, 1989). According to Fraenkel and Wallen (2000) and Litwin (2002), content-related evidence can be accumulated by distributing the instrument to reviewers who have a sound knowledge of the subject matter. Thus, the questionnaires and interview guide were given to three experts in curriculum implementation and two experienced Artisan and Craft educators. The curriculum experts were senior lecturers in selected universities who had enormous experience on instrument design and validation emanating from their research supervision work at postgraduate level. The Artisan and Craft educators were drawn from two technical training colleges and they were selected on the criteria that they had taught Artisan and Craft courses for
a reasonable period of time and were KNEC examiners in the subjects. The two educators further had postgraduate training hence were familiar with the process of instrument validation. Each of the experts separately judged the objectivity, clarity and relevance of the items to the research questions. The constructive feedback and responses received from these experts were then used to improve on the content of the instruments before they were finally administered to participants.

3.7.2 Face Validity

Face validity is used to check whether the instruments are appropriate to the study purpose and content area. Specifically, it evaluates the readability, consistency of style and formatting and the clarity of language used in the instruments (Haladyna, 1999). Face validity was undertaken by the same three curriculum experts and two Artisan and Craft educators who assessed the content validity. Each question in the instruments was assessed in terms of the clarity of wording, level of difficulty in reference to the targeted audience and the layout and formatting style used. The questions were thoroughly examined and revised to achieve face-validity.

3.8 Reliability of Instruments

The internal consistency of the instruments was determined by computing the Cronbach’s alpha. Internal consistency describes the extent to which all the items in a test measure the same concept or construct and hence it is connected to the inter-relatedness of the items within the test. The Cronbach's alpha is the most efficient way to calculate internal consistency reliability (Marty, 2002) especially if the questions are scored as continuous variables (Creswell, 2002). The statistic is used in a context where a set of questions or items are asked to a group of individuals with the objective of measuring a specific construct. It may be used to describe the reliability of factors extracted from dichotomous and/or multi-point formatted questionnaires or scales such as the Likert scale. Thus, the statistic was used to
determine the reliability of the rating scales on students’ questionnaire (items 11, 12, 14, 15) and teachers’ questionnaire (items 11, 12, 20) and binary response items in students’ questionnaire (item 13a) and teachers’ questionnaire (items 17a, 19a, 21a, 23, 24a, 25a). The results are presented in Table 3.

Table 3

Results of Reliability Test

<table>
<thead>
<tr>
<th>Questionnaire</th>
<th>Question No.</th>
<th>Rating scale</th>
<th>No. of Items</th>
<th>$\alpha$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teachers</td>
<td>11</td>
<td>Teaching strategy use</td>
<td>9</td>
<td>0.71</td>
</tr>
<tr>
<td></td>
<td>12</td>
<td>Teaching strategy effectiveness</td>
<td>9</td>
<td>0.56</td>
</tr>
<tr>
<td></td>
<td>20</td>
<td>Factor influence</td>
<td>12</td>
<td>0.93</td>
</tr>
<tr>
<td>Students</td>
<td>11</td>
<td>Teaching strategy use</td>
<td>9</td>
<td>0.73</td>
</tr>
<tr>
<td></td>
<td>12</td>
<td>Teaching strategy understanding</td>
<td>9</td>
<td>0.67</td>
</tr>
<tr>
<td></td>
<td>14</td>
<td>Factor influence</td>
<td>9</td>
<td>0.7</td>
</tr>
<tr>
<td></td>
<td>15</td>
<td>Facility adequacy</td>
<td>9</td>
<td>0.82</td>
</tr>
</tbody>
</table>

The teachers’ questionnaire and students’ questionnaires had an overall alpha statistic of 0.72 and 0.73 respectively. Most researchers recommend an alpha equal to or greater than 0.70 as an acceptable measure for internal consistency of items (De Vellis, 2003; Nunnally, 1978). Thus, the questionnaires were adopted for the study.

3.9 Data Collection Procedures

The researcher obtained a letter of authorization to proceed to data collection from the Catholic University of Eastern Africa. Upon clearance from the university, the researcher further obtained a research permit from the National Council of Science and Technology that allowed the researcher to proceed to data collection in Nairobi region. Thereafter, the directors of the sampled community colleges were contacted and dates of visiting each community college were scheduled. Before administering the instruments on the agreed dates, the researcher explained the purpose of the study to the teachers and students and invited them to fill the questionnaires.
which were self-administered and collected by the researcher on the same date of administering them. The interviews were conducted on the same dates after the questionnaires had been administered. The interviews were tape-recorded.

3.10 Data Analysis Procedures

Data analysis was based on the research questions of the study. Quantitative data from the close-ended items in the questionnaires were analyzed using descriptive statistics such as frequencies, percentages, means and standard deviations. Means and standard deviations were used to address degrees of centralization and the variation of participants' opinions on the rating scales. The Statistical Package for Social Sciences (SPSS) version 20.0 was used in quantitative data analysis.

Qualitative data obtained from open-ended questions and interviews were analyzed in four successive steps. Cresswell (1998, 2003) advances four stages in qualitative data analysis namely; organization of the data, perusal of the entire data several times to get a sense of what it contains as a whole, identification of general categories or themes, and, integration and summarization of the data in form of tables, figures or diagrams. In the current study, tape-recorded interviews were carefully transcribed as soon as they were recorded from the field. The researcher, upon collecting all the data, keenly listened to the tape recorder over and over again and transcribed each recorded interview. To ensure accuracy in transcription, the researcher requested a colleague to check 10% of the interview data. The checking revealed that the transcription had adhered to the informants’ intended meanings.

After transcription of the interviews, the data were edited and ambiguities removed. The data were then paraphrased and organized in a meaningful way to facilitate analysis. This was realized through a number of steps. First the transcribed data were printed and the researcher wrote the themes that emerged on the margins of the excerpts. The identified themes formed the coding categories for the data. The data from the various informants were then pooled into the
appropriate category such that information on same theme but from different informants was pooled into the same category. This eased the sorting process of the data. Thereafter, the sorted data were analyzed by identifying excerpts that either supported or challenged the interpretation made by the researcher. The summarized data were then presented in form of narratives and direct quotations. During the phases of data collection and analysis, all data analyses were managed carefully in accordance with the guidelines of research and ethics practice.

3.11 Ethical Considerations

The current study adapted the acceptable research ethics as articulated in literature (Bell, 1999; Clark, 1997; Creswell, 2003; Johnson & Christensen, 2008). Upon approval of the research proposal, the researcher sought permission to conduct research from the Catholic University of Eastern Africa, the National Council of Science and Technology and the directors of the community colleges. The research permit enabled the researcher to proceed to the field for data collection.

The researcher then presented a letter of consent to each participant in the study. In the letter, the researcher informed the research participants about the purpose and procedure of the study so that they understood the nature of the research and any likely impact it would have had on them (Creswell, 2003). In addition, participants signed consent forms upon acceptance for participation before they engaged in the research (Patton, 2002). They were further made fully aware of their rights to withdraw from the research without fear of consequence. Furthermore, participants were informed of the fact that their participation was voluntary and they would not be coerced to participate in the study. In addition, consent was sought from the directors of the community colleges to record the interviews.

The current study ensured that the confidentiality of data, anonymity, privacy and safety of participants was observed and maintained. The research participants were assured that the data they provided would remain confidential and would not be disclosed in any manner without
their consent. Kombo and Tromp (2006) hold that the identity of the research participants should not be disclosed in the study. Consequently, in writing this dissertation, the interview data collected from the directors has not been attributed to any specific director but has been analyzed using identification codes to ensure anonymity. That is, the anonymity of the interviewees was maintained by assigning to them pseudonyms- James, John, Jane, and Judy. The interviewees were duly informed that they had been assigned pseudonyms. In addition, the raw interview data and recordings were kept securely and will be destroyed six months after submission of the dissertation. Finally, as a scholarly piece of work, the academic writing standards set by the University were upheld in writing this dissertation including strict adherence to the American Psychological Association (APA) manual (sixth edition).
CHAPTER FOUR
DATA PRESENTATION, INTERPRETATION AND DISCUSSION OF FINDINGS

4.1 Introduction

This chapter analyses, presents, interprets and discusses the findings that were obtained from the data collection stage. Based on the aforesaid approach, the chapter begins with an analysis of the questionnaire return rate for the teachers and students. This is followed by the demographic data on the students, teachers and the directors of the community colleges. Thereafter, the findings are thematically presented based on the research questions of the study. That is, how Artisan and Craft curriculum is implemented in community colleges, strategies used in implementation, factors influencing the implementation process, challenges facing the implementation and ways of enhancing the effective implementation of the Artisan and Craft curriculum in community colleges.

4.2 Questionnaire Return Rate

The distribution of students, teachers and directors who participated in the study in the four community colleges is shown in Table 4.

Table 4
Distribution of Participants by College

<table>
<thead>
<tr>
<th>College</th>
<th>Students</th>
<th>Teachers</th>
<th>Directors</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>47</td>
<td>4</td>
<td>1</td>
<td>52</td>
</tr>
<tr>
<td>B</td>
<td>40</td>
<td>3</td>
<td>1</td>
<td>44</td>
</tr>
<tr>
<td>C</td>
<td>32</td>
<td>5</td>
<td>1</td>
<td>38</td>
</tr>
<tr>
<td>D</td>
<td>27</td>
<td>6</td>
<td>1</td>
<td>34</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>146</strong></td>
<td><strong>18</strong></td>
<td><strong>4</strong></td>
<td><strong>168</strong></td>
</tr>
</tbody>
</table>

As explained in the previous chapter, the study intended to administer questionnaires to 172 students and 18 teachers and interview four directors giving a total of 194 participants.
However, at the time of collecting data, only 146 students were reached. A number of students were on field attachment hence they could not be reached during the period of study. The study thus relied on responses from those students who were in session at the time of the study. All the sampled teachers and directors of the community colleges took part in the study as they were available at the time of data collection. This gave a questionnaire return rate of 84.9% and 100% for students and teachers respectively and an interview participation rate of 100%. Overall the actual sample comprised 168 individuals representing 86.6% of the intended sample. This was considered acceptable hence the researcher proceeded on with data analysis.

4.3 Demographic Characteristics of Participants

The demographic variables explored include participants’ age, gender, academic qualification, professional qualification, teaching experience, duration of stay in the college, courses studied/taught, year of study and duration of course. The demographic characteristics of the students are first presented followed by those for teachers and finally the directors of the community colleges. Some of the demographic characteristics of students are merged where appropriate.

4.3.1 Gender of Students and Teachers

The study sought to determine the gender of both the students and teachers who participated in the study. All the sampled students and teachers responded to this item. The results are presented in Table 5. Results in Table 5 show that there were more male students than female students enrolled for various courses in the community colleges. Likewise, the results showed that there were more male than female teachers in the community colleges. The finding on students’ gender is dissimilar to that of Ngware et al. (2005) which established that more female students than male students were enrolled in private tertiary institutions in Kenya. Unlike in Ngware et al. (2005) study that found there were more pro-female courses than pro-male courses, the community colleges had more courses that were predominantly pro-male. This
could be explained by the profile of courses offered. Indeed an analysis of the courses on offer in the colleges (see Table 14) showed that a large proportion of the courses were likely to attract more male than female students. For the same reason, male teachers surpassed female teachers in the community colleges.

Table 5

_Distribution of Students and Teachers by Gender_

<table>
<thead>
<tr>
<th>Gender</th>
<th>Students</th>
<th></th>
<th>Teachers</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>f</td>
<td>%</td>
<td>f</td>
</tr>
<tr>
<td>Male</td>
<td>78</td>
<td>53.4</td>
<td>10</td>
</tr>
<tr>
<td>Female</td>
<td>68</td>
<td>46.6</td>
<td>8</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>146</strong></td>
<td><strong>100.0</strong></td>
<td><strong>18</strong></td>
</tr>
</tbody>
</table>

Besides the nature of courses offered in community colleges, the relatively high enrolment of male students could also be attributed to the possibility of higher female transition to higher learning institutions or pursuit of other non-vocational careers than male students. Another reason could be that more male students either drop out of basic education programs thereby being left with joining vocational training as the only option. The reason for higher proportion of male teachers than female teachers in community colleges may be largely attributed to the nature of courses offered in the community colleges. As shown in Table 18, most of the community colleges offered courses that have traditionally been perceived as male courses such as mechanics, driving, masonry, carpentry and welding (Hicks, et al., 2011).

4.3.2 Age of Students and Teachers

In order to determine the mean age of students and teachers in community colleges, they were required to indicate their age bracket and the results are as shown in Table 6.
Table 6

*Distribution of Students and Teachers by Age*

<table>
<thead>
<tr>
<th>Age Bracket</th>
<th>Male</th>
<th>Female</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>f</td>
<td>%</td>
<td>f</td>
</tr>
<tr>
<td><strong>Students</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>16-20</td>
<td>36</td>
<td>24.7</td>
<td>33</td>
</tr>
<tr>
<td>21-25</td>
<td>34</td>
<td>23.3</td>
<td>28</td>
</tr>
<tr>
<td>26-30</td>
<td>5</td>
<td>3.4</td>
<td>3</td>
</tr>
<tr>
<td>31 and above</td>
<td>3</td>
<td>2.0</td>
<td>4</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>78</td>
<td>53.4</td>
<td>68</td>
</tr>
<tr>
<td><strong>Teachers’ Age</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>16-25</td>
<td>1</td>
<td>5.6</td>
<td>2</td>
</tr>
<tr>
<td>26-35</td>
<td>6</td>
<td>33.3</td>
<td>3</td>
</tr>
<tr>
<td>36-45</td>
<td>2</td>
<td>11.1</td>
<td>2</td>
</tr>
<tr>
<td>46-55</td>
<td>1</td>
<td>5.6</td>
<td>1</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>10</td>
<td>55.6</td>
<td>8</td>
</tr>
</tbody>
</table>

Table 6 shows that more students were aged 16-20 followed by those aged 21-25 and only a few were aged more than 25. This finding shows that students enrolled in the community colleges were generally young adults. In terms of gender, most of the students were in the “16-20” age bracket followed by the “21-25” age bracket for both male and female students. Analysis of the mean and standard deviation for the students showed that although the mean age for male students was equal to that of female students, more age variations existed among female students ($M = 21.4; SD = 4.1$) than male students ($M = 21.4; SD = 3.8$). Generally, in Kenya, students completing secondary education usually transit to post-secondary institutions at ages slightly above 18 hence the average age of 21.4 is not out of the norm for typical college students. However, given that majority of the sampled students were in their early stages in the courses studied, the delay in transition may be attributed to the socio-economic challenges that
drive these students to join community colleges. Furthermore, given that some of them were primary school leavers and secondary school drop outs, it implies that they may have stayed out of school for a number of years before joining the community colleges.

As shown in Table 6, half of the teachers were in the 26-35 age bracket and only two were aged above 45. The teachers were generally youthful but with fairly large age gaps (M = 33.3, SD = 8.3). This implies that on average, the teachers were at various career growth stages hence likely to bring on board their new and existing knowledge and experiences to create a versatile teaching force for effective implementation of Artisan and Craft courses.

**4.3.3 Courses Enrolled by the Students**

The study further established the courses that students were enrolled in as presented in Figure 3.

![chart](image)

**Figure 3. Students’ Distribution by Course Enrolled**

Figure 3 shows that 65.8% of the students were enrolled in Artisan courses while a 34.2% were enrolled in Craft courses. In terms of gender, more male students than female students were enrolled in Craft courses while more female students than male students were enrolled in Artisan courses. An interview with the directors revealed that the colleges offered Craft courses perceived as male-oriented disciplines such as motor vehicle mechanics, electrical installations,
carpentry, welding and masonry and Artisan courses perceived as female-oriented disciplines such as baking, tailoring/dressmaking, hairdressing and beauty, baking, fashion and design, catering and house management.

The finding of the study resonates with the results of the study by Hicks, et al. (2011) on the vocational education voucher delivery and labor market returns among Kenyan youth which showed that the most popular courses for male students were motor vehicle mechanic, driving and masonry, while the most popular courses for females were tailoring, hairdressing and beauty and secretarial and computing. In the same vein, the findings confirm the position held by (UNESCO, 2010) that more female than male students are enrolled at youth polytechnics largely because these institutions offer traditional artisan courses that are attractive to females, such as tailoring and dressmaking. This finding therefore reveals gender disparities in courses offered a fact that limits students’ choice of courses to pursue at Artisan and Craft levels in community colleges.

4.3.4 Distribution of Students by Level of Course Enrolled

Students were further required to indicated the level at which they were enrolled in the Artisan and Craft courses. The results are presented in Table 7.

<table>
<thead>
<tr>
<th>Level of Course Enrolled</th>
<th>Male</th>
<th>Female</th>
<th>Both</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>f</td>
<td>%</td>
<td>f</td>
</tr>
<tr>
<td>Certificate</td>
<td>73</td>
<td>50</td>
<td>66</td>
</tr>
<tr>
<td>Diploma</td>
<td>5</td>
<td>3.4</td>
<td>2</td>
</tr>
<tr>
<td>Total</td>
<td>78</td>
<td>53.4</td>
<td>68</td>
</tr>
</tbody>
</table>

As shown in Table 7, 95.2% of the students were enrolled at certificate level with 50 % and 45.2 % enrolment for male and female students respectively. A dismal 4.8 % of the
students were enrolled at diploma level. Of those enrolled at diploma level, five were male while two were female. This finding has two implications. First, the finding suggests that majority of students enrolling in Artisan and Craft courses do not meet the minimum entry requirements at diploma level hence they enroll at certificate level. Second, even for those who start at certificate level, very few of the students progress to the diploma level. Thus, there is a low progression of students from certificate level to diploma level with female students recording the lowest progression.

Thus, as earlier established by Atchoarena and Delluc (2001), students are likely to avoid advancing to diploma level courses upon completion of certificate level courses as they believe higher vocational qualifications may not obviously result in higher earnings. Thus, the pursuit of higher qualifications may not be a major reason for students’ uptake of Artisan and Craft course in community colleges. Yet one of the TVET objectives is to increase training opportunities to youth in order to improve their employability and the higher the training one receives the higher the employment prospects available to the individual. It therefore implies that for those who do not train beyond Artisan and Craft levels, their employment prospects are limited to the relatively menial jobs in the market. This would therefore suggest that community colleges are not effective in adequately preparing the youth for competitive employment.

4.3.5 Duration of Course Enrolled

The students were also required to indicate the duration for the courses in which they were enrolled. The aim was to check the consistency between the course duration as prescribed in the TVET curriculum and what is actually implemented in the community colleges. The findings are presented in Table 8. Table 8 shows that 51.4% of the students were enrolled in two-year courses. The rest were enrolled in courses lasting six months (25.0%), one year (19.4%) and three months (4.2%). Overall, the duration of courses offered in community colleges was consistent with that stipulated in the TVET curriculum. That is, the Artisan
curriculum should be offered for a period of two years for the students to be awarded an Artisan certificate (KIE, 2009; KNEC, 2012).

Table 8

Duration of Artisan and Craft Courses

<table>
<thead>
<tr>
<th>Duration</th>
<th>f</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Three months</td>
<td>6</td>
<td>4.2</td>
</tr>
<tr>
<td>Six months</td>
<td>36</td>
<td>25.0</td>
</tr>
<tr>
<td>One year</td>
<td>28</td>
<td>19.4</td>
</tr>
<tr>
<td>Two years</td>
<td>74</td>
<td>51.4</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>144</td>
<td>100.0</td>
</tr>
</tbody>
</table>

An examination of the courses that lasted less than two years revealed that the courses were taken by students training in computer studies or specially packaged courses according to their unique needs. For instance, the interview with Judy revealed that some clients required their students (who worked as housemaids) to be given basic skills in catering and house management for short periods. Thus such students would be enrolled for short courses that satisfied the peculiar needs of the clientele.

Thus, the packaging of courses to meet the diverse clientele needs demonstrates the flexibility in curriculum which is characteristic of community colleges (CORAT, 2011; Lannert, Munbodh & Verma, 1999). Indeed, adaptability to market needs is one of the features that are emphasized in the community college concept and the colleges are expected to innovatively respond to the market needs of the communities in which they are situated. Consequently, the study established that community colleges responded effectively to market needs by embracing the principle of flexibility of the curriculum. This strategy ensured the relevance of the curriculum through equipping students with skills that were relevant and needed in the job
market. Reddan and Harrison (2010) argue that courses offered in TVET institutions need to be responsive to the needs of the job market, especially the industry.

4.3.6 Distribution of Students by Year of Study

The study further sought to establish the students’ length of stay in their respective community colleges. In order to achieve this, the students were asked to indicate their year of study for the courses in which they were enrolled. Only 143 students responded to this item. The results are as shown in Table 9.

Table 9

Students’ Distribution by Year of Study

<table>
<thead>
<tr>
<th>Year of Study</th>
<th>Artisan</th>
<th>Craft</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>f</td>
<td>%</td>
<td>f</td>
</tr>
<tr>
<td>First year</td>
<td>77</td>
<td>53.8</td>
<td>28</td>
</tr>
<tr>
<td>Second year</td>
<td>16</td>
<td>11.2</td>
<td>22</td>
</tr>
<tr>
<td>Total</td>
<td>93</td>
<td>64.0</td>
<td>50</td>
</tr>
</tbody>
</table>

Table 9 shows that 73.4% of the students were in their first year of study with 53.8% taking Artisan courses while the remaining 19.6% pursuing Craft courses. Only 26.6% of the students were in second year of their studies with more students pursuing Craft courses compared to those pursuing Artisan courses. This finding implies that there was increase in enrolment for Artisan and Craft courses during the 2012/2013 academic year in the colleges compared to the preceding year. The second year students had enrolled in the colleges in the 2011/2012 academic year. The probable factors for increased enrollment are discussed in the subsequent sections of this chapter.
4.3.7 Choice of Course Enrolled by Students

In order to establish what motivated the students to enroll for the Artisan and Craft courses, they were asked to indicate how they chose the courses in which they were currently enrolled. Those who responded to this item were 145. The results are presented in Table 10.

Table 10

Reasons for Students’ Choice of Courses

<table>
<thead>
<tr>
<th>Reason</th>
<th>Male</th>
<th>Female</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Self decision</td>
<td>70</td>
<td>60</td>
<td>130</td>
</tr>
<tr>
<td>Parents’/sponsor’s influence</td>
<td>7</td>
<td>6</td>
<td>13</td>
</tr>
<tr>
<td>College orientation</td>
<td>1</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Peer influence</td>
<td>0</td>
<td>1</td>
<td>1</td>
</tr>
</tbody>
</table>

The findings show that more male than female students personally chose the courses they were currently studying in the community colleges. Influence of parents/sponsors was minimal in choice of course by students whereas college orientation and peer influence featured for the male students and female students respectively though in both cases they were insignificant falling below 1%. Out of all the reasons given by the students, personal decision was mentioned by 89.7% of the students. This finding revealed that students were intrinsically motivated to pursue the courses in the community colleges. As such, their interest in the courses would enhance the learning of the same consequently leading to effective implementation of the courses.

4.3.8 Reasons for Studying in Catholic Sponsored Community Colleges

The study further sought to establish the reasons that made students study in community colleges. All the students responded to this item. The results are presented in Table 11.
Table 11

Reasons for Choosing to Study in Catholic Sponsored Community Colleges

<table>
<thead>
<tr>
<th>Reason</th>
<th>Male</th>
<th>Female</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>f</td>
<td>%</td>
<td>f</td>
</tr>
<tr>
<td>Get skills for self employment</td>
<td>48</td>
<td>32.9</td>
<td>34</td>
</tr>
<tr>
<td>Acquire skills for future employment</td>
<td>10</td>
<td>6.8</td>
<td>13</td>
</tr>
<tr>
<td>To access further education in future</td>
<td>11</td>
<td>7.5</td>
<td>7</td>
</tr>
<tr>
<td>Community colleges are affordable</td>
<td>4</td>
<td>2.7</td>
<td>12</td>
</tr>
<tr>
<td>Influenced by my family</td>
<td>4</td>
<td>2.7</td>
<td>0</td>
</tr>
<tr>
<td>Lack of alternatives</td>
<td>1</td>
<td>0.7</td>
<td>2</td>
</tr>
</tbody>
</table>

The main reason for studying in the community colleges as mentioned by the students was to get skills for self employment (56.2%). Other reasons included acquiring skills for better employment in the industry (15.8%) and accessing further education in future (12.3%). The least cited reasons were family influence (2.7%) and lack of alternatives (2.1%). Thus, over half of the students were inclined towards entrepreneurship than getting employed. This finding insinuates that community colleges are perceived to meet the objectives of technical and vocational education in Kenya namely promoting self employment, employment in industries and further education (Republic of Kenya, 2012 and 2005).

However, gender disparities were evident in the reasons such that more male students than female students hoped to gain skills for self employment and access further education in future and more female students than male students hoped to acquire skills for better employment in the industry. The finding therefore suggests the existence of less entrepreneurial intentions among female students than male students and is consistent with that of Ofoha (2011) that revealed low entrepreneurial capability among students taking technical and vocational
subjects in secondary schools in Nigeria. The technical and vocational subjects in the Nigeria’s secondary school curriculum are in many ways similar to the courses offered in Artisan and Craft curriculum in Kenya.

However, the finding contradicts Maina’s (2007) finding that showed that 85% of college graduates had interest or intentions to engage in entrepreneurial activities. This could be attributed to the fact that the participants in Maina’s study were university college graduates who had relatively higher academic qualifications and exposure hence a wider array of entrepreneurial intentions than would the community college students. The existence of low entrepreneurial intentions among community college students and especially female students presents a major impediment to the country’s endeavour to attain Vision 2030 goals. Indeed, the centrality of the youth in steering the industrialization agenda of the government cannot just be wished away; low entrepreneurial intentions are likely to slow down the country’s industrialization process.

4.3.9 Students’ Highest Level of Education

In order to determine the students’ entering behavior prior to joining the community colleges, the study required the students to indicate their highest levels of education before joining the community colleges. The results are presented in Table 12. As presented in Table 12, 66.7% of the students had completed secondary education while 33.3 % had completed primary education. Similar results were established for male students and female students. For both male and female students, most of them had completed secondary level compared to those who had reached primary level of education only. However, those who did not respond to this item (five students) were likely to be those who did not complete either primary or secondary education since the directors of the community colleges mentioned in the interviews that some of their students were school drop outs.
Table 12

*Students’ Highest Level of Education*

<table>
<thead>
<tr>
<th>Level of Education</th>
<th>Male</th>
<th></th>
<th>Female</th>
<th></th>
<th>Total</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>f</td>
<td>%</td>
<td></td>
<td>f</td>
<td></td>
<td>%</td>
</tr>
<tr>
<td>Primary</td>
<td>31</td>
<td>22.0</td>
<td>16</td>
<td>11.3</td>
<td>47</td>
<td>33.3</td>
</tr>
<tr>
<td>Secondary</td>
<td>44</td>
<td>31.2</td>
<td>50</td>
<td>35.5</td>
<td>94</td>
<td>66.7</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>75</strong></td>
<td><strong>53.2</strong></td>
<td><strong>66</strong></td>
<td><strong>46.8</strong></td>
<td><strong>141</strong></td>
<td><strong>100.0</strong></td>
</tr>
</tbody>
</table>

The finding shows that generally, students enrolled in community colleges met the minimum entry requirements to study Artisan and Craft courses. Consequently, the community colleges are expected to effectively produce graduates who are as competent as those from other TVET institutions since the students in community colleges are no lesser than their counterparts in other TVET institutions. This therefore challenges the earlier held belief that YPs (which community colleges) are designed for the less-academically endowed students (Mureithi, 2008; African Union, 2007) by showing that in terms of students’ entering behavior community colleges are just as good as other TVET institutions.

4.3.10 Distribution of Teachers by Teaching Workload

The teachers were required to indicate the number of hours they taught per week in the community colleges. The results are presented in Table 13. The results in Table 13 show that thirteen teachers taught not more than 20 hours per week with the mean weekly teaching load of 14.25 hours per week although with high variations for individual teachers (SD = 8.6).
Table 13

*Teaching Workload per Week*

<table>
<thead>
<tr>
<th>Hours per Week</th>
<th>f</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-10</td>
<td>6</td>
<td>37.5</td>
</tr>
<tr>
<td>11-20</td>
<td>7</td>
<td>43.8</td>
</tr>
<tr>
<td>21-30</td>
<td>2</td>
<td>12.5</td>
</tr>
<tr>
<td>31-40</td>
<td>1</td>
<td>6.2</td>
</tr>
<tr>
<td>Total</td>
<td>16</td>
<td>100.0</td>
</tr>
</tbody>
</table>

The reviewed study by Ngware and Nafukho (2002) established that teachers in ITs had a mean weekly teaching load of 14 hours with majority teaching 11-15 hours per week. This is a reasonable teaching load as it falls within the Teachers Service Commission’s recommended teaching load, that is, a minimum of 12 hours and a maximum of 18 hours per week for lecturers in Institutes of Technology and polytechnics. The finding implies that Artisan and Craft teachers have reasonable teaching load that would enable them to adequately plan for and implement the Artisan and Craft curriculum in the community colleges.

4.4 Background Information of the Directors of Community Colleges

The directors of all the four sampled community colleges participated in the study. In the study, they are identified as James, John, Jane, and Judy for community colleges A, B, C and D respectively. In terms of gender, two were male and two were female.

John had worked in the community college for seven years initially as a teacher and later promoted to Deputy Principal and eventually Principal. The college had both a principal and a director. The reason why the researcher selected John and not the director of the college to participate in the study was that the John, being in charge of the day-to-day administrative and curriculum supervision activities, was informed about implementation of Artisan and Craft
courses in the college. John had served in the principal’s docket for three years and had no working experience prior to joining the community college.

With regard to work experience, the findings revealed that James had worked in the current station for 13 years as college director. The findings further showed that Jane had worked in the current station for seven years as the director and Judy had served as director of the college since 2004. Overall, all the four directors of the community colleges had stayed long enough in their respective community colleges to provide reliable and authoritative information about the community colleges.

4.4.1 A Synoptic History of the Community Colleges

During the interviews, the directors were first asked to describe the history of their respective community colleges since establishment. As narrated in the interview, community college A was established 1994 as a technical institute to train youth polytechnic instructors. Later on it started enrolling students for two technical courses (motor vehicle mechanics and garment making). As time went by, the institute kept on introducing new courses and in 2008, the institute adopted the community college concept.

The history of community college B dates back to 1988 when the college was established to offer vocational training to youth in Artisan and Craft disciplines. It emerged that the two community colleges had existed for over ten years before the introduction of the community college concept in 2006. Community college C was established in 2006 with the aim of helping the youth to attain vocational skills that would enable them be self-employed or gain employment. Finally community college D was founded in 2004 with the purpose of training girls in vocational skills that would enhance their employability and adopted the community college tag in 2006.
4.4.2 Artisan and Craft Courses Offered in the Community Colleges

The directors were further asked to mention the Artisan and Craft courses offered in their respective community colleges. A summary of the courses per community college is provided in Table 14. It can be noted that only two community colleges offered both Artisan and Craft courses. In these colleges, the Craft courses were built upon the Artisan courses so that students who had completed Artisan courses could proceed with same courses at Craft level. The other two community colleges primarily offered Artisan courses. The directors of these community colleges explained that majority of Artisan graduates preferred to enter the job market or set up own businesses and those wishing to proceed to Craft level later joined other colleges offering Craft courses.

Table 14

Artisan and Craft Courses offered in Catholic Sponsored Community Colleges

<table>
<thead>
<tr>
<th>College</th>
<th>Artisan Courses</th>
<th>Craft Courses</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Carpentry and joinery, computer applications, garment making, hairdressing and beauty, motor vehicle mechanics, welding and fabrication</td>
<td>None</td>
</tr>
<tr>
<td>B</td>
<td>Motor vehicle mechanics, driving license B,C, E, electrical installation and fitting, computer software and programs, computer maintenance, welding and fabrication, tailoring and knitting</td>
<td>Motor vehicle mechanics, motor vehicle mechanics, electrical installation and fitting, welding and fabrication, tailoring and knitting</td>
</tr>
<tr>
<td>C</td>
<td>Hair dressing and beauty therapy, dress making and tailoring, computer studies, electrical installation, fashion and design</td>
<td>Hair dressing and beauty therapy, dress making and tailoring, electrical installation, fashion and design</td>
</tr>
<tr>
<td>D</td>
<td>French, English, computer applications, catering and laundry, house management</td>
<td>None</td>
</tr>
</tbody>
</table>
Thus, majority of the students opt to set up own businesses or seek employment once they acquire basic vocational skills at Artisan level. A possible reason for students’ preference to advance to Craft level in colleges other than the community colleges could be lack of trust in community colleges. According to Fietz, et al. (2007), lack of trust in certificates earned in private sector hindered the implementation of vocational education and training in European Union member countries. Thus, it is probable that students in community colleges hold the belief that their employment prospects and career prospects will be enhanced if they had academic and vocational qualifications from the public sector institutions in addition to those obtained in community colleges.

4.4.3 Evaluation of Artisan and Craft Curriculum

This question was posed to both the teachers and the directors of community colleges. The teachers’ responses are presented in Table 15.

Table 15

<table>
<thead>
<tr>
<th>Technique</th>
<th>f</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teacher-Made Tests</td>
<td>16</td>
<td>88.9</td>
</tr>
<tr>
<td>Sit-in Continuous Assessment Tests (CATs)</td>
<td>12</td>
<td>66.7</td>
</tr>
<tr>
<td>External Examinations</td>
<td>6</td>
<td>33.3</td>
</tr>
<tr>
<td>Take–Away CATs</td>
<td>5</td>
<td>27.8</td>
</tr>
</tbody>
</table>

Note. N = 18 teachers.

The most commonly used technique for evaluating Artisan and Craft courses as stated by the teachers was use of teacher-made examinations followed by sit-in CATs. Take-away CATs were least used. This suggests that teachers used credible and reliable techniques in evaluating Artisan and Craft courses since the commonly used methods allow for teacher supervision.
unlike take-away CATs. The frequency of evaluating Artisan and Craft courses as mentioned by the teachers is presented in Table 16.

### Table 16

**Frequency of Evaluating Artisan and Craft Courses**

<table>
<thead>
<tr>
<th>Frequency</th>
<th>f</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Weekly</td>
<td>7</td>
<td>38.9</td>
</tr>
<tr>
<td>After two weeks</td>
<td>2</td>
<td>11.1</td>
</tr>
<tr>
<td>Monthly</td>
<td>4</td>
<td>22.2</td>
</tr>
<tr>
<td>Twice a term</td>
<td>2</td>
<td>11.1</td>
</tr>
<tr>
<td>Once a term</td>
<td>3</td>
<td>16.7</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>18</strong></td>
<td><strong>100.0</strong></td>
</tr>
</tbody>
</table>

Table 16 shows that 38.9% of the teachers conducted evaluations on a weekly basis followed by 22.2% of the teacher who conducted evaluations on monthly basis. Generally, evaluations were conducted every term with majority of the teachers undertaking weekly evaluation of the teaching and learning process. Similar responses were echoed by the directors. However, they further said that evaluation was both internally and externally undertaken. Internal evaluation comprised the administration of CATs before and after mid-term break and end-of-term examinations while external examinations were administered by KNEC and DIT. The importance of undertaking frequent curriculum evaluation cannot be overemphasized. It thus implies that the teachers could be able to identify areas of deficiency in terms of students’ internalization of the theoretical knowledge and application of skills and appropriately take corrective measures.

#### 4.4.4 Students’ Progression

The directors explained that some of the students who enrolled in Artisan courses later advanced to higher levels or got employed:
I have a lady who started with Artisan certificate. That Artisan enabled her to do Craft. That Craft enabled her to do Diploma and she was a standard eight dropout. She ended up having a Diploma! Then a college at Kangundo which is run by the (religious) sisters called me asking to direct them where they could get somebody (teacher). I called the lady and at the moment she is working with the sisters. She is a teacher there (James). There is one student who, upon completing a Craft course in this college, went to Kyambogo for the diploma and now he has registered for a degree program in Uganda. Here in Kenya there are others who have also gone to the Nairobi Technical Institute for diploma courses and they have performed very well (John).

The narratives of the two directors revealed that graduates of community colleges were successful in securing employment or pursuing further education. This is evidence that community colleges are meeting some of the objectives of TVET in Kenya, that is, production of quality skilled human resource for the various sectors of the economy and increase opportunities for further education and training (Republic of Kenya, 2005, 2012). Thus the study concluded that Artisan and Craft course implementation has been effective not only in preparing graduates of community colleges for employment but also for further studies in institutions of higher learning.

4.4.5 Students’ and Directors’ Responses on the Extent of Effective Implementation of Artisan and Craft Curriculum

In order to assess the extent to which Artisan and Craft curriculum had been effectively implemented, the students were asked to rate the effectiveness of the training they received in Artisan and Craft courses. A large number of students (95.9%) believed that the training they acquired in Artisan and craft courses adequately equipped them to gain employment or engage in entrepreneurial activities upon graduation. Their subsequent responses are presented in Table 17.
### Table 17

**Students’ Responses on Adequacy of Training Received**

<table>
<thead>
<tr>
<th>Statement</th>
<th>Response</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>In which aspect of Artisan and Craft course are you adequately prepared?</strong></td>
<td></td>
</tr>
<tr>
<td>Theoretical training</td>
<td>21</td>
</tr>
<tr>
<td>Practical training</td>
<td>102</td>
</tr>
<tr>
<td>Both theoretical and practical training</td>
<td>20</td>
</tr>
<tr>
<td><strong>Reasons for adequate theoretical training</strong></td>
<td></td>
</tr>
<tr>
<td>Enables one understand content more than practical</td>
<td>13</td>
</tr>
<tr>
<td>I refer to notes later unlike in practical training</td>
<td>2</td>
</tr>
<tr>
<td>More time is allocated to theory</td>
<td>2</td>
</tr>
<tr>
<td>In future I want to be a manager/office work</td>
<td>1</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>18</td>
</tr>
<tr>
<td><strong>Reasons for adequate practical training</strong></td>
<td></td>
</tr>
<tr>
<td>I am able to acquire more skills</td>
<td>36</td>
</tr>
<tr>
<td>It enables me to be more creative</td>
<td>17</td>
</tr>
<tr>
<td>We are always taken through practical sessions</td>
<td>14</td>
</tr>
<tr>
<td>Makes one understand by watching and seeing practically</td>
<td>13</td>
</tr>
<tr>
<td>Provides opportunity to learn from other students</td>
<td>1</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>81</td>
</tr>
</tbody>
</table>

When students were asked the aspect of training they had been adequately prepared and the reasons for their belief, 69.9% mentioned practical training while 14.7 % and 14.0 % mentioned theoretical training and both theoretical and practical training respectively. It can
therefore be deduced that practical skills training was over-emphasized in training in community colleges. This finding suggests that teaching of Artisan and Craft courses in community colleges tends to focus more on acquisition of practical skills than impartation of knowledge to the students.

While this practice may be valuable for Artisan students who are required to be exposed to 90% practical work and 10% theoretical work, it disadvantages those Craft students who are required to be exposed to 40% practical work and 60% theoretical work (KIE, 2009). The finding however contradicts Ferej, et al.’s (2012) that showed that 67% of TVET teachers were more comfortable teaching theory than practical skills. However, the finding is in line with the TVET policy of the loading of practical skills and theoretical work in the teaching and learning of Artisan and Craft courses. Thus, the study found community colleges to be effectively implementing Artisan and Craft courses as per the TVET policy guidelines.

When asked about the areas emphasized most in their training, 44.4% of the students stated that practical training helped them to acquire more skills and 21.0% stated that it enhanced creativity. Other reasons mentioned were; it was the only training offered in the course (17.3%), it enhanced understanding through watching and doing (16.0%) and it provided opportunity to learn from other students (1.2%). The students who mentioned theoretical training gave such reasons as enhancing understanding of content (72.2%), content can be referred to later (11.1%), college allocates more time to theory (11.1%) and theoretical training enhances their preparation for managerial/office work in future (5.6%). Finally, all those who mentioned both theoretical and practical training stated that understanding theory enabled them to undertake practical work with ease.

It thus emerged that the major reason in favour of practical training was its ability to enhance acquisition of skills in the learners. Theoretical training to a large extent enabled the understanding of content taught while a combination of both theoretical and practical training
did not only enable students understand content taught but also eased the performance of the practical tasks. However, given that much of the training concentrated on practical training, it appears that the synergistic benefits accruing from both theoretical and practical training were not enjoyed by the students, a factor that could affect student outcomes at the end of the training.

The directors seemed to concur that the strategies had been effective in implementing Artisan and Craft courses. For instance, James said that students’ performance in examinations had improved over the past two years. However, when asked what led to some students dropping Artisan and Craft courses, he attributed it to lack of information about the content and demands of the courses by both parents and students prior to joining the courses and peer influence. He narrated:

For instance somebody who is studying welding in a technical college compares himself with somebody who is doing the same welding in a youth polytechnic…At the end of the day there is a lot of confusion especially to the parent and the student. Most of the people do not have an idea about the Artisan and Craft courses. When some realize Craft courses have got other subjects they end up dropping the course (James).

The director strongly argued that some students drop out of college due to criticism they got from their peers in other vocational institutions. This finding is at variance with reasons advanced in previous studies including students’ belief that their employability will not be significantly improved in the remainder of the course (Atchoarena & Delluc, 2001; Hill, 1991), family factors (Scott, Burns & Cooney, 1993; 1996), and financial considerations (Yorke, 1999; McInnis & James, 1995). Besides the aforesaid reasons, the current study established that peer pressure was causal factor in students’ dropping out of community colleges.

The interview data further revealed that some of the colleges collaborated with financial institutions to provide their graduates with start-up capital for businesses. For instance, Jane said
that the college linked her graduates to financiers who assisted them start businesses. Finally, the directors were of the opinion that external feedback attested to the fact that they were effective in implementation of Artisan and Craft courses in community colleges. For instance, one director expressed a lot of satisfaction with the positive feedback they receive from employers:

"We can be proud. Up to now we are able to get employment for all of them (the students). Secondly people who employ our students talk good about us. So when you hear somebody saying this particular person is good and we got her in that particular place it means success…We don’t advertise our college and we already have enough students! People advertise for us and we are very happy. At the same time we try to limit the number. We don’t take big groups. When you need quality things you need to be limited (Judy)."

This narrative revealed two strengths of community colleges: First, community colleges are able to secure employment for their students. This in effect implies that they are able to impart marketable skills, technical know-how and attitudes that respond to contemporary market demands (Republic of Kenya, 2005, 2012). Second, they ensure quality training in their programs that creates demand for their graduates. This confirms the position that Church sponsored institutions enjoy a high demand for their graduates due to inter alia sound management practices in the institutions (Republic of Kenya, 1999). Again, this finding resonates with the tenets of trust, reciprocity and mutuality as expounded in the capital theory of school effectiveness and improvement (Hargreaves, 2001) and Fullan’s position that quality is a crucial characteristic of the curriculum (Fullan, 2001). Tellingly, a quality-driven graduate is bound to exhibit high moral excellences, trustworthiness and right attitudes towards work which are inculcated through quality education and training.
4.5 Findings of the Study

4.5.1 Determinants of Artisan and Craft Curriculum Implementation

Although this section deals with the findings of the study based on the research questions posed, a presentation of the factors participants believed determined the effective of Artisan and Craft curriculum in Catholic Church sponsored community colleges in the study region is first made. This is to ease reference to Table 18 in cases where some of the findings in latter discussions are drawn from it. In particular, part of the findings on research questions 1, 2, 4, 5, 6 and 7 are based on the presentations in Table 18.

The students and teachers were required to indicate the extent to which they believed the selected determinants influenced the teaching of Artisan and Craft courses in their community colleges. The influence was ranked one, two and three for no influence, low influence and high influence respectively. The mean for each factor was computed and interpreted (M = 1.0-1.6 for no influence, M = 1.7-2.3 for low influence and M = 2.4-3.0 for high influence). The results are presented in Table 18.
Table 18

Students’ and Teachers’ Responses on Determinants of Effective Teaching and Learning of Artisan and Craft Courses

<table>
<thead>
<tr>
<th>Factor</th>
<th>High Influence</th>
<th>Low Influence</th>
<th>No Influence</th>
<th>M</th>
</tr>
</thead>
<tbody>
<tr>
<td>Students’ Responses</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Teachers’ attitudes towards the course</td>
<td>108</td>
<td>74.0</td>
<td>18</td>
<td>13</td>
</tr>
<tr>
<td>Students’ attitudes towards the course</td>
<td>102</td>
<td>69.9</td>
<td>28</td>
<td>13</td>
</tr>
<tr>
<td>Teaching strategies used</td>
<td>97</td>
<td>64.4</td>
<td>29</td>
<td>16</td>
</tr>
<tr>
<td>Adequacy of teaching &amp; learning resources</td>
<td>83</td>
<td>56.8</td>
<td>48</td>
<td>12</td>
</tr>
<tr>
<td>Class size/number of students per class</td>
<td>58</td>
<td>39.7</td>
<td>63</td>
<td>19</td>
</tr>
<tr>
<td>Industrial attachment</td>
<td>67</td>
<td>45.9</td>
<td>35</td>
<td>37</td>
</tr>
<tr>
<td>Field practice</td>
<td>57</td>
<td>39.0</td>
<td>53</td>
<td>33</td>
</tr>
<tr>
<td>Adequacy of physical facilities</td>
<td>44</td>
<td>30.1</td>
<td>70</td>
<td>22</td>
</tr>
<tr>
<td>College-community collaborations</td>
<td>46</td>
<td>32.2</td>
<td>51</td>
<td>46</td>
</tr>
<tr>
<td>Teachers’ Responses</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Teacher qualifications</td>
<td>16</td>
<td>88.9</td>
<td>-</td>
<td>1</td>
</tr>
<tr>
<td>Teaching experience</td>
<td>16</td>
<td>88.9</td>
<td>-</td>
<td>1</td>
</tr>
<tr>
<td>Teachers’ attitudes</td>
<td>16</td>
<td>88.9</td>
<td>-</td>
<td>1</td>
</tr>
<tr>
<td>Teacher motivation</td>
<td>15</td>
<td>83.3</td>
<td>-</td>
<td>1</td>
</tr>
<tr>
<td>Teaching and learning strategies</td>
<td>15</td>
<td>83.3</td>
<td>-</td>
<td>1</td>
</tr>
<tr>
<td>Teaching and learning resources</td>
<td>12</td>
<td>66.7</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>Adequacy of physical facilities</td>
<td>11</td>
<td>61.1</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>Teaching workload</td>
<td>11</td>
<td>61.1</td>
<td>6</td>
<td>-</td>
</tr>
<tr>
<td>Students’ attitudes</td>
<td>10</td>
<td>55.6</td>
<td>5</td>
<td>1</td>
</tr>
<tr>
<td>Class size</td>
<td>9</td>
<td>50.0</td>
<td>5</td>
<td>1</td>
</tr>
<tr>
<td>Attending in-service courses</td>
<td>9</td>
<td>50.0</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>College-community collaborations</td>
<td>7</td>
<td>38.9</td>
<td>5</td>
<td>2</td>
</tr>
</tbody>
</table>
4.5.2 Professional Qualifications of Artisan and Craft Teachers in Catholic Sponsored Community Colleges

The teachers were required to indicate the professional training they had acquired prior to teaching in community colleges. The professional qualifications were classified as certificate in education, diploma in education, bachelor of education and any other professional qualifications. The results are presented in Table 19.

Table 19

Teachers’ Professional Qualifications

<table>
<thead>
<tr>
<th>Professional Qualification</th>
<th>f</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Certificate in Technical Education</td>
<td>4</td>
<td>26.7</td>
</tr>
<tr>
<td>Diploma in Education</td>
<td>3</td>
<td>16.7</td>
</tr>
<tr>
<td>Diploma in Technical Education</td>
<td>5</td>
<td>27.8</td>
</tr>
<tr>
<td>Bachelor of Education</td>
<td>1</td>
<td>5.6</td>
</tr>
<tr>
<td>Masters of Law</td>
<td>1</td>
<td>5.6</td>
</tr>
<tr>
<td>None-Form Four</td>
<td>1</td>
<td>5.6</td>
</tr>
</tbody>
</table>

N = 15; two did not give a response.

As depicted in Table 19, except for two teachers, the rest had acquired professional training in teaching ranging from certificate to bachelors degree. Out of this number, four had Certificate in Teacher Education which is a minimum entry qualification to teach Artisan courses. Five and three teachers had Diploma in Education and Diploma in Technical Education qualifications respectively. The Diploma in Education holders had studied subjects that were relevant to teaching Artisan and Craft courses. Only one teacher had Bachelor of Education qualification and two had no professional qualifications in teaching. One had a Masters of Law qualification while another had Form Four qualification only. Overall, the findings showed that all the teachers except two were professionally trained to teach Artisan and Craft courses.
This finding is consistent with Ferej et al.’s (2012) finding that TVET teachers had the requisite minimum qualifications to teach in TVET programs. Similarly, the finding corroborates Hooker et al.’s (2011) findings which showed that majority of the TVET teachers were qualified to teach TVET courses. However, the finding contradicts the UNESCO National Education Sector Support Strategy (UNESS) for the Republic of Kenya 2010-2011 report that cited the lack of adequately trained tutors to teach at TVET institutions in Kenya (UNESCO, 2010). Furthermore, the finding is at variance with the findings of previous studies (Farstad, 2002; Koech, 1999; Sharma, 2008, Fietz, et al., 2007) that showed that TVET teachers in Kenya were inadequately prepared to discharge the task of curriculum implementation. Given the concurrence in findings with the more recent studies, it is clear that the challenge of inadequacy of trained teachers for TVET courses is not a concern for community colleges.

On interrogating the relevance of the pre-service training received, 16 (88.9%) of the teachers affirmed that the pre-service training had prepared them to competently teach Artisan and Craft courses. Noting that previous studies focused on in-service training, this finding provides new knowledge in the area of teacher training. The teacher’s teaching competency had been strengthened through the pre-service training they had acquired hence they could effectively implement the Artisan and Craft curriculum.

As shown in Table 19, 16 (88.9%) of the teachers believed that the professional qualifications of the teacher had a high influence on the teaching of Artisan and Craft curriculum in Catholic Church sponsored community colleges. Only one (5.6%) believed that teacher qualifications had no influence of the teaching of Artisan and Craft courses. Given that reviewed studies had not investigated the influence of teacher qualifications on Artisan and Craft curriculum implementation, this finding is a presents a new thinking of how to effectively implement the Artisan and Craft curriculum. The earlier finding on the competency of the teachers had shown that they believed they had been competently prepared in the pre-service
training to implement the curriculum and as such the community colleges had qualified teachers
to implement the Artisan and Craft curriculum.

4.5.3 Teaching Experiences of Artisan and Craft Teachers in Catholic Sponsored

Community Colleges

The study further sought to establish the teaching experience of teachers in Catholic Church
sponsored community colleges. The teaching experience was measured by the number of years
the teachers had taught Artisan and Craft courses. The results are as presented in Table 20.

Table 20

*Teaching Experience in Years*

<table>
<thead>
<tr>
<th>Length of Service</th>
<th>Present College</th>
<th>Other Tertiary Colleges</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>f</td>
<td>%</td>
</tr>
<tr>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>1-5</td>
<td>7</td>
<td>38.9</td>
</tr>
<tr>
<td>6-10</td>
<td>7</td>
<td>38.9</td>
</tr>
<tr>
<td>11-15</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>16-20</td>
<td>3</td>
<td>16.7</td>
</tr>
<tr>
<td>21-25</td>
<td>1</td>
<td>5.6</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>18</strong></td>
<td><strong>100.0</strong></td>
</tr>
</tbody>
</table>

According to Table 20, 67.8% of the teachers had teaching experience not exceeding ten
years in the community colleges or other tertiary institutions in which they had previously
worked. Only 16.7% of the teachers had between 16-20 years teaching experience in community
college and one had more than twenty years teaching experience in community colleges. The
mean teaching experience was 8.6 years. Despite the large variations in the teaching experience
for individual teachers (SD = 6.2), the teaching experience was considered adequate length of
time for the teachers to develop meaningful experiences about teaching in community colleges.
The finding, however, contradicts Ferej (2012) study on the challenges of quality and relevance
in TVET teacher education in Kenya which established that only 16 % of the TVET teachers had work experience of over three years. This therefore shows that teachers in the community colleges had more teaching experience than those in other TVET institutions in Kenya. Without gainsaying, long teaching experience enables the teacher to effectively and efficiently implement the curriculum. An examination of Table 18 reveals that 16 (88.9%) of the teachers believed that teachers’ teaching experience had a high influence on the effective implementation of Artisan and Craft curriculum in community colleges.

When asked the level at which they taught, 55.6% of the teachers indicated that they taught both Artisan and Craft courses while the remaining 44.4% indicated that they taught Artisan courses only. A scrutiny of the courses offered in the colleges revealed that Artisan courses had been mounted in all the community colleges whereas Craft courses were offered on a small scale in some of the colleges in which case those who taught Artisan courses also taught Craft courses.

The implications of this finding are twofold: First, the teachers who taught both Artisan and Craft courses had synergistic gains in knowledge emerging from the continuity of content from Artisan to Craft. This ultimately developed their competence in teaching at any of the two levels. Secondly, while it may be argued that teaching at both levels enriched their experience in handling students across the levels, there was a likelihood of superficial exposure of students to content as the teachers would be more competent in one and not all the levels of teaching the courses. This eventually would limit the teacher’s teaching effectiveness hence impinging the implementation of Artisan and Craft curriculum.

The teachers were also required to indicate the Artisan courses they taught in the community colleges. The results are presented in Table 21.
**Table 21**

*Artisan Courses Taught by Teachers*

<table>
<thead>
<tr>
<th>Course</th>
<th>Number of Teachers Teaching the Course</th>
<th>Male</th>
<th>Female</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>f</td>
<td>%</td>
<td>f</td>
</tr>
<tr>
<td>Electricity</td>
<td></td>
<td>3</td>
<td>16.7</td>
<td>-</td>
</tr>
<tr>
<td>Motor Vehicle Mechanics</td>
<td></td>
<td>2</td>
<td>11.1</td>
<td>-</td>
</tr>
<tr>
<td>Science</td>
<td></td>
<td>2</td>
<td>11.1</td>
<td>2</td>
</tr>
<tr>
<td>Applied Geometry</td>
<td></td>
<td>3</td>
<td>16.7</td>
<td>1</td>
</tr>
<tr>
<td>Tailoring/Garment-making</td>
<td></td>
<td>2</td>
<td>11.1</td>
<td>2</td>
</tr>
<tr>
<td>Hairdressing and Beauty Therapy</td>
<td></td>
<td>2</td>
<td>11.1</td>
<td>-</td>
</tr>
<tr>
<td>Mathematics</td>
<td></td>
<td>1</td>
<td>5.6</td>
<td>1</td>
</tr>
<tr>
<td>Trade Theory</td>
<td></td>
<td>1</td>
<td>5.6</td>
<td>2</td>
</tr>
<tr>
<td>Life Skills</td>
<td></td>
<td>1</td>
<td>5.6</td>
<td>2</td>
</tr>
<tr>
<td>Technical Drawing</td>
<td></td>
<td>-</td>
<td>-</td>
<td>1</td>
</tr>
<tr>
<td>Fashion and Design</td>
<td></td>
<td>-</td>
<td>-</td>
<td>1</td>
</tr>
<tr>
<td>Practical sessions</td>
<td></td>
<td>8</td>
<td>44.4</td>
<td>6</td>
</tr>
<tr>
<td>Food Processing/Baking</td>
<td></td>
<td>-</td>
<td>-</td>
<td>3</td>
</tr>
<tr>
<td>Catering and House Management</td>
<td></td>
<td>-</td>
<td>-</td>
<td>3</td>
</tr>
</tbody>
</table>

According to the results in Table 21, in most of the Artisan courses, there were no marked gender disparities in regard to teaching of the courses. Overall, there were as many female teachers in the traditionally perceived male courses as there were male teachers in the traditionally perceived female courses. These included such courses as science, tailoring and mathematics. However, on one hand, electricity, motor vehicle mechanics and hairdressing and
beauty were taught by male teachers only. On the other hand, food processing, catering and house management, fashion and design, technical drawing were taught by female teachers only.

The aforementioned finding is indicative of the finding of Hicks, Kremer, Mbiti, and Miguel (2011) which showed that courses such as motor vehicle mechanic, driving and masonry were popular among male students whereas tailoring, hairdressing and beauty, secretarial and computing were popular among female students. However, this trend was challenged in two subjects namely hairdressing and beauty therapy and technical drawing. Hairdressing and beauty therapy was taught by male teachers while technical drawing was taught by female teachers contrary to the belief that the former is for females and the latter for males.

This is a departure from the traditional practice where male teachers and female teachers taught the traditionally perceived male courses and female courses respectively. The finding demonstrates that the teachers’ gender is not a determinant of the course one teaches in the community college. The possible reason for this uncommon trend would be that the teachers were inspired by the conviction to become role models for the youth in the non-traditional courses offered in community colleges.

4.5.4 Teaching Strategies That Enhance Effective Implementation of Artisan and Craft Curriculum in Catholic Sponsored Community Colleges

This research question was also posed to students, teachers and directors of the community colleges. Students’ responses and teachers’ responses are presented in Table 22 and Table 23 respectively. The responses from the directors are discussed alongside the findings from students and teachers.

4.5.4.1 Students’ Views on the Effectiveness of the Strategies Used in Teaching Artisan and Craft Courses

In order to establish the effectiveness of teaching strategies in Artisan and Craft courses, students were required to state the teaching strategies that made them best understand the
Artisan and Craft courses. The responses were rated (1 = very low, 2 = low, 3 = high and 4 = very high) and the mean was computed for each strategy (where M = 1.0-1.7 implied very low understanding, M = 1.8-2.5 implied low understanding, M = 2.6-3.3 implied high understanding and M = 3.4-4.0 implied very high understanding). The results are presented in Table 22.

**Table 22**

*Students’ Responses on Teaching Strategies That Enhance Understanding*

<table>
<thead>
<tr>
<th>Teaching Strategy Used</th>
<th>Very High</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>f</strong></td>
<td><strong>%</strong></td>
<td><strong>f</strong></td>
<td><strong>%</strong></td>
<td><strong>f</strong></td>
<td><strong>%</strong></td>
<td><strong>M</strong></td>
</tr>
<tr>
<td>Question and answer</td>
<td>63</td>
<td>43.2</td>
<td>63</td>
<td>43.2</td>
<td>14</td>
<td>9.6</td>
<td>3</td>
</tr>
<tr>
<td>Demonstration method</td>
<td>56</td>
<td>38.4</td>
<td>52</td>
<td>35.6</td>
<td>23</td>
<td>15.8</td>
<td>11</td>
</tr>
<tr>
<td>Group discussion</td>
<td>48</td>
<td>32.9</td>
<td>64</td>
<td>43.8</td>
<td>23</td>
<td>15.8</td>
<td>10</td>
</tr>
<tr>
<td>Project work</td>
<td>47</td>
<td>32.2</td>
<td>51</td>
<td>34.9</td>
<td>15</td>
<td>10.3</td>
<td>20</td>
</tr>
<tr>
<td>Problem solving</td>
<td>55</td>
<td>37.7</td>
<td>36</td>
<td>24.7</td>
<td>26</td>
<td>17.8</td>
<td>23</td>
</tr>
<tr>
<td>Brainstorming</td>
<td>32</td>
<td>21.9</td>
<td>60</td>
<td>41.1</td>
<td>26</td>
<td>17.8</td>
<td>23</td>
</tr>
<tr>
<td>Use of resource persons</td>
<td>21</td>
<td>14.4</td>
<td>34</td>
<td>23.3</td>
<td>49</td>
<td>33.6</td>
<td>35</td>
</tr>
<tr>
<td>Lecture method</td>
<td>18</td>
<td>12.3</td>
<td>50</td>
<td>34.3</td>
<td>33</td>
<td>22.6</td>
<td>44</td>
</tr>
<tr>
<td>Field visits</td>
<td>17</td>
<td>11.6</td>
<td>45</td>
<td>30.8</td>
<td>27</td>
<td>18.5</td>
<td>55</td>
</tr>
</tbody>
</table>

The teaching strategies that students stated made them to highly understand the subjects taught included question and answer method (M= 3.30), demonstration method (M = 3.08), group discussion (M = 3.03), project work (M = 2.94) problem solving method (M = 2.88) and brainstorming (M = 2.77). It can thus be noted that effective learning did occur when strategies that allowed for high learner participation in the teaching and learning process were used. On the contrary, the use of resource persons (M = 2.29), lecture method (M = 2.29) and field visits (M = 2.17) resulted in low understanding of subjects taught to the students. However, the interviews with directors of the community colleges showed that field visits and use of resource...
persons were perhaps misunderstood by students due to their infrequent use in teaching Artisan and Craft courses in community colleges.

4.5.4.2 Teachers’ Rating of the Effectiveness of the Strategies Used in Teaching Artisan and Craft Courses

The teachers’ responses on the effectiveness of the strategies they used in teaching Artisan and Craft courses are presented in Table 23. The effectiveness was rated (1 = very ineffective, 2 = ineffective, 3 = effective and 4 = very effective), mean for each strategy computed and interpreted (M = 1.0-1.7 for very ineffective, M = 1.8-2.5 for ineffective, M = 2.6-3.3 for effective and M = 3.4-4.0 for very effective).

Table 23

Teachers’ Responses on Effectiveness of Strategies in Teaching Artisan and Craft Courses

<table>
<thead>
<tr>
<th>Strategy</th>
<th>Level of Effectiveness</th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>VE</td>
<td>E</td>
<td>I</td>
<td>VI</td>
<td>M</td>
</tr>
<tr>
<td></td>
<td>f  %</td>
<td>f  %</td>
<td>f  %</td>
<td>f  %</td>
<td></td>
</tr>
<tr>
<td>Demonstration method</td>
<td>11  61.1</td>
<td>6   33.3</td>
<td>0   0</td>
<td>1   5.6</td>
<td>3.50</td>
</tr>
<tr>
<td>Question and answer</td>
<td>11  61.1</td>
<td>5   27.8</td>
<td>2   11.1</td>
<td>0   0</td>
<td>3.50</td>
</tr>
<tr>
<td>Group discussion</td>
<td>7    38.9</td>
<td>11  61.1</td>
<td>0   0</td>
<td>0   0</td>
<td>3.39</td>
</tr>
<tr>
<td>Problem solving approach</td>
<td>3    16.7</td>
<td>13  72.2</td>
<td>0   0</td>
<td>0   0</td>
<td>3.19</td>
</tr>
<tr>
<td>Project work</td>
<td>5    27.8</td>
<td>10  55.6</td>
<td>2   11.1</td>
<td>0   0</td>
<td>3.17</td>
</tr>
<tr>
<td>Brainstorming</td>
<td>4    22.2</td>
<td>9   50.0</td>
<td>2   11.1</td>
<td>0   0</td>
<td>3.13</td>
</tr>
<tr>
<td>Field visits</td>
<td>4    22.2</td>
<td>7   38.9</td>
<td>2   11.1</td>
<td>2   11.1</td>
<td>2.87</td>
</tr>
<tr>
<td>Use of resource persons</td>
<td>3    16.7</td>
<td>7   38.9</td>
<td>2   11.1</td>
<td>2   11.1</td>
<td>2.79</td>
</tr>
<tr>
<td>Lecture method</td>
<td>2    11.1</td>
<td>8   44.4</td>
<td>3   16.7</td>
<td>2   11.1</td>
<td>2.67</td>
</tr>
</tbody>
</table>

Note. VE = Very Effective; E = Effective; I = Ineffective; VI = Very Ineffective; N = 18

Table 23 shows that teachers rated demonstration method (M = 3.50), question and answer method (M = 3.50) and group discussion (M = 3.39) to be very effective in teaching
Artisan and Craft courses. In addition, they rated all the other strategies to be effective in teaching Artisan and Craft courses. Very few teachers considered the above-mentioned strategies as being either very ineffective or ineffective. When asked why they believed the strategies were effective, 66.7% of the teachers stated that the strategies helped students to quickly comprehend concepts and 27.8% explained that the strategies helped students to handle different issues. Thus it can be concluded that overall, the strategies were effective in teaching Artisan and Craft courses.

A comparative analysis of teachers’ and students’ responses on effectiveness of teaching strategies used shows that both agreed on the strategies that were effective in the teaching and learning of Artisan and Craft courses. According to the two groups of participants, question and answer, demonstration, problem-solving, group discussion and project work enhance the student understanding of the courses hence effective in the implementation of Artisan and Craft curriculum. However, while 55.6% of the teachers believed that lecture method was effective in teaching Artisan and Craft courses, 52.7% of the students believed that it had a low influence in enhancing their understanding of Artisan and Craft courses. This shows a divergence of opinion between teachers and students on the effectiveness of the teaching strategies used in Artisan and Craft courses.

On the contrary, there is a concurrence on views from the students and the directors regarding effectiveness of teaching strategies used with the latter expressively arguing in favour of learner-centered teaching strategies. The directors said that learner-centered strategies resulted in improved students’ performance and productivity, sustained students’ attention by making the lessons more lively and interesting, and enabled students to practice the skills learnt in class. Based on the foregoing discussion, the study deduced that the teaching strategies, especially learner-centered strategies, were effective in implementation of the Artisan and Craft courses in community colleges. Learner-centered strategies provide learners with opportunities
to not only discover new ideas and interact with resources but also to interact among themselves and with teachers in building strong relationships and working as a team. Without belaboring the value of teamwork and good teacher-student relationship, the strategy could enhance student outcomes. Both Hargreaves and Fullan argue that effective teaching and learning is enhanced in contexts that promote relationship building and collaborative learning environments.

4.5.5 Effectiveness of Teaching and Learning Strategies in Enhancing the Implementation of Artisan and Craft Curriculum in Catholic Sponsored Community Colleges

This research question was posed to the students, teachers and directors of the community colleges. These participants mentioned a number of strategies and their effectiveness in the implementation of Artisan and Craft courses. The findings are discussed in the subsequent sections.

4.5.5.1 Frequency of Use of Teaching and Learning Strategies in Community Colleges

In order to determine the strategies used in teaching Artisan and Craft courses in community colleges, students and teachers were required to indicate the frequency of use of the various strategies. The frequency of use was graded; never, often and very often. The responses were ranked 1, 2 and 3 respectively for never, often and very often. These ranks were then used to compute the mean usage of each strategy. The means were interpreted as least frequently used (M = 1.0 – 1.6), frequently used (M = 1.7-2.3) and most frequently used (M = 2.4-3.0). The results are presented in Table 24.

According to the students, the most frequently used teaching strategies were question and answer method (M = 2.59) and demonstration method (M = 2.35). All the other strategies were frequently used and none was least used. However, the responses of the teachers showed an increase in the number of the most frequently used teaching strategies compared to students’ responses.
Table 24

Students’ and Teachers’ Responses on Frequency of use of Teaching Strategies

<table>
<thead>
<tr>
<th>Teaching Strategy</th>
<th>Frequency of use</th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Never</td>
<td>%</td>
<td>Often</td>
<td>%</td>
<td>Very Often</td>
</tr>
<tr>
<td>Question and answer</td>
<td>3</td>
<td>2.1</td>
<td>52</td>
<td>35.6</td>
<td>87</td>
</tr>
<tr>
<td>Demonstration method</td>
<td>18</td>
<td>12.3</td>
<td>56</td>
<td>38.4</td>
<td>67</td>
</tr>
<tr>
<td>Group discussion</td>
<td>17</td>
<td>11.6</td>
<td>76</td>
<td>52.1</td>
<td>50</td>
</tr>
<tr>
<td>Problem solving approach</td>
<td>22</td>
<td>15.1</td>
<td>68</td>
<td>46.6</td>
<td>51</td>
</tr>
<tr>
<td>Project work</td>
<td>27</td>
<td>18.5</td>
<td>55</td>
<td>37.7</td>
<td>49</td>
</tr>
<tr>
<td>Brainstorming</td>
<td>25</td>
<td>17.1</td>
<td>68</td>
<td>46.6</td>
<td>47</td>
</tr>
<tr>
<td>Field visits</td>
<td>61</td>
<td>41.8</td>
<td>54</td>
<td>37.0</td>
<td>27</td>
</tr>
<tr>
<td>Use of resource persons</td>
<td>58</td>
<td>39.7</td>
<td>64</td>
<td>43.8</td>
<td>22</td>
</tr>
<tr>
<td>Lecture method</td>
<td>67</td>
<td>45.9</td>
<td>58</td>
<td>39.7</td>
<td>18</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Teachers’ Responses</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Group discussion</td>
<td>11</td>
<td>61.1</td>
<td>7</td>
<td>38.9</td>
<td>-</td>
</tr>
<tr>
<td>Question and answer</td>
<td>11</td>
<td>61.1</td>
<td>7</td>
<td>38.9</td>
<td>-</td>
</tr>
<tr>
<td>Demonstration method</td>
<td>10</td>
<td>55.6</td>
<td>7</td>
<td>38.9</td>
<td>-</td>
</tr>
<tr>
<td>Brainstorming</td>
<td>7</td>
<td>38.9</td>
<td>9</td>
<td>50.0</td>
<td>-</td>
</tr>
<tr>
<td>Project work</td>
<td>7</td>
<td>38.9</td>
<td>10</td>
<td>55.6</td>
<td>-</td>
</tr>
<tr>
<td>Problem solving approach</td>
<td>4</td>
<td>22.2</td>
<td>12</td>
<td>66.7</td>
<td>1</td>
</tr>
<tr>
<td>Lecture method</td>
<td>5</td>
<td>27.8</td>
<td>9</td>
<td>50.0</td>
<td>3</td>
</tr>
<tr>
<td>Field visits</td>
<td>2</td>
<td>11.1</td>
<td>10</td>
<td>55.6</td>
<td>5</td>
</tr>
<tr>
<td>Resource persons</td>
<td>1</td>
<td>5.6</td>
<td>7</td>
<td>38.9</td>
<td>7</td>
</tr>
</tbody>
</table>

According to the teachers, the most frequently used strategies were; group discussion (M = 2.61), question and answer (M = 2.61), demonstration method (M = 2.59), brainstorming (M = 2.44) and project work (M = 2.41). These strategies are largely learner-centered and thus
provide experiential and interactive learning experiences to the learners hence effective strategies for teaching skill-oriented courses like Artisan and Craft. The strategies teachers cited as frequently used included problem solving approach (M = 2.18), lecture method (M = 2.12) and field visits (M = 1.82). Only one strategy (use of resource persons, M = 1.60) was least used by the teachers in contrast to students’ view that it was frequently used by the teachers.

The finding shows that while teachers mentioned that they most frequently used group discussion, brainstorming and project work in teaching Artisan and Craft courses, students stated that these strategies were only frequently used. Of greater concern is the students’ belief that teachers frequently used resource persons whereas the teachers mentioned that they least used the strategy. This differential rating of the strategies between students and teachers could have been caused by the fact that either the students were not sure of the strategies or the teachers tended to rate the strategies higher than they actually used them. The inadequate use of resource persons would require that community colleges enhance collaborations with the surrounding community to tap the expertise and experiences of the human capital existing in the community.

However, the low utilization of the resource persons as established by the study may pose a challenge to the effective implementation of Artisan and Craft courses. Previous studies had shown that collaborative teaching strategies improve teachers’ teaching effectiveness and the quality of teacher-student interactions which eventually influence students’ educational outcomes (Desimone, et. al., 2004; Olatoye, Aderogba & Aanu, 2011; Sava, 2001). As already mentioned, the frequently used and most frequently used strategies embody learner-centered approaches to teaching. Thus, it can be deduced that collaborative teaching strategies are at the centre of Artisan and Craft curriculum implementation in community colleges.

The teachers also mentioned other strategies they employed in teaching Artisan and Craft courses in community colleges. The findings are presented in Table 25.
Table 25

**Teachers’ Responses on Other Strategies Used in Teaching Artisan and Craft Courses**

<table>
<thead>
<tr>
<th>Strategy</th>
<th>f</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Holding workshops</td>
<td>3</td>
<td>16.7</td>
</tr>
<tr>
<td>Borrowing materials from other colleges</td>
<td>2</td>
<td>11.1</td>
</tr>
<tr>
<td>Giving regular assignments/ Class exercises</td>
<td>6</td>
<td>33.3</td>
</tr>
<tr>
<td>Use of peer teaching</td>
<td>1</td>
<td>5.6</td>
</tr>
<tr>
<td>Benchmarking against other colleges</td>
<td>1</td>
<td>5.6</td>
</tr>
</tbody>
</table>

Note: N = 18

One of the other strategies teachers used strategy in teaching Artisan and Craft courses was giving regular assignments specifically class exercises to students. In addition, they used other strategies such as holding workshops and borrowing materials from other similar institutions for use. An analysis of the strategies identified by both the students and teachers showed a convergence on the most used and least used strategies. For each of the them, group discussion, question and answer, problem-solving approach, project work and demonstration methods were mostly used while lecture methods, use of resource persons and field visits were least used in teaching Artisan and Craft courses. Thus, learner-centered strategies were used more often than teacher-centered strategies in teaching Artisan and Craft courses. As earlier discussed, these strategies embody collaborative teaching approaches which have been shown to improve teacher effectiveness and students’ educational outcomes.

From these findings, it emerges that majority of the methods used in teaching Artisan and Craft courses in community colleges were basically for teaching the practical aspect(s) of the content more than the theoretical aspect(s). For instance, lecture method (least used) is appropriate in teaching theoretical knowledge whereas demonstration method (most used) is appropriate in teaching practical skills. This finding therefore contradicts that of Ferej et al.
(2012) which showed that two thirds (67%) of the TVET teachers were more comfortable teaching theory than practical skills. A possible explanation for this variance in teaching methods is that community colleges, unlike other TVET institutions, lay greater emphasis of acquisition of practical skills to enable their graduates to earn a living or gain employment (CORAT, 2011; EACCS, 2010).

In order to further interrogate the teaching strategies used in community colleges, the same question was posed to the directors of the community colleges during the interviews. Information from the interviews with the directors confirmed the frequent use of learner-centered strategies by teachers in teaching Artisan and Craft courses as captured in the words of one of the directors:

In our college here, because of the level of understanding of the students we have, mostly we normally use what we call the practical approach to teaching. In other words the teacher shows them (students) what to do just briefly and then he/she lets them do (James).

In the same vein, John, while supporting the learner-centered strategies alluded that the teachers used discovery technique where learners were facilitated to discover their own abilities and talents. Indeed the director said:

The methods of teaching which they (teachers) use, is individual based…However, we also teach and help them (students) so that they are able to discover their own talents…It is the teacher discovering the needs of the student and after discovering them the student is able to fit in at different levels (John).

However, Jane seemed to stress the strength of teacher-centered strategies over learner-centered strategies. The director explained that the teacher was instrumental in exposing the student to new knowledge before the student could be left to explore the skills. The teachers
thus used informal lectures to expose learners to new information that they were not privy to prior to joining the college. The director explained:

…Because these students are here to learn skills they did not have, when they come here they get informed first. Once they are informed they can then share their experiences (Jane).

When asked about other strategies that were used to teach Artisan and Craft courses in the community colleges, James said that the college sometimes organized field trips to neighboring factories. This strategy gave the students an opportunity to relate what they had learnt in class with reality in the field. However, John explained that the college had devised a number of strategies including holding regular seminars and workshops to upgrade teachers’ knowledge and skills, and taking parents through orientation sessions to familiarize them with the programs their students go through. In addition the college organized mandatory internships for students before they transit into the job market whether self-employment or otherwise. The directors emphatically expressed that the induction of the teacher was a precondition for teaching in community colleges as captured in the following narrative:

The policy in community college is that the teacher is the first student of the community college. For instance, life skills is taught in our community college. The teacher must be the first student of life skills. In order to strategize our aims and goals in a community college, the teacher himself must have undergone such training. We have constant seminars and workshops for the teachers as a way of strategizing so that they are able to be relevant to the students and students are relevant to them as well (John).

Similarly, Jane seemed to emphasize the focus on the teacher as a strategy in Artisan and Craft curriculum implementation. The director explained that the college adopted such strategies as motivation of teachers, forging good teacher-student relationships by holding joint workshops, performing teacher evaluation and student evaluation of teachers at the end of every
term. These strategies are underpinned in Fullan’s theory wherein he underscores the value of peer assistance programs, post-project meetings, visits and consultations, and learning fairs in knowledge building and sharing. Nevertheless, strategy focus again shifted to the students where the college would track students’ progress and place them for employment upon completion of course as captured in the following excerpt:

We try to follow on the girls. There is one who follows the file of the girls. We train them but also get jobs for them. There is a file for each girl. Even the attachment from outside, we follow them and get all their recommendation letters (Judy).

Although employment placement is a positive move in ensuring immediate returns for the students’ investment in training, it may create in the students a culture of dependency on the community colleges for employment placement rather than developing a spirit of initiative and entrepreneurship in the graduates. This undermines the TVET objective of developing entrepreneurial skills and positive attitudes in students for self employment (Maina, 2007; Ngware, Onsomu & Manda, 2005; Republic of Kenya, 1999). Therefore, the finding revealed that community colleges were yet to fully promote the TVET objective of enhancing entrepreneurship and self employment among their graduates. Furthermore, with the soaring unemployment levels in the country, securing employment for their graduates would remain a daunting task for the community colleges. In discussion of the concept of leverage, Hargreaves warns that when teachers invest a lot of energy in students with little impact on students, they definitely suffer frustration and exhaustion. Thus community colleges strategy of securing employment for their graduates would result in a frustrated teaching force hence slowing down the implementation of the curriculum.

4.5.5.2 Motivation of Teaching Staff

The directors were further required to comment on the level of motivation of the Artisan and Craft teachers in the community colleges. The directors had a consensus view that the
teachers’ level of motivation was low and cited low remuneration as a major cause of the low motivation levels. For instance, James said that the teaching staff motivation was rather low due to the meager salaries since teachers’ salaries were dependent on the students’ payment of fees that could not sustain better salaries. However, the low remuneration did not deter the teachers from effectively executing their teaching tasks. As expressed by John, the teachers were motivated by students’ good performance in the Artisan and Craft courses. In addition, the colleges would occasionally offer them incentives in the form of prizes and gifts, special recognition as well as allowing them to take some courses internally. Similarly, both Jane and Judy affirmed that despite the relatively low salaries, the teachers were motivated to teach.

In general, all the directors agreed that staff motivation influenced the implementation of Artisan and Craft courses in the community colleges. In particular, Jane said that low staff motivation led to low morale among the teaching staff. This corroborates Abebe (2012) finding that low pay and benefits led to low motivation of TVET teachers in Ethiopia. The finding echoes Hargreaves’ (2001) argument that leverage concepts such as inadequate teacher motivation may impinge the effective implementation of the curriculum. Hargreaves posits that inadequate staff motivation leads to a frustrated workforce, non-sustained improvement and employee disapproval of the implementation process. Likewise, low teacher motivation is likely to result in ineffective implementation of the Artisan and Craft curriculum.

The role of staff motivation in curriculum implementation is also underscored in the theory of change (Fullan, 2001). The theorist argues that job satisfaction shapes the process of curriculum implementation. However, given that the directors agreed that the teachers were motivated to teach despite the low remuneration for teachers, it suffices to conclude that teacher motivation positively contributed to effective implementation of Artisan and Craft curriculum in the community colleges.
4.5.5.3 Teacher-Student Interactions

Teachers further rated the teacher-student interactions in their respective community colleges. The results are presented in Table 26.

Table 26

*Teachers’ Rating of Teacher-Student Interactions*

<table>
<thead>
<tr>
<th>Level of Teacher-Student Interactions</th>
<th>f</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low</td>
<td>1</td>
<td>5.6</td>
</tr>
<tr>
<td>Moderate</td>
<td>13</td>
<td>72.2</td>
</tr>
<tr>
<td>High</td>
<td>4</td>
<td>22.2</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>18</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Table 26 shows that 72.2% of the teachers rated teacher-student interactions as moderate, 22.2% rated the interactions as high while only 5.6% rated the interactions as low. This therefore suggests that there exist moderate teacher-student relationships in community colleges which can translate into effective implementation of Artisan and Craft courses. Moderate teacher-student interactions would permit a healthy intellectual dialogue between the teachers and students which would eventually translate into improved students’ academic achievement (Sava, 2001). The finding is in line with Fullan’s (2001) emphasis that healthy interpersonal relationships arise from open communication, trust, support and help. It is also in agreement with Hargreaves’ (2001) argument that high levels of trust between teachers and students with strong norms of reciprocity and mutuality are bound to influence curriculum implementation.

When asked the strategies they used to enhance teacher-student interactions in the community colleges, the teachers mentioned a number of strategies as presented in Table 27. The most commonly used strategy by the teachers was toning down to the students’ level of understanding. Other strategies used included being friendly and helpful to students at all times.
An examination of these strategies revealed that student-friendly teaching strategies were employed by the teachers.

**Table 27**

*Strategies Teachers use to Improve Teacher-Student Interactions*

<table>
<thead>
<tr>
<th>Strategy</th>
<th>f</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Toning down to students’ level of understanding</td>
<td>10</td>
<td>55.6</td>
</tr>
<tr>
<td>Being friendly and helpful to students</td>
<td>5</td>
<td>27.8</td>
</tr>
<tr>
<td>Listening patiently to students</td>
<td>5</td>
<td>27.8</td>
</tr>
<tr>
<td>Knowing students’ background</td>
<td>2</td>
<td>11.1</td>
</tr>
<tr>
<td>Holding regular guidance and counseling sessions</td>
<td>2</td>
<td>11.1</td>
</tr>
</tbody>
</table>

Note. N = 18

This parallels findings of Desimone et al. (2004) and Olatoye et al. (2011) which established that a friendly learning environment that is grounded in collaborative teaching and learning strategies promotes effective teaching and learning hence effective curriculum implementation. Hargreaves (2001) argues that strong networks and relations among the stakeholders of an institution not only enrich its social capital but also strengthen its intellectual capital. He further advocates for high levels of trust with norms of reciprocity and mutuality among stakeholders—between head teacher and staff, among teachers, between teachers and students, between teachers and parents and among students. Thus, it can be argued that teachers in community colleges had embraced friendly relations with students that were likely to translate in effective implementation of Artisan and Craft curriculum.

**4.5.5.4 Attending of In-service Courses in Artisan and Craft Teaching**

When teachers were asked whether they attended any in-service courses in Artisan and Craft teaching, 72.2% of the teachers confirmed that they attended in-service courses. Out of this percentage, 50% indicated that they attended in-service courses once a term while 22.2%
indicated that they attended once a year. These findings suggest an average participation of teachers in in-service training since only 50% attended the trainings once a term.

However, this finding contradicts Indoshi, et al.’s (2010) finding that Art and Design teachers did not have in-service training to improve their teaching Art and Design in secondary schools. Thus, the finding implies teachers in community colleges were exposed to in-service trainings which enabled them to effectively implement the Artisan and Craft curriculum. In-service courses are particularly important in updating the knowledge, pedagogical skills and attitudes of teachers and enabling them adjust to the changing world of knowledge. Indeed, Cohen and Hill (2001) and Esa, et al. (n.d) contend that in-service training not only enable teachers to teach well but it also enhances students’ achievement. When asked the extent to which the in-service courses covered the content that was relevant to teaching Artisan and Craft courses, 55.6% of the teachers indicated to a large extent and only 16.7% indicated to a small extent. This finding shows that in-service courses are relevant to the implementation of Artisan and Craft courses and would therefore be beneficial if they are held regularly with the participation of all Artisan and Craft teachers.

4.5.5.5 Teachers’ Continuous Professional Development

The teachers were also asked to indicate whether they were enrolled in further education programs. Only four teachers mentioned being currently enrolled for further studies and all of them were self-sponsored students. Out of these, two were enrolled for Bachelor of Education, one enrolled for Diploma in Technical Education and the remaining one enrolled for a Driving course. This finding shows a low level of teacher participation in continuous professional development (CPD). An interview with the directors confirmed that the colleges did not have CPD for their teachers, a probable reason for the low participation of teachers in CPD which hinders effective implementation of Artisan and Craft courses.
The benefits of participation in CPD cannot be gainsaid. CPD helps to improve the teachers’ knowledge, skills and performance (Banks & Mayes, 2001). In addition, CPD helps teachers integrate technology into their teaching (Grant, 1997) and promotes teacher effectiveness resulting in improved student achievement (Guskey, 2000). The finding is in conformity with Hargreaves’ theory and Fullan’s theory. Fullan (2001) emphasized that guidance and encouragement of teachers to adopt and adapt initiatives to meet the needs of their students (Fullan, 2001) is critical in developing effective teachers. Similarly, Hargreaves (2001) underscored the importance of CPD for teachers. In particular, he advanced that CPD necessitates the mentoring of teachers and provides them an opportunity to develop and test new teaching strategies that lead to high cognitive outcomes. It therefore suggests that inadequate teacher participation in CPD impinged Artisan and Craft curriculum implementation in the community colleges.

4.5.5.6 Industrial Attachment/Field Practice

This question was responded to by the students. The students mentioned that both industrial attachment and field practice had low influence on the implementation of Artisan and craft curriculum (M = 2.22 and M = 2.17 for industrial attachment and field practice respectively) (see Table 18). In fact, more students stated it had no influence (25.3%) than those who believed it had low influence (24.0%). Similarly, field practice appeared to have low influence on the learning of Artisan and Craft courses.

For instance, 36.3% and 22.6% of the students believed that field practice had low influence and no influence on the learning of Artisan and Craft courses respectively. This finding shows that, from students’ point of view, industrial attachment/field practice did not have a high influence on the learning of Artisan and Craft courses in community colleges. This view may be counterproductive to the effective implementation of Artisan and Craft curriculum
since relying solely on the practical skill training students undergo in community colleges may not fully prepare them for the requirements at the world of work.

4.5.5.7 Class Size for Artisan and Craft Courses

With regard to class size (the number of students per class), Table 18 revealed that while students believed that class size had low influence (M = 2.28), teachers believed that it had high influence on the teaching and learning of Artisan and Craft courses (M = 2.53). Thus, in students’ view, class size did not have a high influence contrary to the teachers’ viewpoint. Although previous studies such as Nyerere (2009), Mwinzi and Kelemba (2009), Ngumbi (2004) and Canagarajah, Dar and Raju’s (2002) established low enrolment levels for courses in TVET institutions, the influence of enrolment on subsequent teaching and learning process had not been investigated.

Thus, the finding yields useful information on understanding how student enrolment in Artisan and Craft courses affects the implementation of the same in community colleges. The number of students in a class will probably dictate the teaching strategies adopted and the level of students’ participation in the teaching and learning process. Without gainsaying, the underutilization of student capacity brings into the fore an input-output disequilibrium in so far as human and material resources are concerned. As a result, the community colleges may not be cost effective in the curriculum implementation.

4.5.5.8 Teachers’ Responses on Other Strategies That Enhance Effective Implementation of Artisan and Craft Courses

Figure 4 shows other activities that enhance the implementation of Artisan and Craft courses according to the teachers.
According to Figure 4, the most widely undertaken activity in implementing Artisan and Craft courses was engaging students in co-curricular activities by hosting sports, games and music for students in the community colleges. Other activities undertaken included occasionally exhibiting student-made products in exhibitions and trade fairs and holding regular guidance and counseling sessions for students. This finding resonates with previous studies that found positive correlations between students’ participation in co-curricular activities and their subsequent educational outcomes such as becoming model students reduced involvement in delinquency and crime (Rose, 2000) and enhanced competencies in communication, cognitive, managing self and academics (Abdul & Sasidhar, 2005; Guest & Schneider, 2003; Ismat & Saleem, n. d).

Hargreaves’ capital theory of school effectiveness and improvement (Hargreaves, 2001) emphasized the formal and informal curriculum thereby downplaying the role of the non-formal curriculum which is synonymous to the co-curriculum. This finding and previous studies have so far demonstrated that school effectiveness is a product of the co-curricular activities undertaken by the school in question. The study thus shows that for institutional effectiveness to be enhanced, all the dimensions of the curriculum must seamlessly and interdependently work together achieve the overall educational outcomes of the institution. This was lacking in the community colleges.
4.5.5.9 Influence of Teaching Strategies on Artisan and Craft Curriculum Implementation

As earlier shown in Table 18, both students and teachers agreed that the teaching strategies had a high influence on the implementation of Artisan and Craft curriculum (M = 2.57 for students and M = 2.88 for teachers). The subsequent interviews with the directors of the community colleges revealed that the teaching strategies used were effective in: improving students’ performance and productivity; sustaining students’ attention by making the lessons lively and interesting, and; enabling the students to practice the skills learnt in class. Thus the finding of the study was confirmatory to the previous findings of Desimone, et al. (2004) and Olatoye, et al. (2011) that showed that teaching strategies improved teacher effectiveness that translated in effective implementation of the curriculum.

4.5.6 How Existing Physical Facilities and Resources Enhance Effective Implementation of Artisan and Craft Curriculum in Catholic Sponsored Community Colleges

Table 18 shows divergent viewpoints from students and teachers with regard to the adequacy of physical facilities in the community colleges. Whereas students believed that it had low influence on the Artisan and Craft curriculum implementation, teachers believed that it had a high influence on the implementation of the curriculum (M = 2.16 and M = 2.67 for students and teachers respectively). A spot check on the facilities in the community colleges confirmed that the community colleges had adequate facilities to accommodate the learning needs of the students. Moreover, the directors of the community colleges emphasized that the facilities were adequate in teaching the Artisan and Craft courses in their colleges.

The students further indicated the degree to which facilities were adequate in their community colleges. The adequacy of teaching and learning facilities was categorized as very inadequate, inadequate, moderately adequate, adequate and very adequate and rated 1, 2, 3, 4, 5 respectively. The mean adequacy for each facility was computed. The availability of the facilities was regarded very inadequate if mean = 1.0-1.7, inadequate if mean = 1.8-2.5,
moderately adequate if mean = 2.6-3.3, adequate if mean = 3.4-4.1 and very adequate if mean = 4.2-5.0. The results are presented in Table 28.

Table 28

**Students’ Responses on Adequacy of Teaching and Learning Facilities**

<table>
<thead>
<tr>
<th>Facility</th>
<th>VA</th>
<th>A</th>
<th>MA</th>
<th>I</th>
<th>VI</th>
<th>M</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>f</td>
<td>%</td>
<td>f</td>
<td>%</td>
<td>f</td>
<td>%</td>
</tr>
<tr>
<td>Workshops for your course</td>
<td>46</td>
<td>31.5</td>
<td>24</td>
<td>16.4</td>
<td>40</td>
<td>27.4</td>
</tr>
<tr>
<td>Equipment for training</td>
<td>46</td>
<td>31.5</td>
<td>35</td>
<td>24.0</td>
<td>26</td>
<td>17.8</td>
</tr>
<tr>
<td>Raw materials for practicals</td>
<td>51</td>
<td>34.9</td>
<td>27</td>
<td>18.5</td>
<td>22</td>
<td>15.1</td>
</tr>
<tr>
<td>Lecture rooms</td>
<td>31</td>
<td>21.2</td>
<td>32</td>
<td>21.9</td>
<td>21</td>
<td>14.4</td>
</tr>
<tr>
<td>Reference books</td>
<td>15</td>
<td>10.3</td>
<td>20</td>
<td>13.7</td>
<td>47</td>
<td>32.2</td>
</tr>
<tr>
<td>Laboratories</td>
<td>15</td>
<td>12.5</td>
<td>35</td>
<td>29.2</td>
<td>12</td>
<td>10.0</td>
</tr>
<tr>
<td>Sports fields/playgrounds</td>
<td>25</td>
<td>17.1</td>
<td>17</td>
<td>11.6</td>
<td>16</td>
<td>11.0</td>
</tr>
<tr>
<td>Textbooks for your course</td>
<td>14</td>
<td>9.6</td>
<td>14</td>
<td>9.6</td>
<td>43</td>
<td>29.5</td>
</tr>
<tr>
<td>Library for personal study</td>
<td>13</td>
<td>8.9</td>
<td>13</td>
<td>8.9</td>
<td>26</td>
<td>17.8</td>
</tr>
</tbody>
</table>

Note. VA = Very Adequate; A = Adequate; MA = Moderately Adequate; I = Inadequate; VI = Very Inadequate

The students’ responses revealed that workshops (M = 3.52), equipment for training (M = 3.51) and raw materials used in practical training (M = 3.44) were adequate in the community colleges. Lecture rooms (M = 3.03), reference books (M = 2.74) and laboratories (M = 2.69) were moderately adequate whereas textbooks (M = 2.51), playgrounds (M = 2.49) and libraries (M = 2.23) were mentioned to be inadequate in the community colleges.

When interviewed, James said that physical facilities in the college were adequate relative to the enrolment of students. On one hand, the director explained that the college had modern facilities and equipment that equipped learners with the relevant training for the job.

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market. A spot check of the facilities confirmed that the departments of computer, hairdressing, garment and dressmaking had relevant and modernized equipment. This contradicts the TVET baseline survey report (Hooker, et al., 2011) that revealed the existence of obsolete equipment in TVET institutions in Kenya. On the other hand, John reported inadequacy of teaching and learning resources and most textbooks were outdated in terms of the changing technology. This made them rely on old textbook editions that were deficient in new knowledge. This is a confirmatory finding to those in previous studies such as Gichira (2002), Indosh, et al. (2010) and Mupinga, et al. (2006). The cited studies had established that TVET institutions lacked adequate teaching and learning resources including textbooks and stationery which hindered effective teaching and learning.

Similar sentiments were echoed by James and Judy. James said that the facilities were relevant to the needs of the market and where inadequate, students would visit industries where they would have practical interaction with the relevant equipment. However, Director C said that the facilities were inadequate and pointed out the areas of inadequacy such as computers and chairs. To overcome the challenge, students in the college shared the available computers in the ratio of 3:1. The director further said that some of the equipment was not the latest in the industry and the college therefore arranged visits to the neighbouring firms where students would have hand-on experience with the appropriate equipment particularly for students enrolled in electrical installation and dress-making. Again this reinforces Hooker, et al.’s (2011) baseline survey finding that curriculum implementation in TVET institutions was hindered by obsolescence of equipment. The inadequacy was further overcome through signing agreements with some workshops and public institutions where students were taken for practical lessons. This strategy facilitated not only the efficient utilization of facilities in the community colleges but also ensured that students had practical lessons.
All key informants except Judy explained that the teaching and learning resources were underutilized. For instance, James said that some teachers did not maximize the use of available teaching and learning resources. Instead, they spent more time on teaching theory at the expense of practical content thereby underutilizing the available resources. In other cases, there were no students enrolled in courses for which facilities were available. James cited masonry which had no students despite the availability of adequate facilities and equipment. Both John and Jane attributed the underutilization of teaching and learning resources to low student enrolment for Artisan and Craft courses. For instance, Jane explained that low enrolment rendered classrooms underutilized. From the testimonies of the directors, it can be deduced that the teaching and learning facilities found in community colleges are either deliberately underutilized (teachers’ decision) or underutilized due to low student enrolment.

Whereas the underutilization of resources due to low student enrolment may not have an effect, the deliberate underutilization by teachers is likely to negatively affect the implementation of the Artisan and Craft curriculum. This is because the students are eventually exposed to too much theory and very little practical sessions hence become deficient in application of the theoretical knowledge after they graduate. Previous studies had shown that lack of up-to-date tools and equipment, infrequent repair of old equipment, high costs of practical training materials and equipment constrained the curriculum implementation efforts in TVET institutions (Farstad, 2002; Koech, 1999; Sharma, 2008; UNESCO, 2010). Similarly, the current study singled out the inadequacy of textbooks, laboratories, playgrounds and library facilities (as cited by students) and inadequate computers and chairs (as mentioned by the directors) to be among the factors that would most impinge the teaching and learning of Artisan and Craft courses in community colleges.

However, the study established that community colleges overcame this challenge through a number of ways including but not limited to sharing facilities and equipment with
similar colleges and collaborating with industries where students would visit to have hands-on experience with equipment not likely to be in their colleges. The sharing of facilities among colleges is not only an innovative strategy in overcoming the inadequacy of facilities, but also an effective way to stay up-to-date with technology and share the costs of machinery among the institutions involved. However, it may not provide the students with sufficient time to interact with the facilities thereby hindering their development of practical skills.

4.5.7 How Existing Teaching and Learning Resources Enhance Effective Implementation of Artisan and Craft Curriculum in Catholic Sponsored Community Colleges

As earlier revealed in Table 18, there was a convergence of belief between students and teachers that adequacy of teaching and learning resources had a high influence on the implementation of Artisan and Craft curriculum (M = 2.50 for students and M = 2.59 for teachers). The finding echoes previous studies which showed that lack of teaching and learning resources hindered the teaching and learning of vocational courses (Busby & Ngatia, 2006; Daudau, 2010; Bandele & Faremi, 2012; Farstad, 2002; Gichira, 2002; Hailu, 2011; Hooker et al., 2011; Koech, 1999; Mupinga, Indoshi, et al., 2010). Indeed, the inadequacy of teaching and learning resources could give room to teachers focusing more on theoretical teaching thereby contributing to students’ not being proficient in practical skills acquisition. In addition, lack of resources could also lead to cuts in the volume of training expected to be provided to students in community colleges.

4.5.8 How College-Community Collaborations Enhance Effective Implementation of Artisan and Craft Curriculum in Catholic Sponsored Community Colleges

The study further sought to determine the views of teachers on the existence of collaborations between community colleges and the neighboring community. The institutions that collaborated with the colleges with their respective collaboration activities are presented in Table 29.
Table 29

Institutions Collaborating With Community Colleges

<table>
<thead>
<tr>
<th>Collaborating Institution/Individuals</th>
<th>Activities of Collaboration</th>
<th>f</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Churches</td>
<td>Facilitation of guidance and counseling sessions; Provision of instructional support materials; paying fees for needy students</td>
<td>5</td>
<td>31.3</td>
</tr>
<tr>
<td>Parents/guardians</td>
<td>Facilitation of guidance and counseling sessions; Provision of instructional support materials; paying fees for needy students; supervision of homework</td>
<td>3</td>
<td>18.8</td>
</tr>
<tr>
<td>Local administration</td>
<td>Information dissemination on community colleges</td>
<td>2</td>
<td>12.5</td>
</tr>
<tr>
<td>Industrial partners</td>
<td>Provision of attachment places for students</td>
<td>3</td>
<td>18.8</td>
</tr>
<tr>
<td>Local customers/clients</td>
<td>Purchase of products made by students</td>
<td>2</td>
<td>12.5</td>
</tr>
<tr>
<td>Other colleges</td>
<td>Sharing of facilities and co-curricular activities</td>
<td>1</td>
<td>6.3</td>
</tr>
</tbody>
</table>

Note. N=18

It is evident from Table 29 that community colleges collaborated more with churches followed by industrial partners and parents/guardians of the students. Thus the networking with the three aforementioned institutions is critical to effective implementation of Artisan and Craft curriculum in community colleges. Indeed this finding echoes the tenets of the capital theory of school effectiveness and improvement (Hargreaves, 2001) and the theory of change (Fullan, 2001). In his social capital concept, Hargreaves (2001) emphasized that an improving institution will exhibit strong networks and collaborative relations among its members and stakeholders. These collaborative relations call for high levels of trust among the stakeholders. As such, people readily share their knowledge, both intellectual and moral.
Similarly, Fullan (2001) argued that relationship building that is anchored in strong parent-school relationships, local community-school relations, relations with school boards, collegiality, government and other agencies will result in effective curriculum implementation. This therefore suggests the establishment of strong networks with stakeholders in community colleges enhances effective implementation of the Artisan and Craft curriculum.

Table 29 further revealed that the church and parents/guardians were involved in many collaboration activities than any other collaborating institutions. The finding that the industrial partners were only involved in providing places for students to be attached for field practice suggests that community colleges had not fully exploited all the avenues of engaging the industrial partners in their activities. As a result, the community colleges would not precisely identify and respond to the changing demand and skill expectations of the industry. Worse still, they would not enjoy the benefit of cost savings arising from sharing the rather costly facilities with the industrial partners (Dyankov, 1996; Gewer, 2009). It is common knowledge that exposing students to industrial facilities ensures that they gain relevant knowledge, skills and attitudes at far lower costs than would without industrial collaboration.

In spite of the perceived low level of collaboration between community colleges and variety of stakeholders, the interview with James revealed that there was a strong collaboration network between community colleges and the neighboring communities and donors. The director narrated:

Despite where the college is located, we benefit a lot from the community and the community also benefits from the college. For instance we normally make products and most of the people who place the orders come from the community. There was a time when we got a donor who dug the borehole for us. The first lot of people to benefit from the borehole was the community because we supplied water to them…When we have a function we involve them; when they have a function they involve us (James).
This kind of collaboration demonstrates the tenet of reciprocity and collaboration advanced in Hargreaves’ (2001) capital theory of school effectiveness and improvement. The theory holds that there should be strong ties and high levels of trust between people who are engaged in networks or linkages. Therefore, the finding suggests that forging strong relations with the local community results in effective the implementation of Artisan and Craft curriculum. The interview with John further showed that the community colleges endeavored to establish collaborations with individuals, industrial partners, among themselves and other TVET institutions:

The industrial partners offer internship to our students and eventually employ some of them. These industrial partners also have a chance to come to our classes and teach (as resource persons)...Individuals also help us in job creation. For instance, one individual has secured employment for some of our students who are now drivers of high ranking personalities (John).

Moreover, the collaboration with local administration and parents was embraced by the community colleges as captured in the following excerpt:

We have great partnership with the chief of the area. Sometimes when he has meetings he calls (invites) us to talk about the community college or sometimes he markets the community college courses on our behalf. And then we have some parents who are very concerned with the community college. They pay fees for students who are not able to pay their fees. And then we have a contractor who gives our students some practical work to do and sometimes employs some of them (Jane).

A dissection of the views of the teachers and the directors of the community colleges shows that although community colleges have forged collaborations with stakeholders, the collaborations have been limited to a few stakeholders and have not fully exploited the areas that would facilitate effective implementation of Artisan and Craft courses in the colleges.
Hargreaves (2001) argues that for effective implementation of the curriculum, institutions should increase their social capital by building strong trusts and networks by stakeholders. To this end, the study holds that community colleges’ inability to optimize collaborations hinders the effective implementation of Artisan and Craft curriculum.

As shown in Table 18, there was a convergence in students’ and teachers’ viewpoints on the influence of college-community collaborations on the effective implementation of Artisan and Craft courses. They agreed that collaborations had a low influence (M = 2.00 and M = 2.36 for students and teachers respectively). Thus, both teachers and students were convinced that the implementation of the Artisan and Craft curriculum in the community colleges was minimally affected by the existing college community collaborations.

Previous studies (Olatoye, et al., 2011; Desimone, et al., 2004) had however demonstrated that collaboration strategy improved teacher’s teaching effectiveness and students’ achievement. It therefore raises the question as to how community colleges effectively utilized the collaborations to achieve the intended curriculum outcomes. Hargreaves (2001) holds that effective collaborations should embody the tenet of reciprocity and mutuality. In other words, they should be well thought out and informed by sound cost benefit decisions. It is therefore apparent that community colleges had not fully embraced the essence of collaboration and the gains that would accrue to them if they had effective collaborations with various stakeholders.

**4.5.9 Challenges Facing Effective Implementation of Artisan and Craft Curriculum in Catholic Sponsored Community Colleges**

Both the students and teachers were further required to state the challenges they believed hindered the effective implementation of Artisan and Craft curriculum in their respective community colleges. The results are presented in Table 30.
Table 30

*Students’ and Teacher’s Responses on Challenges in Teaching and Learning of Artisan and Craft Courses*

<table>
<thead>
<tr>
<th>Challenge</th>
<th>f</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Students’ Responses</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Inadequate teaching and learning resources</td>
<td>95</td>
<td>65.1</td>
</tr>
<tr>
<td>Students’ negative attitude towards Artisan and Craft courses</td>
<td>52</td>
<td>35.6</td>
</tr>
<tr>
<td>Inappropriate instructional skills</td>
<td>31</td>
<td>21.2</td>
</tr>
<tr>
<td>Low participation in co-curricular activities/visits to other institutions</td>
<td>27</td>
<td>18.5</td>
</tr>
<tr>
<td>Inadequate teaching staff</td>
<td>26</td>
<td>17.8</td>
</tr>
<tr>
<td>Inability to pay school fees/low parents’ socio-economic status</td>
<td>24</td>
<td>16.4</td>
</tr>
<tr>
<td>Poor management of college/ inappropriate handling of cases</td>
<td>21</td>
<td>14.4</td>
</tr>
<tr>
<td>Difficulties in securing field attachment</td>
<td>18</td>
<td>12.3</td>
</tr>
<tr>
<td>Poor teacher-student relationship</td>
<td>17</td>
<td>11.6</td>
</tr>
<tr>
<td>Inadequate time for practical sessions</td>
<td>16</td>
<td>11.0</td>
</tr>
<tr>
<td>Teacher absenteeism</td>
<td>13</td>
<td>8.9</td>
</tr>
<tr>
<td>Negative peer influence/pressure from classmates</td>
<td>5</td>
<td>3.4</td>
</tr>
<tr>
<td><strong>Teachers’ Responses</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Inadequate raw materials/resources for carrying out practical sessions</td>
<td>8</td>
<td>44.4</td>
</tr>
<tr>
<td>Low student entry behavior/language barrier/communication skills</td>
<td>7</td>
<td>38.9</td>
</tr>
<tr>
<td>Students’ inability to pay school fees</td>
<td>7</td>
<td>38.9</td>
</tr>
<tr>
<td>Low students’ interest in the Artisan and Craft courses</td>
<td>6</td>
<td>33.3</td>
</tr>
<tr>
<td>Lack of government support</td>
<td>3</td>
<td>16.7</td>
</tr>
<tr>
<td>Lack of proper parenting/poor family upbringing of the students</td>
<td>3</td>
<td>16.7</td>
</tr>
<tr>
<td>Inadequacy of teachers</td>
<td>3</td>
<td>16.7</td>
</tr>
<tr>
<td>Low student enrolment in Artisan and Craft courses</td>
<td>2</td>
<td>11.1</td>
</tr>
</tbody>
</table>

Note. N = 146 for students and N = 18 for teachers

Table 30 shows that 65.1% of the students believed that inadequacy of teaching and learning resources influenced the learning of Artisan and Craft courses. Other challenges to the learning of Artisan and Craft courses included students’ negative attitude towards Artisan and Craft courses (35.6%), inappropriate instructional skills (21.2%), low participation in co-curricular activities (18.5%), inadequate teaching staff (17.8%), inability to pay school fees
(16.4%) and poor management of community colleges (14.4%). The students also mentioned other challenges, albeit with relatively dismal influence, such as difficulties in securing attachment places (12.3%), poor teacher-student interactions (11.6%), inadequate time for practical sessions (11.0%), teacher absenteeism (8.9%) and negative peer influence (3.4%).

The cited challenges are likened to the four concepts of the capital theory of schools effectiveness and improvement (Hargreaves, 2001). That is, the teacher-related challenges (inappropriate instructional skills, inadequate teaching staff, teacher absenteeism) are likened to the leverage concept; the learning-related challenges (inadequate teaching and learning resources, inadequate time for practical sessions, low participation in co-curricular activities) are likened to intellectual capital; and the interaction-related challenges (poor teacher-student interactions, negative peer influence, difficulties in securing attachment, poor management of community colleges) are likened to the social capital. All these three concepts will eventually influence the teaching and learning and learning of Artisan and Craft curriculum that denotes the fourth concept of outcomes.

Likewise, teachers highlighted a number of challenges they faced in implementing Artisan and Craft courses in community colleges. The major challenge identified by the teachers was the inadequacy of resources/raw materials needed for carrying out practical sessions during teaching of skills. Similarly, the low entry behavior of students which was evident in their poor communication skills/language barrier also posed a major challenge to effective implementation of Artisan and Craft curriculum. In addition, the inability to pay school fees and students’ low interest in Artisan and Craft courses affected the effective implementation of Artisan and Craft curriculum. Other challenges included inadequacy of teachers, low student enrolment in Artisan and Craft courses, lack of government support and poor family upbringing of the students.

The teachers indicated that lack of resources limited the number of practical sessions to be conducted thereby denying the learners adequate experiential learning. They stated that poor
parenting encouraged irresponsible behavior among students, lack of government support hampered the adequacy of teaching and learning resources and lack of school fees exacerbated dropout rates among students. In addition, the teachers stated that teacher inadequacy led to high workload for the available teachers thereby lowering the quality of their teaching. Again, the aforementioned challenges fit well in the four concepts expounded in the capital theory of school effectiveness and improvement and they ultimately influence the outcome of the teaching and learning process in community colleges.

When asked some of the challenges that hindered the implementation of Artisan and Craft curriculum in community colleges, the directors echoed the challenges stated by the students and teachers. James reiterated that Artisan and Craft courses demand a lot in terms of the syllabus, equipment and supervision which could not be realized without adequate teachers and government support. A challenge that resulted in student withdraw from college was expressed by Jane who explained that when parents or guardians are relocated the students end up dropping out of college for lack of accommodation. Judy cited inadequate finances especially for operational expenses for the college and poor student-teacher relationships as challenges that hindered effective implementation of Artisan and Craft courses.

An analysis of the challenges identified by the students, teachers and directors revealed that the major challenges in the implementation of Artisan and Craft courses were inadequate teaching and learning resources, students’ attitudes towards Artisan and Craft courses, inadequate finances (school fees), inadequate participation in co-curricular activities, inadequate teaching staff, lack of government support, poor teacher-student relationship and low student enrolment for Artisan and Craft courses. These challenges can be viewed in light of two of the concepts underlying Fullan’s theory of change. That is, external factors (government support), local factors (teaching and learning resources, teacher-student relationships, inadequate teaching staff, students’ attitudes, co-curricular activities). At the same time the challenges, in a similar
manner to those identified by students and teachers fit in Hargreaves’ capital theory of school effectiveness and improvement

The directors explained that they had employed several techniques in handling the aforesaid challenges. With respect to inability of some students to pay fees, James said that the college had devised a mechanism such that the perceived affluent students paid relatively high fees to take care of those who could not afford. A similar approach was mentioned by Judy. In addition, it emerged that the teaching of life skills enabled students to restructure their own life history and accept themselves thereby leading to holistic character formation consequently resulting in improved teacher-student relationships. The challenge posed by relocation of parents or guardians was overcome by securing accommodation for the affected students until they completed studies. However, accommodation arrangement was made only for those students who could pay the accommodation fees implying that those who could not pay the fees ended up withdrawing or dropping out of college. Additionally, in order to ensure that teachers were promptly remunerated, the colleges had embarked on cost cutting measures to ensure they had enough savings set aside for payment of teachers.

4.5.10 Ways of Overcoming the Challenges Facing the Implementation of Artisan and Craft Curriculum in Catholic Sponsored Community Colleges

The students and teachers suggested various measures of improving the teaching and learning of Artisan and Craft courses in community colleges. The findings are summarized in Table 31. The provision of more teaching and learning resources was raised by 47.3% of the students to widen access to the resources. In addition, 36.3% of the students suggested that community colleges should step up the motivational talks in a bid to change students’ negative attitude towards Artisan and Craft courses.
### Table 31

**Students’ and Teachers’ Responses on how to Improve Teaching and Learning of Artisan and Craft Courses**

<table>
<thead>
<tr>
<th>Suggestion</th>
<th>f</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Students’ Suggestions</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Provide more teaching and learning resources widen students’ access to them</td>
<td>69</td>
<td>47.3</td>
</tr>
<tr>
<td>Hold motivational talks to change students’ negative attitude towards the courses</td>
<td>53</td>
<td>36.3</td>
</tr>
<tr>
<td>Allocate more time for practical training</td>
<td>30</td>
<td>20.5</td>
</tr>
<tr>
<td>Employ more teachers</td>
<td>27</td>
<td>18.5</td>
</tr>
<tr>
<td>Improve on management-handling of cases/improve of food diet and sanitation</td>
<td>25</td>
<td>17.1</td>
</tr>
<tr>
<td>Provide facilities/playgrounds for co-curricular activities</td>
<td>23</td>
<td>15.8</td>
</tr>
<tr>
<td>Improve teacher-student relationships</td>
<td>21</td>
<td>14.4</td>
</tr>
<tr>
<td>Teachers should improve teaching methods</td>
<td>18</td>
<td>12.3</td>
</tr>
<tr>
<td>Expose students to field work and assist them secure attachment</td>
<td>15</td>
<td>10.3</td>
</tr>
<tr>
<td>Collaborate with the industry in the provision of resources</td>
<td>12</td>
<td>8.2</td>
</tr>
<tr>
<td>Enhance guidance and counseling for students to appreciate individual differences</td>
<td>7</td>
<td>4.8</td>
</tr>
<tr>
<td><strong>Teachers’ Suggestions</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Enrich guidance and counseling programs in community colleges</td>
<td>7</td>
<td>38.9</td>
</tr>
<tr>
<td>Raise entry grades to Artisan and Craft courses</td>
<td>7</td>
<td>38.9</td>
</tr>
<tr>
<td>Ensure strict adherence to the college timetable including punctuality for classes</td>
<td>7</td>
<td>38.9</td>
</tr>
<tr>
<td>Invite resource persons to regularly talk to students</td>
<td>7</td>
<td>38.9</td>
</tr>
<tr>
<td>Enhance good relationships among students, teachers and college administration</td>
<td>6</td>
<td>33.3</td>
</tr>
<tr>
<td>Employ more qualified teachers in community colleges</td>
<td>5</td>
<td>27.8</td>
</tr>
<tr>
<td>Government to be involved in provision of resources to community colleges</td>
<td>3</td>
<td>16.7</td>
</tr>
<tr>
<td>Seek donor funding in provision of resources</td>
<td>3</td>
<td>16.7</td>
</tr>
<tr>
<td>Collaborate with Artisan and Craft examining bodies</td>
<td>1</td>
<td>5.6</td>
</tr>
</tbody>
</table>

Note. N=146 for students and N = 18 for teachers.

Still, 20.5 % of the students proposed the allocation of more time for carrying out practical sessions to give students adequate practice of the Artisan and Craft skills. Other
suggestions included employing more teachers (18.5%) and improving the management of the colleges especially with respect to handling of cases, quality of meals and sanitation in the colleges (17.1%). In addition, the students suggested the provision of playgrounds for co-curricular activities (15.8%), improvement of teacher-student interactions (14.4%), improvement of teaching methods (12.3%) and assisting students to secure attachment places for industrial experience (10.3%). Finally, students suggested the collaboration between community colleges and the industry especially in provision or resources (8.2%) and enhanced guidance and counseling sessions to enable students appreciate individual differences (4.8%) as measures of overcoming the challenges in learning Artisan and Craft courses.

Similarly, the teachers proposed measures that should be taken to improve the implementation of Artisan and Craft curriculum in community colleges. One of the measures teachers proposed was enriching the guidance and counseling programs for students in community colleges. The teachers also suggested that the entry grades (minimum admission qualifications) for students into Artisan and Craft courses should be raised so as to improve the entry behavior of the students in community colleges. The strict adherence to the college timetable including punctuality to classes was also identified by teachers as a measure that would improve the implementation of Artisan and Craft course. This would ensure adequate coverage of the Artisan and Craft course content including subjecting the students to adequate practical sessions.

Teachers also suggested the regular invitation of resource persons to talk to students on variety of topical issues that are relevant to their training in community colleges. The enhancement of good relationships among teachers, students and college administrations was also suggested as a measure that would help to improve the implementation of Artisan and Craft courses in the community colleges. Other measures proposed by the teachers included employing more qualified teachers, seeking government and donor support in providing
resources to community colleges and collaborating with bodies that examine Artisan and Craft courses. The measures suggested by the teachers can be construed to be the leverage, social and intellectual capital needed for an effective and improving institution to achieve its desired outcomes. The measures also touched on all the concept of the theory of change namely the characteristics of the curriculum, the local characteristics and the external characteristics thereby implying that a holistic approach to resolving the issues underlying the teaching and learning of Artisan and Craft courses would ensure effective implementation of the Artisan and craft curriculum in community colleges.

Similar suggestions were raised by the directors of the community colleges. James strongly argued that the curriculum they used was rather old and needed to be revised to offer content that is relevant to the job market. The director expressed: “If the syllabus can be revised to fit the present situation I think it could be better. We have not received the latest syllabus and even the examinations are set based on the old syllabus of 1989.” The director further suggested the need to educate people to appreciate that technical courses are not the preserve of “academic failures”. Lastly, the director emphasized the need to have regular joint meetings of teachers and heads of community colleges to share information, ideas and experiences on how to effectively implement Artisan and Craft courses in community colleges.

Interestingly, John was of the opinion that the minimum entry requirements into Artisan and Craft courses should be waived by the Ministry of Education, Science and Technology so as to widen access to the courses to many youth. The director further emphatically suggested that theoretical knowledge should be downplayed in favour of practical knowledge to give a chance to those who may be disadvantaged theoretically to explore their talents and earn a living. Another suggestion vehemently raised by the director was that the government should commit more resources in building capacity in technical institutions that it does in universities. This was expressed as cited in the following narration:
Why not the technical? You are offering Free Primary Education, Tuition-Free Secondary Education. What about technical schools? You mean there is no knowledge there? And I gave you an example; we need to train 20 people to touch mud and build. We need to train one supervisor at the university to supervise the 20 but is the other way round! You are taking 20 supervisors in the university and there is nobody trained on the ground…The government must invest more money to train the 20 technicians than the one supervisor (John).

It emerged from the cited excerpt that community colleges feel that they are sidelined by the government in resource allocation to the point that they are unable to train the personnel with the appropriate technical skills needed in the economy. Perhaps this may be due to lack of information on the existing public-private partnerships that community colleges could explore in a bid to secure funding and resources. Indeed, Kelemba (2009) and Gichira (2002) singled out the facility-finance debate as a major challenge facing TVET institutions in Kenya. The finding therefore confirms previous studies that showed that TVET institutions lacked adequate finances and facilities (Messah & Mucai; Hicks, et al., 2011). Moreover, the current study established that this challenge hindered Artisan and Craft curriculum implementation.

One of the directors suggested that community colleges should acquire more facilities so that they are adequately equipped to offer a variety of Artisan and Craft courses. The director also emphasized the enhancement of collaborations with examining bodies such as DIT and KNEC so that the colleges are versed with new requirements from these examining bodies from time to time. The director lamented that KNEC had stringent requirements for registration of examinations compared to DIT that allowed students with primary education qualifications (including those who did not complete primary education) to register for examinations. Moreover, the director echoed the cementing of collaborations with industrial partners especially in the provision of industrial experience to the students in community colleges and
the forging of close collaborations among the community colleges especially in visiting each other to learn and share experiences.

Judy suggested that more community colleges should be set up in order to reach and empower many youth. Furthermore, the director suggested the creation of more playgrounds for students to undertake co-curricular activities. In order to overcome the inadequacy of funds, the director suggested that community colleges should start income-generating activities that may as well provide training opportunities for their students. Thus, the suggestions made by the participants revolved around resource mobilization, capacity building, infrastructural improvement and relationship building. These are at the heart of the capital theory of school effectiveness and improvement and the change theory. In the capital theory, social capital that is characterized by relationship building/collaborations, intellectual capital that is basically capacity-building are important inputs for the realization of intended educational outcomes. The same are equally underpinned in the change theory where relationship building, knowledge creation sharing are viewed as instrumental to attainment of the moral purpose of the school. Indeed partnerships with the government and industry were elucidated as measures that could enhance the effective implementation of Artisan and Craft curriculum in Catholic sponsored community colleges in Nairobi region.
CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

This chapter presents a summary and makes conclusions and recommendations for the future implementation of Artisan and Craft courses in similar contexts. The chapter begins with a summary of findings under the research questions. This is then followed by conclusions based on the findings on each research question. Finally, the chapter presents recommendations based on the conclusions of the study and further areas of research.

5.2 Summary

The purpose of this study was to analyze the determinants of effective implementation of Artisan and Craft courses in Catholic Church sponsored community colleges in Nairobi region. The focus of the study centered on analysis of the strategies used to implement the Artisan and Craft curriculum, the extent to which Artisan and Craft curriculum is effectively implemented, the factors influencing and challenges faced in implementing the Artisan and Craft curriculum. The study was underpinned in two theoretical orientations; capital theory of school effectiveness and improvement and the theory of change, and a conceptual framework was developed to guide the investigation and analysis. Literature review identified the knowledge gaps with regard to implementation policies for Artisan and Craft curriculum including the factors influencing and challenges faced in the implementation.

A mixed methods research design was adopted to explore these factors in four community colleges in Nairobi region. The study triangulated questionnaires and in-depth interview guides. The instruments were content-and face-validated by subjecting them to thorough scrutiny from experts in Curriculum Studies and Artisan and Craft courses. Instrument reliability was ascertained by piloting the questionnaires after which Cronbach alpha statistic was computed. Quantitative data and qualitative data from the questionnaires and interviews
were analyzed, interpreted and thematically discussed according to the research questions. Chapter Four describes and discusses the findings in detail.

The study established that the strategies most frequently used in teaching Artisan and Craft courses were; question and answer method, demonstration method, problem solving approach, group discussion, field trips and project work. The most effective strategies were; question and answer method, demonstration method, problem solving method, group discussion method and project work. The ineffective strategies included field visits, lecture method and use of resource persons. The study further established that evaluation of Artisan and Craft curriculum was conducted both internally through teacher-made examinations and sit-in CATs and externally through examinations administered by KNEC and DIT. The study established that community colleges had not fully exploited all the avenues of collaborations as a strategy. It was further revealed that despite the low remuneration, teachers were motivated to teach through a variety of ways.

The findings showed that attitude of teachers and students towards Artisan and Craft courses, teaching strategies, adequacy of teaching and learning resources, teacher qualifications, teaching experience, teacher motivation, teaching workload and attending of in-service courses had a high influence on the implementation of Artisan and Craft curriculum. On the contrary, industrial attachment, field practice and college-community collaborations were found to have a low influence on the implementation of Artisan and Craft curriculum. Mixed views were raised on the influence of the class size (enrolment) with students holding that it had a low influence while teachers believed it had high influence on the implementation of Artisan and Craft curriculum.

The study established that several challenges faced the implementation of Artisan and craft curriculum in community colleges. These challenges included; inadequacy of teaching and learning resources, students’ negative attitude towards Artisan and Craft courses, inappropriate
instructional skills, low participation in co-curricular activities, inadequate teaching staff, inability to pay school fees and poor management of community colleges. Other challenges were; inadequacy of resources for practical skills training, low entry behavior of students, students’ low interest in Artisan and Craft courses, low student enrolment in Artisan and Craft courses and lack of government support.

A number of suggestions on how to improve the teaching and learning of Artisan and Craft courses were raised. These included; provision of more teaching and learning resources, enhancement of motivational talks, employment of more qualified teachers and fostering good relationships among teachers, students and college management. In addition, the provision of playgrounds for co-curricular activities, improvement of teacher-student interactions, improvement of teaching methods and assisting students to secure attachment places for industrial experience were suggested. Other suggestions included; enhancing collaboration with stakeholders especially in provision of resources, enriching guidance and counseling programs for students, and seeking government and donor support in providing resources to community colleges. Finally, the participants suggested that Artisan and Craft curriculum should be revised to reflect the job market needs and educate people to change the negative perceptions towards Artisan and Craft courses.

5.3 Conclusions

As concerns the strategies used in teaching Artisan and Craft course, the study concluded that: Most of the Artisan and Craft teachers embraced practical-oriented teaching strategies more than theory-oriented teaching strategies; community colleges employed a variety of learner-centered teaching strategies in implementing the Artisan and Craft curriculum; community colleges had in-built strategies that enabled them to track the progress of the students including placement of the students in the job market; and the strategies were effective in teaching Artisan and Craft courses in community colleges. Moreover, based on the process
and intensity of curriculum evaluation undertaken in the community colleges, the study concluded that majority of the community colleges employed effective evaluation strategies in the implementation of Artisan and Craft curriculum. Furthermore, the study concluded that teacher motivation strategy was effectively used to enhance the implementation of Artisan and Craft curriculum in the community colleges. However, the study concluded that the inadequate use of collaboration as a strategy hindered the effective implementation of Artisan and Craft curriculum in the community colleges.

The findings on the extent to which Artisan and Craft curriculum had been effectively implemented in community colleges led to two conclusions. First, based on the finding that practical training was emphasized over theoretical training, the study concluded that the training gained in community colleges was deficient in theoretical grounding of the students for further education. Second, the study also established that graduates of community colleges were successful in securing employment or pursuing further education. Thus, it was concluded that Artisan and Craft course implementation was effective more in preparing graduates of community colleges for employment than preparing students for further studies in institutions of higher learning.

The study established that attitude of teachers and students towards Artisan and Craft courses, teaching strategies, adequacy of teaching and learning resources, teacher motivation, teaching workload and attending of in-service courses had a high influence on the implementation of Artisan and Craft curriculum. On the contrary, industrial attachment, field practice and college-community collaborations were found to have a low influence on the implementation of Artisan and Craft curriculum. Mixed views were raised on the influence of the class size (enrolment) with students holding that it had a low influence while teachers believed it had high influence on the implementation of Artisan and Craft curriculum.
As regards the challenges facing the implementation of Artisan and Craft curriculum, the study concluded that the inadequacy of resources such as teaching and learning resources, teaching staff, and materials for practical skills training hindered the effective implementation of Artisan and Craft curriculum in community colleges. The study further concluded that students’ negative attitude and low interest towards Artisan and Craft courses, students’ inability to pay school fees, students’ low entry behavior and low participation in co-curricular activities posed a challenge in the implementation of Artisan and Craft curriculum. Moreover, the study concluded that teachers’ inappropriate instructional skills, low student enrolment, lack of government support and poor management of community colleges hindered the effective implementation of Artisan and Craft curriculum in community colleges.

5.4 Recommendations

5.4.1 Recommendations for Theory

The study adopted two theories in interrogating the factors impinging curriculum implementation; the capital theory of school effectiveness and improvement and the theory of change. However, from the findings of the study it emerged that the omission of the non-formal curriculum in the capital theory of school effectiveness and improvement as postulated by Haregreaves (2001) was an oversight to the effective implementation of the school curriculum. Whereas the capital theory of school effectiveness presents a theoretical framework of assessing effectiveness of learning institutions, the theory focuses on the formal curriculum and informal curriculum without underscoring the critical role played by the non-formal curriculum. Thus in order to have a comprehensive and holistic assessment of curriculum implementation, it is prudent to incorporate the non formal curriculum dimension in examining the factors that impact on curriculum implementation in learning institutions.
5.4.2 Recommendations for Practice

The Directorate of Technical Accreditation and Quality Assurance of the Ministry of Education, Science and Technology should constantly monitor the activities of community colleges to ensure that community colleges offer courses that meet the quality standards established by the ministry.

The sponsors of community colleges should endeavour to provide playgrounds for students to undertake co-curricular activities. This would give students an opportunity to explore their inherent talents beyond the formal curriculum offered in community colleges. The sponsors of community colleges should further employ more qualified teachers in order to enhance teacher competence thereby improving students’ interest in the Artisan and Craft courses. The sponsors of community colleges should also initiate and develop strong networks and collaborations with relevant stakeholders that would ensure reciprocal and mutual relationships between the parties. This would ensure that community colleges not only benefit from material and non-material resources from the collaborating institutions but also create employment avenues for their graduates. The study further recommends that the sponsors of community colleges should source for more funding from variety of organizations in order to provide facilities and teaching and learning resources in community colleges.

At community college level, the management team of the college should come up with activities and policies that would foster good relationships among teachers, students and college management. This would also improve teacher-student interactions by building trust between them thereby leading to effective teaching and learning. In addition, the management should enrich guidance and counseling programs for students. The community colleges should also intensify the provision of motivational talks in the colleges that should incorporate a variety of cross-cutting issues affecting youth so that community colleges students are made aware of how to deal and cope with the issues as and when they arise.
5.4.3 Recommendations for Further Research

This study explored the implementation of Artisan and Craft curriculum in Catholic Church Sponsored community colleges in Nairobi region. It emerged from the study that students had some issues about the management of the colleges. This was not interrogated in the study. It is therefore suggested that further research be conducted to investigate the perceptions of students on management of community colleges.

Furthermore, given that this study was confined to community colleges in Nairobi region, it is suggested that a study on a wider geographic spectrum should be conducted to generate findings with a wider implication. It is hoped that a replication of this study in other parts of the country would yield findings that would assist in making policy decisions that would enhance effective implementation of Artisan and Craft curriculum in community colleges in the country.

Finally, the researcher acknowledges that a number of indicators could be used to measure the effectiveness of TVET programs. One such indicator is the employment and skills utilization rates of TVET graduates. The current study did not however delve into this area. The researcher therefore recommends that graduate tracer studies be conducted to determine the employment and skills utilization rates among the graduates of community colleges as a way of assessing the effectiveness of Artisan and Craft curriculum implementation.
References


APPENDIX 1

LETTER OF CONSENT

Date: ........................

Dear Participant,

RE: LETTER OF CONSENT

I am a doctoral student at The Catholic University of Eastern Africa conducting research on “Determinants of Effective Implementation of Artisan and Craft Curriculum in Community Colleges in Nairobi Region”.

You have been selected to participate in this study. Your participation is voluntary, and will take approximately 30 minutes of your time. You may decline to answer any questions presented during the study if you so wish. Further, you may decide to withdraw from this study at any time by advising the researcher. Your identity will be kept confidential. Thank you for your willingness to participate in the study.

Consent:

By signing this consent form, I confirm that I have read and understood the information and have had the opportunity to ask questions. Accordingly, I voluntarily agree to take part in this study.

Signature ______________________________________ Date ___________________
APPENDIX II

STUDENTS’ QUESTIONNAIRE

Part A: Demographic Information of the Students

This part seeks to gather your background information in relation to the community college where you study. Please provide as accurate information as possible by ticking (✔) the best response where appropriate.

1. Gender: Male (   ) Female (   )

2. Age range in years: 16-20 (   ) 21-25 (   ) 26-30 (   ) 31 and above (   )

3. Course you are currently taking at this college: Artisan (   ) Craft (   )

4. Level of study: Certificate (   ) Diploma (   ) Higher diploma (   )

5. Duration of course: 3 months (   ) 6 months (   ) 1 year (   ) 2 years (   )

6. Year of study: First (   ) Second (   )

7. What was your highest level of education before joining this college?
   Primary (   ) Secondary (   ) Post-secondary (   ) Explain…………

8. Why did you choose study in a community college?
   Family influence (   ) Lack of other alternatives (   )
   Get skills for self employment (   ) It is affordable (   )
   Acquire skills for better employment in the industry (   )
   To access further education in future (   )

9. How did you choose your current course of study?
   Self decision (   ) Peer influence (   ) Parents’/Sponsor’s decision (   )
   By college orientation (   ) Other (   ) Explain…………………………
Part B: Strategies Used in Teaching Artisan and Craft Curriculum

10. By putting a tick mark (✓) in the box below the choices, indicate the frequency of use of the following teaching strategies by your teachers in teaching Artisan and Craft courses.

<table>
<thead>
<tr>
<th>Teaching Strategy</th>
<th>Frequency of use</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Never</td>
</tr>
<tr>
<td>Lecture method</td>
<td></td>
</tr>
<tr>
<td>Group Discussion</td>
<td></td>
</tr>
<tr>
<td>Project work</td>
<td></td>
</tr>
<tr>
<td>Brainstorming</td>
<td></td>
</tr>
<tr>
<td>Question and answer</td>
<td></td>
</tr>
<tr>
<td>Use of resource persons/ inviting guest speakers</td>
<td></td>
</tr>
<tr>
<td>Demonstration method</td>
<td></td>
</tr>
<tr>
<td>Problem solving approach</td>
<td></td>
</tr>
<tr>
<td>Field visits</td>
<td></td>
</tr>
</tbody>
</table>

11. By putting a tick mark (✓) in the box below the choices, indicate the teaching strategy that makes you to best understand the subject taught by the teacher.

<table>
<thead>
<tr>
<th>Teaching Strategy Used by Teacher</th>
<th>Level of Understanding Subject Matter</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Very Low</td>
</tr>
<tr>
<td>Lecture method</td>
<td></td>
</tr>
<tr>
<td>Group Discussion</td>
<td></td>
</tr>
<tr>
<td>Project work</td>
<td></td>
</tr>
<tr>
<td>Brainstorming</td>
<td></td>
</tr>
<tr>
<td>Question and answer</td>
<td></td>
</tr>
</tbody>
</table>
12. a) Do you believe that the training you acquire in Artisan and Craft courses equips you adequately to gain employment or engage in entrepreneurial activities upon graduating?
   Yes (   ) No (   )

b) (i) Which aspect of Artisan and Craft course would you say you are adequately prepared?
   Theoretical training (   ) Practical training (   )

(ii) Give a reason for your answer…………………………………………………………………………………………

Part C: Factors Influencing the Implementation of the Artisan and Craft Curriculum

13. Please answer each item by putting a tick mark (✓) in the box below the choices, which most closely represents your opinion about the influence of the following factors on teaching Artisan and Craft courses in your community college.

<table>
<thead>
<tr>
<th>Factor</th>
<th>Influence on Learning Artisan and Craft</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No influence</td>
</tr>
<tr>
<td>1 Teaching methods used</td>
<td></td>
</tr>
<tr>
<td>2 Teachers’ attitudes towards the course</td>
<td></td>
</tr>
<tr>
<td>3 Adequacy of physical facilities</td>
<td></td>
</tr>
<tr>
<td>4 Adequacy of teaching &amp; learning resources</td>
<td></td>
</tr>
<tr>
<td>5 Students’ attitudes towards the course</td>
<td></td>
</tr>
<tr>
<td>6 College-community collaborations</td>
<td></td>
</tr>
<tr>
<td>7 Number of students per class</td>
<td></td>
</tr>
<tr>
<td>8 Industrial attachment</td>
<td></td>
</tr>
<tr>
<td>9 Field Practice</td>
<td></td>
</tr>
</tbody>
</table>
14. The following facilities are important for the effective learning in a community college. By ticking (✔️) the choice that best describes your opinion, indicate the degree to which the facilities are adequate in this community college, where 1 = very inadequate; 2 = inadequate; 3 = moderately adequate; 4 = adequate; 5 = very adequate.

<table>
<thead>
<tr>
<th>S.N</th>
<th>Facility/Teaching and Learning Resource</th>
<th>Level of Adequacy</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Equipment for training</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>2</td>
<td>Textbooks in your field of study</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Availability of workshops in your field of study</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Laboratories in your field of study</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Reference books in your field of study</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Raw materials provided for practical training</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Library for personal study</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>Lecture rooms</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>Sports fields/playgrounds</td>
<td></td>
</tr>
</tbody>
</table>

Part D: Challenges Facing Effective Artisan and Craft Curriculum Implementation

15. In your opinion, what challenges hinder effective implementation of Artisan and Craft curriculum in your college?

(i) .................................................................................................................................
.................................................................................................................................

(ii) .................................................................................................................................
.................................................................................................................................
16. What do you think should be done to overcome the challenges in question 15 above?

(i) .................................................................

(ii) .................................................................

(iii) .................................................................

(iv) .................................................................

(v) .................................................................

Thank you for your contribution
APPENDIX III

TEACHERS’ QUESTIONNAIRE

Part A: Demographic Information of Teachers

Please provide response by ticking (✔) on the appropriate alternative.

1. Gender:   Male (   )       Female (   )

2. Your age in years:
   16-25 (   )  26-35 (   )  36-45 (   )  46-55 (   )  56 & above (   )

3. Academic qualification:
   Primary level (   )  Secondary O-level (   )  Secondary A-level (   )
   Undergraduate level (   )  Postgraduate level (   )  Other (specify)......................

4. Professional qualification:
   Diploma in Education (   )  Bachelor of Education (   )  Master in Education (   )
   Diploma in Technical Education (   )  PGDE (   )  Other (specify)......................

5. Work experience in years:
   a) Number of years of service at your present post in the college:
      5 and below (   )  6-10 (   )  11-15 (   )  16-20 (   )  21 and above (   )
   b) Total years of service in tertiary colleges:
      5 and below (   )  6-10 (   )  11-15 (   )  16-20 (   )  21 and above (   )

6. Briefly describe the type of work you did before joining the college..............................

7. Level at which you teach: Artisan (   )  Craft (   )  Both Artisan and Craft (   )

8. Subject(s) taught in the community college

<table>
<thead>
<tr>
<th>Artisan Courses</th>
<th>Craft Courses</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>1.</td>
</tr>
<tr>
<td>2.</td>
<td>2.</td>
</tr>
<tr>
<td>3.</td>
<td>3.</td>
</tr>
</tbody>
</table>
9. Your weekly teaching load (lessons per week):

1-10 ( ) 11-20 ( ) 21-30 ( ) 31-40 ( )

Part B: Strategies Used in Implementing the Artisan and Craft Curriculum

10. Tick (✓) the box that presents the appropriate response on the strategies you use in implementing the curriculum in this college

   Teacher-centred strategies ( ) Learner-centred strategies ( )
   Both teacher-centred and learner-centred strategies ( )

11. By putting a tick mark (✓) in the box below the choices, indicate your frequency of use of the following teaching strategies in teaching Artisan and Craft courses in this college.

<table>
<thead>
<tr>
<th>Teaching Strategy</th>
<th>Frequency of use</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Never</td>
</tr>
<tr>
<td>Lecture method</td>
<td></td>
</tr>
<tr>
<td>Group Discussion</td>
<td></td>
</tr>
<tr>
<td>Project work</td>
<td></td>
</tr>
<tr>
<td>Brainstorming</td>
<td></td>
</tr>
<tr>
<td>Question and answer</td>
<td></td>
</tr>
<tr>
<td>Use of resource persons</td>
<td></td>
</tr>
<tr>
<td>Demonstration method</td>
<td></td>
</tr>
<tr>
<td>Problem solving approach</td>
<td></td>
</tr>
<tr>
<td>Field visits</td>
<td></td>
</tr>
</tbody>
</table>

12. Tick (✓) in the box below the choices that present the most appropriate response about your view on the effectiveness of the following teaching strategies in the teaching of Artisan and Craft in this college.
<table>
<thead>
<tr>
<th>Teaching Strategy</th>
<th>Effectiveness of Strategy</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Very ineffective</td>
</tr>
<tr>
<td>Lecture method</td>
<td></td>
</tr>
<tr>
<td>Group Discussion</td>
<td></td>
</tr>
<tr>
<td>Project work</td>
<td></td>
</tr>
<tr>
<td>Brainstorming</td>
<td></td>
</tr>
<tr>
<td>Question and answer</td>
<td></td>
</tr>
<tr>
<td>Use of resource persons</td>
<td></td>
</tr>
<tr>
<td>Demonstration method</td>
<td></td>
</tr>
<tr>
<td>Problem solving approach</td>
<td></td>
</tr>
<tr>
<td>Field visits</td>
<td></td>
</tr>
</tbody>
</table>

13. Explain why the strategies are:

(i) Effective in teaching Artisan and Craft

...........................................................................................................................................................................................................................................
...........................................................................................................................................................................................................................................

(ii) Ineffective in teaching Artisan and Craft

...........................................................................................................................................................................................................................................
...........................................................................................................................................................................................................................................

14. What other strategies do you use to enhance effective teaching and learning of Artisan and Craft courses?

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...........................................................................................................................................................................................................................................
15. What techniques do you use to evaluate the course(s) you teach in this community college? 

(*More than one response allowed*)

Sit-in CATS ( ) Take-away CATS ( ) Teacher-made Examinations ( )

External Examinations ( ) Other (specify)........................................................................

16. How often do you evaluate the teaching and learning process? (*Only one response allowed*)

Weekly ( ) After two weeks ( )

Monthly ( ) Once a term ( )

Twice a term ( ) Never ( )

17. a) How would you rate the current teacher-student interactions for the students you teach?

Low ( ) Moderate ( ) High ( )

b) What strategies have you used to achieve level of teacher-student interaction in 17a)?

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........................................................................................................................................
........................................................................................................................................

18. Besides teaching, what other activities of the college do you participate in to enhance the effective implementation of Artisan and Craft curriculum?

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........................................................................................................................................
........................................................................................................................................

19. a) Do you get any support from the college carrying out activities dealing with the implementation of Artisan and craft curriculum?

Yes ( ) No ( )

b) If yes, explain how the college supports you?

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........................................................................................................................................
........................................................................................................................................
Part C: Factors Influencing the Implementation of the Artisan and Craft Curriculum

20. Please answer each item by putting a tick mark (✓) in the box below the choices, which most closely represents your opinion about the influence of the following factors on teaching Artisan and Craft courses in your community college.

<table>
<thead>
<tr>
<th>Factor</th>
<th>Degree of Influence of Implementation</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No Influence</td>
</tr>
<tr>
<td>Teacher qualifications</td>
<td></td>
</tr>
<tr>
<td>Teaching experience</td>
<td></td>
</tr>
<tr>
<td>Teacher motivation</td>
<td></td>
</tr>
<tr>
<td>Attending in-service courses</td>
<td></td>
</tr>
<tr>
<td>Teaching and learning strategies</td>
<td></td>
</tr>
<tr>
<td>Adequacy of physical facilities</td>
<td></td>
</tr>
<tr>
<td>Teaching workload</td>
<td></td>
</tr>
<tr>
<td>Class size/number of students per class</td>
<td></td>
</tr>
<tr>
<td>Adequacy of teaching and learning resources</td>
<td></td>
</tr>
<tr>
<td>Teachers’ attitudes towards Artisan and Craft</td>
<td></td>
</tr>
<tr>
<td>Students’ attitudes towards Artisan and Craft</td>
<td></td>
</tr>
<tr>
<td>College-community collaborations</td>
<td></td>
</tr>
</tbody>
</table>

21. a) Do you attend any in-service courses/seminars organized to train teachers on Artisan and Craft teaching?

   Yes (   ) No (   )

b) How often do you attend the training?

   After every two weeks (   ) Once a month (   )
   Once a term (   ) Once a year (   )
c) To what extent would you say the training covers content that is relevant in implementing Artisan and craft curriculum?

To a small extent (   ) To a large extent (   )

22. What subjects did you study during your pre-service training?

Major subject ……………………………… Minor subject ……………………………

23. Do you think the pre-service training adequately prepared you to teach Artisan and Craft courses?

Yes (   ) No (   )

24. a) Are you currently enrolled for a course in a learning institution?

Yes (   ) No (   )

b) If yes, who finances your studies?

Self-sponsored (   ) Sponsored by Employer (   ) Sponsored by the Church (   )

Porticus Foundation (   ) Other (Specify) …………………………………………………

c) Describe the course you are currently enrolled in……………………………………

25. a) Does your college collaborate with the surrounding community in implementing the Artisan and craft curriculum?

Yes (   ) No (   )

b) If yes, who from the surrounding community are involved in implementing the curriculum?

........................................................................................................................................

c) In what specific activities of curriculum implementation are they involved?

26. What other factors influence the teaching of Artisan and Craft courses in this college?

(Briefly explain each factor)

(i) ........................................................................................................................................

(ii) ........................................................................................................................................

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Part D: Challenges Facing Implementation of Artisan and Craft Curriculum

In this part, you are required to mention any other challenges you think hinder implementation of Artisan and Craft curriculum in community colleges and the measures you think should be taken to overcome the challenges.

27. Mention some of the challenges you think hinder effective implementation of Artisan and Craft courses in this college?

(i) ............................................................................................................................................

(ii) ............................................................................................................................................

(iii) ............................................................................................................................................

(iv) ............................................................................................................................................

(v) ............................................................................................................................................

28. How do the challenges in 27 above hinder the implementation of Artisan and Craft curriculum in this college?

<table>
<thead>
<tr>
<th>Challenge</th>
<th>How it Hinders Implementation</th>
</tr>
</thead>
<tbody>
<tr>
<td>(i)</td>
<td></td>
</tr>
<tr>
<td>(ii)</td>
<td></td>
</tr>
<tr>
<td>(iii)</td>
<td></td>
</tr>
<tr>
<td>(iv)</td>
<td></td>
</tr>
<tr>
<td>(v)</td>
<td></td>
</tr>
</tbody>
</table>
29. Suggest measures that can be taken to improve Artisan and Craft Curriculum implementation in your college.

(i) ........................................................................................................................................
........................................................................................................................................

(ii) ........................................................................................................................................
........................................................................................................................................

(iii) ........................................................................................................................................
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(iv) ........................................................................................................................................
........................................................................................................................................

(v) ........................................................................................................................................
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Thank you for your participation
APPENDIX IV

INTERVIEW GUIDE FOR DIRECTORS/PRINCIPAL

The purpose of this interview guide is to gather information on the factors affecting and challenges facing the implementation of Artisan and Craft curriculum in community colleges in Nairobi Region.

Community college number

Interviewer number

Date of interview

Day:  Month:  Year:

Time interview commenced

Time interview ended

Part A: Strategies Used to Implement the Artisan and Craft curriculum

1. What Artisan and Craft courses does your college offer?

2. How is the curriculum for Artisan and Craft structured in this college?
   (i) What teaching and learning strategies are employed in Artisan and Craft courses?
       How effective are these strategies?
   (ii) How is the Artisan and Craft curriculum evaluated in this college?
   (iii) What other strategies are undertaken to ensure effective implementation of the curriculum? How are they used? How effective are these strategies?
   (iv) Which teaching strategies have been effective in implementing Artisan and Craft curriculum in the college? Please explain.

Part B: Views on Effective Implementation of Artisan and Craft curriculum

3. Do you think that Artisan and Craft curriculum is effectively implemented in this college?
   Give reasons for your answer.

4. Is the college effective in retaining students throughout the course duration?
   a) How many students enrol for Artisan and Craft courses annually?
b) How many students complete their courses as planned?

c) How many students transit to either self or other employment?

d) How many students pursue education beyond Artisan and Craft levels?

e) How is the students’ performance in Artisan and Craft examinations since 2007?

5. (i) In which curriculum implementation areas does the college collaborate with: (a) surrounding community and (b) industrial partners?

(ii) How effective are the: (a) college-industry collaborations? (b) College-community collaborations?

**Part C: Factors Influencing the Implementation the Artisan and Craft Curriculum**

6. Basing on your personal experience, what factors influence the Artisan and Craft curriculum implementation process?

7. How do the factors influence the implementation process?

8. a) Are the physical facilities in the college adequate to accommodate all learners?

   b) If no, how do you manage the student numbers against the inadequate facilities to achieve maximum learning?

   c) (i) Are your facilities/equipment technologically relevant for the current job market/industry?

   (ii) If not, how do you ensure students acquire relevant hands-on skills for use after exiting college?

9. a) In your assessment, what is the level of adequacy of teaching and learning resources existing in the college?

   b) How does this level influence the implementation of artisan and craft curriculum in the college?

   c) In your view, are the existing teaching and learning resources effectively utilized?

10. a) How would you rate the motivation levels of your teaching staff?
b) How has the college contributed to this level of staff motivation?

c) In your opinion, does this level of staff motivation influence the implementation of Artisan and craft curriculum by the teachers? If yes, how?

**Part D: Challenges Faced in Implementing the Artisan and Craft Curriculum**

11. a) What challenges, if any have you experienced in so far as implementation of Artisan and Craft curriculum is concerned?

   b) How have the challenges hindered effective implementation of Artisan and Craft curriculum?

   c) How have you tackled the challenges?

12. What would you suggest should be done in order to enhance effective implementation of Artisan and Craft curriculum in community colleges?

   **Thank you for your contribution**
APPENDIX V

RESEARCH PERMIT

REPUBLIC OF KENYA

NATIONAL COUNCIL FOR SCIENCE AND TECHNOLOGY

Telephone: 254-020-2213471, 2241349, 254-020-2673556
Mobile: 0713 788 787, 0735 404 245
Fax: 254-020-2213215
When replying please quote
secretary@ncst.go.ke

Our Ref: NCST/RCD/14/013/282

Date: 25th March, 2013

Peter Changilwa
The Catholic University of
Eastern Africa
P.O.Box 62157-00200
Nairobi.

RE: RESEARCH AUTHORIZATION

Following your application dated 15th March, 2013 for authority to carry out research on “Determinants of effective implementation of Artisan and Craft Curriculum in Catholic Sponsored Community Colleges in Nairobi Region, Kenya,” I am pleased to inform you that you have been authorized to undertake research in Nairobi and Machakos Counties for a period ending 31st July, 2013.

You are advised to report to the Principals of selected Catholic Sponsored Community Colleges before embarking on the research project.

On completion of the research, you are expected to submit two hard copies and one soft copy in pdf of the research report/thesis to our office.

DR M.K. RUGUTT, PhD, HSC,
DEPUTY COUNCIL SECRETARY

Copy to:

The Principals
Selected Catholic Sponsored
Community Colleges.