

Influence of Academic Admission Qualifications on Student Skills Development in Public Technical Training Institutions in Kenya

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Abstract

Technical education skills development is one of the strategies Kenya needs for the achievement of sustainable transformative development. The role the technical institutions play in the achievement of this goal cannot be significant without relevant academic admission qualifications. The objective of the study was to examine the influence of academic admission qualifications on student skills development in public technical training institutions in Kenya. Focusing on Diploma final year 2021 students Clothing Technology and Building and Construction Technology, the study population included 49 technical institutions recognized by Technical Vocational Education and Training Authority, Kenya National Examination Council, and Higher Education Loan Board (HELB) not later than 2018, 49 principals, 348 lecturers and 4,999 students from which a sample of 11 principals, 100 lecturers and 100 students was determined using Fisher (1998) and Bartlett et al, (2001) sample determination formulae. Simple random sampling method was used in sample selection. Contacted participants included 8 principals, 80 lecturers and 80 students. response rate included 100% for principals, 69(86.25%) for lecturers and 70(87.5%) for students. The study was anchored to the Convergence parallel mixed research design. Data was collected by means of questionnaires, document analysis guide and interview schedules. Qualitative and quantitative methods were used in collecting, analyzing and reporting the findings. Hypothesis test results revealed that (H_1) *there is a statistically significant relationship between academic admission qualifications and student skill development in which $P = \leq 0.001$, Alpha 0.05*. Qualitative results supported these findings as there were several referrals and fails at the KNEC technical results and student grievances over challenging course work content, inadequately trained lecturers and challenging national examinations. The study concluded that Kenya cannot entirely rely on the approved academic admission qualifications in the achievements of sustainable transformative development. The study recommended a review of the open admission policy to diploma level of learning, investment in technical education research, involvement of subject lecturers in the selection of students to TTI with KUCCPS and proposed a perceptual model of TTI curriculum implementation suitable for addressing academic admission qualification issues related to skills development inherent in the TTIs in Kenya.

Keywords: Academic admission qualifications, Kenya, Kenya national examination Council, Skills development, Technical education, institutions, Technical institutions

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1.0 Introduction

Kenya Certificate of Secondary Education (KCSE) constitutes basic education structure in the national education system of Kenya (Ministry of Education [MoE], 2019). Academic admission qualifications are key factors in skills development. A high grade scored in KCSE is an indicator quality skills development. Therefore, quality and reliable technical education output critically depends on inputs, academic admission qualifications being one of them. The study thus focuses on the influence of academic admission qualification as it is the most important input element in skills development (Lucas, Spencer and Claxton, 2012).

1.1 Background of the study

Globally, access to technical education institutions is open in terms of academic admission qualifications, age and gender as supported by EFA, (2010) and United Nations Sustainable Development Goals (SDGs). While EFA goal number three advocates for life-long learning for everyone, SDGs goal number eight advocates for decent work and economic growth which are part of technical education curriculum (UNESCO, 2015). The two policies seem to be challenged at the implementation stage because not all students admitted to the technical training institutions succeed especially in Sub-Saharan Africa (Eicker, Haseloff, & Lennartz, 2017). To achieve sustainable transformative development in Kenya, a critical mass of adequately trained graduates by technical colleges and universities is required. Nonetheless, the open admission policy seems to be faced with multiple challenges among them lack of adequately trained graduates in the to operate modern equipment available in various industries and

work places (Wambui 2016). In regard to this, the question whether the government will succeed in achieving the sustainable development goals is not answered and thus this study sought to respond to the question.

1.2 Statement of the problem

Technical education is one of the strategies Kenya needs in the achievement of sustainable transformative development. The role the technical institutions play in the achievement of this goal cannot be significant without relevant academic admission qualifications. On this regard, students who graduate from technical institutions have been observed struggling with skills mismatch in the world of work (Eicker et al., 2017; Maina et al., 2016; Njoroge, 2019; Wambui, 2016). This has manifested as lack of effective quantitative, communication, technical and leadership skills in the industry, collapsing of physical structures and taking lives, the import of second hand textile products notwithstanding (Maina et al., 2016; Njoroge, 2019; Wambui, 2016). Lucas et al. (2012) assert that when such a phenomenon is observed, the main problem is in the entire elements of skills development among them: academic admission qualifications and instructional strategies in classrooms, workshops and laboratories. While the question of skills gap is hoped to be solved by Competence Based Education and Training and the new and developing system of education, the question whether technical institutions in Kenya have capacity to produce adequately skilled graduates in regard to academic admission qualifications is not answered. Despite the concerted efforts made by the government of Kenya to improve technical education, the issue of skills gap has persisted. This study thus endeavored to fill the gap that exists between skills developed technical institutions and industries.

1.3 Materials and methods

The objective of the study was to examine the influence of academic admission qualifications on student skills development in public technical training institutions in Kenya in Kenya. The study investigated the focusing on Diploma final year students class of 2021, Clothing Technology and Building and Construction Technology courses. Hypothesis was stated and conducted on its null form (H_0); *there is no statistically significant relationship between academic admission qualifications and student skill development*. The study was anchored to the Open systems theory in education (Mintrom, 2016) and the Decision making theory (Campitell & Gobet, 2010). The systems theory was selected because of its emphasis on the principle of unity of purpose of skills development elements that include: inputs, through puts and outputs in which academic admission qualifications are part of inputs. The second theory was selected to fill the scientific gap in decision making that lacked in the systems theory that included the bounded rationality and satisficing principles of decision making. The theories suited this study as all of them involved the student, lecturers and principals who are the main participant in the process of skills development.

The study was guided by the convergence parallel mixed design. The study population included 49 technical institutions recognized by Technical Vocational Education and Training Authority, Kenya National Examination Council, and Higher Education Loan Board (HELB) not later than 2018, 49 principals, 348 lecturers and 4,999 students from which a sample of 11 principals, 100 lecturers and 100 students was determined using Fisher (1998) and Bartlett et al, (2001) sample determination formulae. Simple random sampling method was used in sample selection. Contacted participants included 8 principals, 80 lecturers and 80 students. response rate included 100% for principals, 69(86.25%) for lecturers and 70(87.5%) for students. The study was anchored to the Convergence parallel mixed research design. Data was collected, by means of questionnaires, document analysis guide and interview schedules. Analysis of data was conducted using the convergence parallel approach in which qualitative and quantitative findings were compared, contrasted, interpreted. Qualitative and quantitative methods in reporting the findings.

2.0 Related Literature Review

Globally, various studies have been conducted in regard to the influence of academic admission qualifications and skills development with the purpose of improving technical education and tackling issues of skills gap. On this regard, Sarikaya and Yildirim (2019) sought to understand the nature of higher vocational training processes in Turkey. The study established that all students enrolling for higher vocational education needed to obtain a pass in basic level of Turkey's English, Standard English Language and Mathematics. This strategy impeded upward mobility in skills development meaning that students were not able to transit from diploma level of learning to degree for example. Similar observations were made by Amedorme and Fiagbe (2013) in Nigeria, Malenchwanzwi, (2018) in Kenya, Ngoveni (2018) in South Africa as the students wondered whether the nations wanted languages and mathematics or skills. These findings thus can be used to show that learners in technical education might be lacking a logical understanding of the existence of technical education curriculum and/or the logical reason for the existence of open admission policy is lacking globally.

In Tajikistan, Al-Saaideh (2016) observed that few youths enroll for technical education annually. The study thus endeavored to finding out the reasons for avoidance of Technical and Vocational Education in the country. Findings showed that technical education was set aside for low grade academic achievers, the students discouraged

others from taking up the courses and that the students had difficulties in mastering skills taught adequately. These discouraged students who obtained university entry grades but wished to pursue a technical education course from enrolling. In this case, the country missed an opportunity of developing a critical mass of well qualified graduates for sustainable development. Similar observations established by Burdenhost & Radile, (2018) in South Africa in which technical education curriculum was set at a higher level comparing to the students' academic ability by professors who had inadequate knowledge in technical education and proper orientation. Malechwanz, (2018) in Kenya also made same observation in which students performed poorly at the Kenya national examinations even in adequately equipped institutions. These findings show that there is a significant relationship between academic admission qualifications and skills development globally brought about by multiple elements that require further investigation.

In Cameroon, Daoudou (2018) observed that admission to technical education had multiple issues that included: curriculum, political and attitude among others. The study findings on the state of practices of Cameroon technical education institutions indicated that admission to technical courses was based on a competitive examination administered prior to admission and that the students' academic credentials and education background were studied against courses applied for before admission. This could mean that Kenya can succeed in skills training if such a strategy is applied at admission stage. Similarly, a study conducted by Munishi (2016) in Tanzania sought to establish factors contributing to lack of employable skills among technical graduates in Tanzania. Using the historical dialectical materialism approach, the study found out that weak primary and secondary school curriculum and admission of weak students to technical education programmes was the main course of skills gap in Tanzania. Similar findings in regard to low-quality input among them low entry grades that make it difficult for the training institutions to respond adequately to the industry's needs were established by Al-saaideh (2020) in Jordan, Alshamsi (2020) in United Arab Emirates, Anindo (2016) in Nairobi County Kenya, Barasa and Kwisira (2019) in Kakamenga County Kenya, Bogonko (2018) in Nyamira County Kenya, Koboonye (2020) in Botswana, Mwila (2016) in Malawi, Ngure (2015) in Kenya, Sakamba in Zambia. These findings emphasize the fact that open admission policy is a challenge to skills development globally hence requiring further investigation.

In Kenya, Ringera (2017) carried out a study in Meru County to establish the relationship between performance in secondary school Mathematics and Diploma in structured programming unit in technical institutes in Meru. The study's statement of the problem showed that students who did not perform well in Diploma in Communication Information Technology (DCIT) had failed in Mathematics at KCSE. As result the lecturers made no effort of teaching the students as they believed that they will still fail. Similar findings were established by Ngoveni (2018) in South Africa and Muthoni, (2015) in Kenya in which students could not perform simple mathematics like calculating distance and speed in a motor-vehicle mathematics, Yizengaw (2018) in Ethiopia in which students could not apply quantitative knowledge in practical learning and Yi et al. (2015) in China in which a sharp student enrollment decline in computer science was noted before the students completed their first year of study. The findings thus emphasize that the open admission policy is a global problem which require further research.

A global survey of related literature reviewed in English in regard to the influence of academic admission requirements on student skills development has revealed that the academic aspect of technical education is under searched globally as few studies have been conducted in this area. The literature reviewed thus can be used to demonstrate that skills gap is a global issue which can be addressed by intensive scientific research. To contribute to solutions of skills gap globally, this study was thus initiated.

3.0 Data Analysis

Lecturers' responses in regard to the influence of academic admission qualifications and student skills development

The lecturers' questionnaires garnered both qualitative and quantitative responses. Therefore, this section presents quantitative and qualitative findings, a comparison and contrast of the two data and an interpretation of the findings.

Lecturers' quantitative responses

Using a Likert scale of five levels, the lecturers were asked to give their opinions in regard to the academic admission qualifications and skills development. The following responses were gathered:

Table 1
Lecturers' Opinions on Academic Admission Qualifications and Skills Development

Statements	Response Percentages						
	Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree	Mean	Std. Deviation
Admission grades are relevant to the course applied for	2.9	7.2	2.9	58.0	29.0	4.03	0.94
Course work subject content is relevant to the students' academic ability	2.9	11.6	8.7	59.4	17.4	3.77	0.97
No student gets a referral in math and science subjects at the national examinations	20.3	59.4	7.2	11.6	1.4	2.14	0.93

Table 1 shows that majority, 40 (58%) of the respondents were in agreement that academic admission qualifications are relevant to the courses applied for while 20 (29%) strongly agreed, 2 (2.9%) were undecided, 5 (7.2%) percent disagreed and 2 (2.9%) strongly disagreed. The results thus show that TTI produce both high and low qualified graduates. The ambivalent responses of the lecturers can be used to show that the probability of employers getting a highly qualified graduate in half due to open academic admission qualifications factor. In this regard, the possibility of industries un-training graduates to retrain is high. In 2016, Kyrariz made such an observation in Uganda. For this concern the question is, "is un-training and retraining of graduates possible in a nation or continent where families live below one dollar a day?". These findings thus require further investigation.

In regard to relevance of course work subject content with student ability majority, 40 (59.4%) agree that the two are commensurable, 12 (17.4%) strongly agree, 9 (11.6%) disagree, 6 (8.7%) were undecided, 2 (2.9%) strongly disagree. The varied responses are thus indicators of enrollment of both strong and weak students to the same level of training. Similar findings established in South Africa (Burdenhost & Radile, 2018; Ngoveni, 2018) revealed that many students in TTIs do not fare on well with the coursework due to high subject content intonation in relation. To address such issues, intensive empirical studies need to be conducted (Koobonye, 2020; Zauliatou, 2017). Moreover, Tambwe (2017) advises that a backward or chronological mapping strategy is required in addressing issues regarding course work content and academic admission qualifications.

In regard to whether students received fails and referral results in mathematics and science subjects at the KNEC Technical Examinations, majority, 41 (59.4%) disagreed, 14 (20.3%) disagreed, 5 (7.2%) were undecided, 8 (11.6%) agreed, and 1 (1.4%) strongly agreed. These results reveal that there are many referrals and fails in TTIs in regard to Mathematics and Science subjects. One point above the mean implies that students have issues with mathematics and science subjects. Therefore, not all students reach the required level of skills development. Similar findings were established in Ghana by Amedome and Fiagbe (2013) and Malechwanz (2018) in Kenya. These findings thus can be used to emphasize the fact that technical education is not for academic failure as thought to be but for students who qualify especially in mathematics and sciences.

Using Kolmogorov Smirnov test for normality, the results showed that the data qualified for Kruskal Wallis test and test for normality failed. The Kruskal Wallis test was thus performed to compare the statistical significant difference between academic admission qualifications and the attitude of the lecturers on the extent to which the content of the subject they teach was relevant to the academic admission qualifications. The following results were generated:

Table 2
Kruskall Wallis Test Statistic

	Academic admission
Chi-Square	15.487
Df	4
Asymp. Sig.	.004

A Kruskal Wallis test results in table 2 showed that there was a statistically significant difference in academic admission qualifications between the lecturer responses or attitude (chi-square=15.487, p=0.001, df=4) with a mean rank academic admission score of 64.0 for very low, 48.21 for very high, 38.76 for high, 24.52 for moderate and 10.80 for low. Therefore, the extent to which the lecturers perceived the content of the subject they teach to be relevant to the academic admission differed from very low to very high based on the mean rank of the results

revealing the nature of the open admission policy. The p value, 0.001 show that a statistically significant relationship between academic admission qualifications and skills development. Therefore, Kenya cannot entirely rely of the approved academic admission qualifications for skills development.

Lecturers' qualitative data on the influence of academic admission qualifications on student skills development

The lecturers were asked to explain how effectiveness the academic admission qualification is in skills development. Majority expressed that there a problem with the KUCCPS in regard to subject clusters and admitting KCPE graduates together with KCSE graduates for artisan level of learning. In this regard, responses indicated that the sector admits students to TTIs programmes without consulting TTI lecturers who have practical teaching experience, proper knowledge and orientation in regard to the training. The lecturers concluded that students who did not pass in Mathematic and sciences should not be admitted to technical courses that require high grades in mathematics and sciences especially physics. These findings thus show that systems thinking lacks in the process of skills development. For instance, respondent number 34 opined that, there are subjects that require high Kenya Certificate of Secondary Education (KCSE) general grades and at the same time high grades at subject level. Unfortunately, on admission, specific subjects' grades are not specified thus students with no proper academic foundation to the courses that require high grades or marks end up in enrolling for courses that are very challenging. Such students end up obtaining fails and referrals and the national examinations, get discouraged and end up dropping school. The end results could be waste of resources or being employed without comprehensive skills in the same field in a corrupt institution thus a perpetuation of skills gap.

Moreover, the qualifications were not in favor of the physically challenged especially the deaf. Respondent number 46 said that in Building and Construction Technology course, high grades in physics and mathematics are required but only a general grade is mentioned at admission to the programmes by Kenya Universities and Colleges Central Placement Sector (KUCCPS). On the same note, lecturer number 46 stated that there is lack of career guidance for these students at basic education level. These findings thus make a basis for another study.

Comparing and contrasting quantitative and qualitative data for lecturers

Hypothesis tested using Kruskal Wallis test in table 2 showed that there was a statistically significant difference in academic admission qualifications and the lecturers' responses on attitude (chi-square=15.487, p=0.001, df=4). This shows that there is a problem with academic admission qualifications and skills development in Kenya. Qualitative data supported these findings as the responses showed that students had academic challenges especially in regard to courses that require adequate knowledge in mathematics and high KCSE grades.

Students Quantitative findings on the Influence of Academic Admission Qualifications on Skills Development

Students' questionnaire comprised of both open and closed ended questions. Therefore, this section presents quantitative and qualitative findings, compared, contrasted and interpreted.

Students' quantitative findings

Admission qualifications are important to this study because prior knowledge to technical courses is an essential prerequisite to skills development. Table 3 therefore presents academic admission grades for the 70 sampled students for the study.

Table 3

Sampled Students' Academic Qualifications at Admission Level

KCSE Grade	Frequency	Percent (%)
C+ and above	1	1.4
C Plain	25	35.7
C Minus	23	32.9
D Plus	12	17.1
D Plain	3	4.3
KCPE Certificates	6	8.6
Total	70	100%

Table 3 shows that 1 (1.4 % of the students admitted to the TTIs had obtained grade C plus and above, 25 (35.7%) obtained grade C, 23 (32.7 %) C minus, 12 (17.1 %) D plus, 3 (4.3 %) D plain and 6(8.6 %) had earned a KCPE certificate. The findings thus show that technical institutions had complied with the academic admission qualifications policy to TTIs in Kenya as specified in the TVET Act, 2013 and the Kenya Universities and Colleges

Central Placement Sector (KUCCPS).

The study thus sought to establish whether or not the academic admission qualifications were relevant to the course students were enrolled in. The students were asked to indicate whether or not they had learning challenges.

Table 4

Learning Challenges for TTIs Students

Students with learning challenges	Frequency	Percent
No	22	31.4
Yes	48	68.6

Table 4 reveals that majority of the student respondents 48(68.6%) had learning challenges and 22 (31.4%) had no challenges. In regard to these findings, 48.6 percent is a high figure which shows a serious problem in regard to academic admission qualifications and skills learning in TTIs. When most students show that they have challenges in regard to skills learning it may indicate that the course content is pitched at a higher level than the students' academic ability as observed by Ngoveni, (2018) and Burdenhost & Radile, (2018) in South Africa thus one cause of skills gap in Kenya.

Students' qualitative responses

The study sought to find whether or not students had challenges in regard to academic admission requirements and the course pursued. Responses obtained focused on financial and pedagogy that included late remission of fees by HELB, inadequate lectures, practical lessons, learning material, training equipment, inadequately trained lecturers, over description of the syllabus and no serious learning for diploma students. On this regard, *responded number 24 lamented that "there are difficult subjects in the TTIs and some of them were not introduced at secondary school level such as Technical drawing"* A second major challenge reported was finance. On this regard, student number 52 lamented that, *"here in this institution we experience delays by Higher Education Loan Board which is supposed to facilitate our school fee the beginning of the term but they do remit at the end of the term, and this has affected our learning because we couldn't be allowed to attend classes without fee clearance document by the accounts' office."* Therefore, the study established that there is lack of coordination between technical training institutions and High Education Loan Board, a challenge among stakeholders which is systemic. Another study is therefore required to establish the cause of these findings.

Comparing and contrasting quantitative and qualitative data for students

Quantitative and qualitative findings agree that academic admission qualifications influence skills development. It seems that students are enrolled in TTIs as the last resort when they fail to get admissions to universities. Therefore, inadequate academic admission grades account for the issue of skills gap in Kenya.

Interpretations

Academic admission qualifications lack logical reason specifically on how they were arrived. This is in regard to general admission grades and specific subjects for various courses offered by technical institutions in Kenya. Therefore, there is need for further study into this phenomenon. Moreover, technical institution lecturers and principals need to be involved in decision making for matters pertaining admissions to the institutions.

Principals' responses in regard to the influence of academic admission qualifications and skills development

The study sought to understand how effective the academic admission qualifications were to skills development. Principal number one asserted that the qualifications were are not adequately set as most students at diploma level do not reach the required level of skills development. Course work seem to be challenging specially to subjects that require high grades in mathematics and science subjects. Principal number two and three asserted that, "the qualifications are well set, it all depends on the seriousness of every student." Moreover, principal number four opined that, "the qualifications are not favorable for deaf students." Principal number five and seven pointed out that there are issues of clusters that need to be reviewed by Kenya Universities and Colleges Central Placement Service. Principal six asserted that it is yes and no because in some subjects, students lack sufficient background knowledge for their careers and principal number eight asserted that the qualifications were well set but how students are taught matters a lot.

Majority of the responses elucidated agree with the literature review findings that open admission policy is a challenge to skills development (Al-Saaideh, 2016; Doudou, 2018; Eicker et al., 2017; Munishi, 2016; Ringera, 2017). Therefore, another study will be required to verify the truthfulness of these findings.

Document Analysis guide findings in Regard to Academic Admission Qualifications and Skills Development

Document analysis was conducted on KCSE grades at admission level and the final KNEC technical grades in the TTIs. The purpose of this analysis was to generate data to aid in discerning whether or not academic admission

grades influence skills development in TTIs in Kenya. Findings were presented as follows:

Cross tabulation of KCSE grades and KNEC technical results

The data was cross tabulated as presented in table 5. on the courses that students pursued that aimed at answering the question whether the KCSE results influence the final grade at TTI. The following results were generated:

Table 5

Cross Tabulation Test Table for KCSE Grades and KNEC Technical Grades

Final KNEC Grade at TTI		KCSE Grade					Total	
		E or KCPE Certificate	D plain	D Plus	C Minus	C plain		C Plus and Above
Fail	Frequency	1	1	1	6	0	0	9
	Percent	1.4	1.4	1.4	8.7	0.0	0.0	13.0
Refer	Frequency	0	0	1	7	6	2	16
	Percent	0.0	0.0	1.4	10.1	8.7	2.9	23.2
Pass	Frequency	2	0	6	10	3	0	21
	Percent	2.9	0.0	8.7	14.5	4.3	0.0	30.4
Credit	Frequency	0	0	3	5	7	6	21
	Percent	0.0	0.0	4.3	7.2	10.1	8.7	30.4
Distinction	Frequency	0	0	0	0	1	1	2
	Percent	0.0	0.0	0.0	0.0	1.4	1.4	2.9
Total	Frequency	3	1	11	28	17	9	69
	Percent	4.3	1.4	15.9	40.6	24.6	13.0	100.0

Table 5 shows that out of the 70 students whose entry to TTIs results were studied. The findings show that the higher the academic admission qualifications the higher the chance of succeeding in the TTI studies. Despite the fact that some students with low entry qualifications successively progressed from artisan and craft levels of learning and excelled at the diploma level the track they followed is an expensive venture. Another study thus is required to solve this problem especially in the third world economy nations.

Chi-square test on KNEC Tech Grade and KCSE Grade

In this study data in regard to final Diploma KNEC technical education for Building and Construction Technology (BCT) Clothing and Building Technology (CBT) courses and KCSE grades were tested. The following results were generated:

Table 6

KNEC Tech Grade and KCSE Grade

Chi-square test	Value	Df	Asymp. Sig. (2-sided)
Pearson Chi-Square	33.471 ^a	20	0.030
Likelihood Ratio	37.058	20	0.012
Linear-by-Linear Association	5.958	1	0.015
N of Valid Cases	69		

a. 25 cells (83.3%) have expected count less than 5. The minimum expected count is 0.03.

In table 6 a Chi-square test was thus performed to find the relationship between KNEC technical examination and KCSE grade among the students. The test shows that there is a significant relationship ($p=0.03$, Chi-square=33.471, $df=20$) between KNEC technical examination and KCSE grade. In the KNEC examination, 30.4 percent had a pass while 30.4 percent had a credit with 2.9 percent obtaining a distinction. Approximately 14.5 percent of the students who scored C minus in KCSE had a pass in KNEC examination. No student with C plus and above had a fail in the KNEC examination. Therefore, academic admission grade has an influence on students' skills development at the TTIs.

Comparing and Contrasting Quantitative and Qualitative findings on the influence of academic admission qualifications and skills development

Quantitative results supported the alternative hypothesis; *there is a statistically significant relationship between academic admission qualifications and skills development*. Qualitative results supported these results by indicating

that students were challenged in courses that required adequate quantitative knowledge. The results supported the literature review findings that open admission policy is one of the causes of skills gap globally (Amedorme & Fiagbe 2013; Daoudou, 2016; Eicker et al., 2017; Munishi, 2015; Ringera, 2017; Serikaya & Yildirim, 2019). Another study that will look into the causes of these findings will be required.

Interpretation

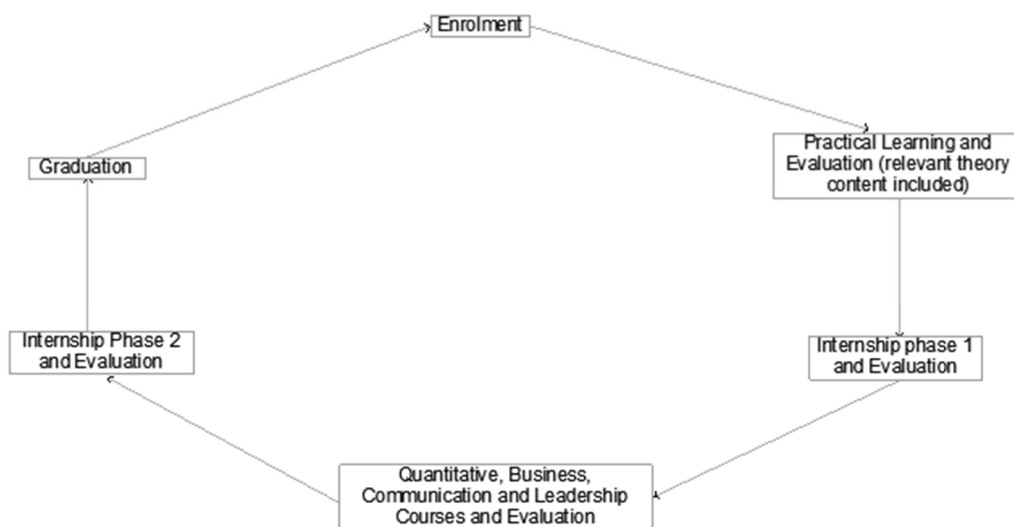
There is a problem with the academic admission qualification policy. The policy lacks competitive criteria for selection of students and credibility as the government cannot employ the same students for the KCSE grades they are admitted on. Moreover, technical education is not for academic failures especially at Diploma level of learning. Therefore, students applying for diploma programmes to technical institutions in Kenya need to obtain right qualifications if the issue of skills gap are to be ended.

Conclusion

Adequate academic admission qualification policy is an important factor in regard to quality skills development. Therefore, stakeholders need to synergize in order to bring the issues of skills gap in Kenya to an end.

Recommendations for practice

This study revealed that majority of the students admitted to diploma level of training had issues with mathematics and science subjects but preferred practical learning amidst a lack of adequate and current training equipment and adequately trained skill lecturers. To tackle this issue, the study suggests a perceptual curriculum implementation model that separates practical learning from theory. The model provides a basis for harnessing all stakeholders in the TVET sector, one at a time, working systemically, enhancing inputs, through puts and out puts for quality skills development. In this model, students focus on practical learning first before proceeding to quantitative and communication skills learning which equips them with generic knowledge that enables graduates to thrive in the job market. The model provides a step by step basis for principals and other stakeholders to implement and supervise learning, enhance system thinking and decision making in process of skills development.



There is low enrolment for technical courses at diploma level and the coursework seems to be a challenge to majority of students. Therefore, there is a need of academic admission qualifications being at par with other middle level colleges as well as universities.

Admission criteria of students by the Kenya Universities and Colleges Central Placement Sector (KUCCPS) was established a challenge to the technical institutions. For this concern, KUCCPS admits students with challenges in science subjects and mathematics to courses that required high grades than they scored at KCSE. Therefore, there is a need of involving lecturers in the student selection process for by KUCCPS will be important in addressing issues of skills gap.

Admission criterion to technical education is under searched globally as few published sources were available. Therefore, there is need for international and local bodied responsible for the development and growth for technical education to invest in technical education research and allow experts in this area of education to venture

Recommendations for further study

This research recommends that a study on whether it is necessary to abolish the open admission policy for diploma level admissions for technical training institutions in Kenya.

To enhance quality of skills development in the country, the study recommends an investigation into the cause of multiple referrals and fails at Kenya National Examinations at diploma level of training. Besides these, there is need to find out the cause of low enrolment of students at diploma level in the Clothing Technology and Building and Construction Technology Courses in Kenya.

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