



*The Cradle of Knowledge: African Journal of
Educational and Social Science Research
AJESSR - ISSN 2304-2885-p, 2617-7315-e
Volume 11, Issue 4, 2023
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**SOCIETY OF
EDUCATIONAL
RESEARCH
AND
EVALUATION
IN KENYA**

Trends in Government Bursary Allocation and Students' Access to Public Vocational Training Centres in Bungoma County, Kenya

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Abstract

The county governments have been spending a lot of money on public Vocational Training Centers (VTCs) trainees in form of bursary to promote equity in access and quality education. It is on this basis that the objective of this paper was to establish the trends in County Government Bursary (CGB) allocation and students' access to public VTCs in Bungoma County for the period 2014 to 2019. Descriptive research design was adopted. The study was guided by socialist economy and the principle of demand and supply theories. The study used sample size of 48 managers and 358 VTCs trainees. The study used stratified proportionate sampling technique. Data was then collected using questionnaires and document analysis. A reliability of 0.75 was established through test-retest method. It was established that although the trends of the County Government Bursary allocation and access to Bungoma County VTCs fluctuated, there was steady rise in both variables. The study recommends diversification of courses and funding in VTC in line with the ever-changing technological world and market demand to promote increase in students' access over the years.

Key words: Access; bursary; funding; trends, trainees; vocational education

1. Introduction

The United Nations Educational, Scientific and Cultural Organization (UNESCO, 2012) envisioned that enrolment rates in tertiary institutions would be more than double between the years 2000 to 2020. Desai, (who was the former principal secretary for Technical Vocational Education and Training (TVET)) noted that, enrolment into TVET stood at 0.5%, by the year 2019, Mbuva (2019). The government of Kenya, envisioned to enroll 20% of the youth population to TVET institutions by the year 2030, Maina (2019). To bring this vision to realization, the government of Kenya has put in place several measures one of which is the introduction of the county government bursary (CGB) which is aimed at increasing access for trainees of vocational training centers (VTCs), who hail from needy backgrounds. The County Government expenditure on education in the 2018/2019 financial year stood at Kshs. 36,745,370,000 (Republic of Kenya (RoK), 2019). This paradigm shift termed 'productivism' in the TVET sector assumes that training leads to acquisition of skills which would enable one to become employed thus, contributing to economic growth.

Government investment in TVET sector has many success stories and vice versa. The Bangladesh Bureau of Statistics (BBS) labor force survey 2010 indicated that, the unemployment rate remained low at 4.5% (Haolader, 2015) on one hand but on the other, Dynarski (2007) expressed fears that students induced into college by grant aid may soon drop out. This could explain why a study by Agrawal (2013) established that those who had followed the Vocational Education Training (VET) path were not economically successful in their lives.

When compared to other levels of education, TVET institutions tend to be more expensive to set up and even manage (UNESCO Vocational Education, (UNEVOC-UNESCO, 2017) because of its practical nature. Jweiles (2017) adds that, TVET is an easy target for budget cuts. A study by Osidipe (2017), established that the financing of TVET was inadequate in west African region. Baikuntha (2020) notes that in Nepal, allocation to this department by Ministry of Education, Science and Technology (MOEST) tends to fluctuate and so did the statistics (RoK, 2019). A lot of funds



are invested in VTCs by the government with the hope that increased funding would lead to an increase in enrolment and completion rates. However, Wasike et. al. (2020a) established that the trainees of VTCs could be receiving more funding from the Constituency Development Fund (CDF) i.e. (74.5%) than from the Bungoma County Government Bursary (BCGB) i.e. (21.8%).

The increased focus on TVET institutions is based on the assumption that they are the key drivers of Vision 2030 (Muriithi, 2013). However, the national statistics indicates that the enrolment capacity in public VTCs nationwide, is lower (average of 57 trainees per VTC) in comparison with that of private VTCs (average of 1822 trainees per VTC in the year 2018 (RoK, 2019). In an effort to revitalize these institutions of learning, the name village polytechnics has been changed severally, today, they are called vocational training centers (VTCs) and the economic survey 2019 referred to them as vocational training colleges (VTCs). The CGBF was defined by Oketch et. al. (2019) as a county fund consisting of monies of an amount of not less than 1.5% of the county government budget in every financial year as may be appropriated by the county assembly.

Many studies have been conducted to establish the relationship between government financial initiatives (like bursaries) and the various indicators of access to education institutions for instance studies by: Obwari (2013), Oyoo et. al. (2020), Dzuya (2020), Nzuki (2017), Ng'alu and Bomet (2014) and Wasike et. al. (2020b) which established that there was a positive relationship between government initiatives and the various indicators of access on one hand, and others like Tanui (2016) and Rukwaro et. al. (2017) established that there was a negative relationship between government initiatives and access. Yet others, like Ngugi and Muthima (2017) established that there were great disparities in enrolment according to gender. Thus, the findings from the studies that have been conducted were contradictory. Moreover, all but a study by Wasike et. al. (2020b) was conducted in Bungoma County. Furthermore, the study by Wasike et. al. (2020b) was conducted on TVET and not specifically VTCs and the focus of the study was on government financing in general and not specifically on the Bungoma county government bursary.

National statistics indicate that private VTCs had a higher enrolment capacity in comparison to the public VTCs. This raises a great concern especially in Bungoma county where the Vocational Training Centre (VTC) trainees receive varied amounts of money in the form of the Bungoma county government bursary since the year 2014. This was unlike other counties like Kakamega county where for instance, the VTCs trainees would receive a uniform amount of Kshs. 15,000 per trainee per year in the form of county government bursary. There was thus, need to establish how the variation in the amount of bursary awarded affected students' access in public VTCs in Bungoma County between the years 2014 to 2019.

The study was guided by the socialist economy and the principle of demand and supply theories. A socialist economy is a system of production where goods and services are produced directly for use. Karl Marx is considered the founder of socialist economic thinking. The New World Encyclopedia contributors (NWEC, 2015) defines it as the destruction of both the class system and the compulsion economic growth that is, it serves to provide equal access to all individuals. The principle of demand and supply states that, all things constant, when commodity prices rise, the quantity demanded of a commodity falls and vice versa Mankiw (2007). In essence the cost of education affects access to different courses and VTCs.

In the school scenario, this theory implies that other things constant, when the amount of money required of a potential trainee to pay in terms of tuition fees in education institutions (like VTCs) is increased, the number of those who are willing and able to enroll into the institutions reduces and when the amount of tuition fees required of a potential trainee to pay is lowered, the number of those who are willing and able to enroll into the institutions increases. Therefore, the bursary reduces the amount of tuition fees that VTCs trainees have to pay in form of tuition and this would mean that more students would be able to enroll in the VTCs and even complete the courses they were enrolled into, by sitting national exams in these respective courses they enrolled for and vice versa. The principle of demand and supply was noticed in the market place long before it was mentioned in a published work or even given its name.

2. Research Methodology

The study used descriptive research design. The study area was Bungoma county which is located in the western region of Kenya. The target population comprised of 3578 trainees enrolled in VTCs in the year 2019, 54 principals (managers) of VTCs and 4 sub county vocational education training officers (SCVETOs). The 54 VTCs that were already in operation by the year 2013 were the only institutions from which the target population was drawn. The



sample comprised of 358 trainees, 48 principals and 4 sub county officers. Document analysis, questionnaires and interview schedules were used as data collection instruments. Data was presented in tables and graphs.

3. Findings and discussion

3.1. Trends of the Bungoma county government bursary and access

The first objective of the current study was to determine the trend of the Bungoma county government bursary (BCGB) and enrolment in public VTCs in Bungoma County between the years 2014 to 2019. The purpose of this objective was to determine whether there was increase or decrease in BCGB and enrolment. Table 4.1 illustrates the enrolment per course per gender and average amount of BCGB per VTC per year.

Table 1: Average amount of BCGB per VTC per year and access

	2014		2015		2016		2017		2018		2019	
	M	F	M	F	M	F	M	F	M	F	M	F
G. M	51	901	66	908	64	812	57	738	52	1100	42	1173
M.V.M	542	24	736	29	588	28	517	18	713	72	1022	34
Mas.	477	20	475	25	528	17	449	5	815	26	901	20
E. W.E	167	21	301	22	236	50	223	16	419	89	673	36
H. D	6	128	12	185	5	224	16	145	28	339	26	432
C&J	204	3	193	12	180	0	144	0	241	21	227	15
ICT	45	56	39	67	30	47	18	31	99	100	126	131
P.P.F	40	4	46	4	84	10	96	5	187	40	203	47
A.W	65	0	89	3	85	1	63	1	189	8	226	6
Driv.	155	8	110	7	97	1	110	8	45	6	33	2
F.T.	6	48	6	38	15	13	5	26	35	110	24	126
U.L	52	25	34	15	58	24	39	61	0	0	0	0
A.B	0	2	0	0	0	1	0	1	75	64	65	55
Total	181	124	210	131	197	122	173	105	289	1975	3568	2077
	0	0	7	5	0	8	7	5	8			
BCGB average	188180		168029		213861		305594		375711.7		480000	
BCGB	3920.4		3500.6		4455.4		6366.5		7827.3		10000	

Table 1 shows that courses like Garment Making (G.M) and Hair Dressing (H.D.), Carpentry and Joinery (C&J), Architectural Welding attracted enrolment from both genders. The table also shows that the highest overall enrolment among both genders was recorded in the year 2019 (3568 males and 2077 females). And that the highest average amount of BCGB received per trainee, per VTC per year was in 2019 (10000) while the lowest amount was in 2014 (3500.6). Figure 4.1 illustrates the overall enrolment per course in the six year period (2014 to 2019).



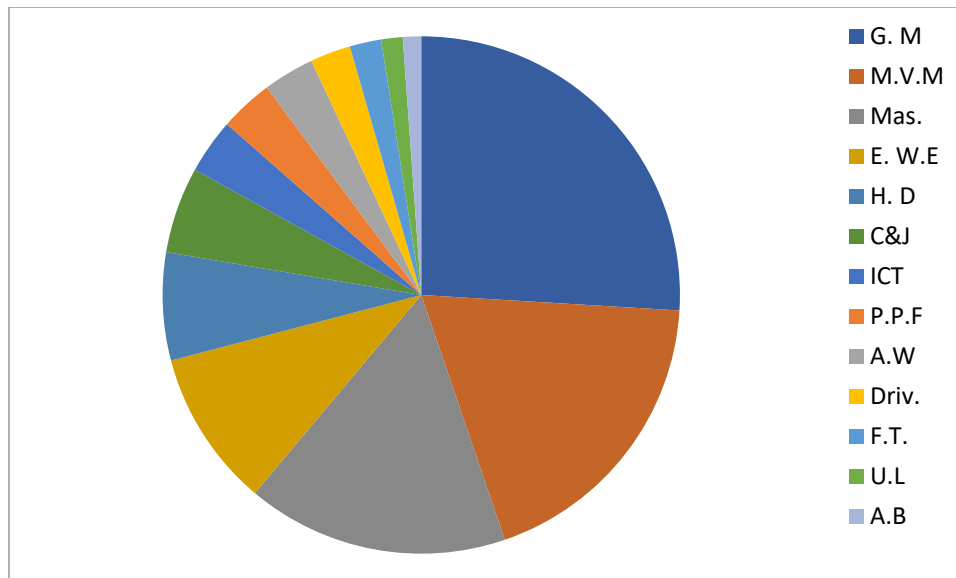


Figure 1: The overall percentage enrolment per course

From Figure 1, it is shown that garment making had the highest overall enrolment while agribusiness had the lowest overall enrolment between the years 2014 to 2019. Similarly, the questionnaires that were administered on the VTC trainees showed that majority of the respondents 59 (19.4%), were undertaking garment making while minority of the respondents 15 (4.9%), were undertaking Agri-business. The rest of the respondents were undertaking the following course: Motor vehicle mechanics 43 (14.1%), Masonry 38 (12.5%), Hair dressing 36 (11.8%), Plumbing and pipe fitting 30 (9.9%), Food technology 25 (8.2%), Electrical wiring 23 (7.6%), Metal work 18 (5.9%), Carpentry 17 (5.6%). The study calculated the trend of the BCGB and enrolment using Thakur (n.d.) trend analysis formula which was discussed in detail in chapter three (page 28). Table 2 illustrates the trend of the Bungoma county government bursary (BCGB) and enrolment.

Table 2: Trend of the BCGB and enrolment in Bungoma County VTCs

Year	Total BCGB	Trend	Male enrolment	Trend	Female enrolment	Trend
2014	188180	N/A	1810	N/A	1240	N/A
2015	168029	-10.71	2107	16.4	1315	6
2016	213861	27.28	1970	-6.5	1228	-6.6
2017	305594	42.89	1737	-11.8	1055	-14.1
2018	375711.7	22.94	2898	66.8	1975	87.2
2019	480000	27.76	3568	23.1	2077	5.2

Table 2 shows that the percentage amount of the Bungoma County Government Bursary (BCGB) awarded per trainee per year, just like enrolment per gender, decreased then increased between the years 2014 to 2019 in Bungoma County. To determine the exact trend that was assumed by the BCGB and enrolment, the study has further illustrated the information in figure 2.



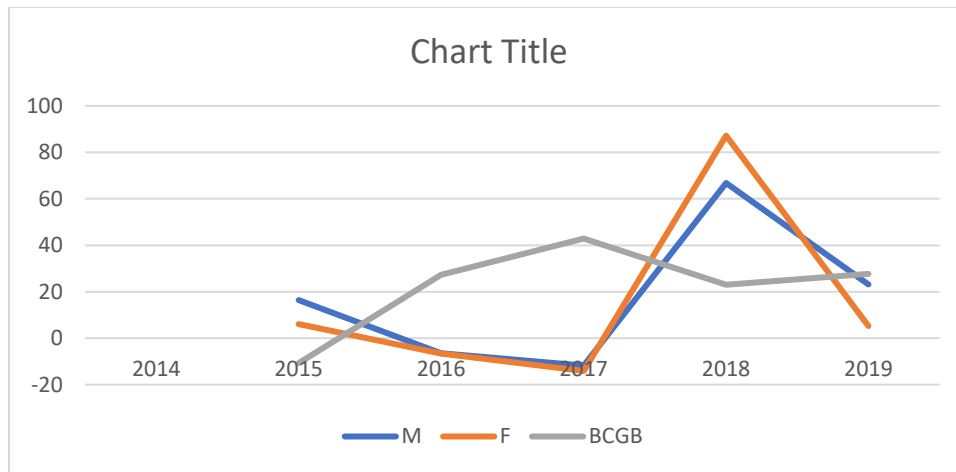


Figure 2: Trend of the BCGB and access per gender

Figure 2 shows that both the BCGB and enrolment fluctuated between the years 2014 to 2019. The findings of the current study mean that in the 6 year period under the current study, all courses offered by the VTCs in Bungoma county received equal attention in terms of enrolment from both genders. Whereby, more males than females enrolled into VTCs. On average, the amount of bursary allocated per trainee per year per VTC was increased. The findings also meant tailoring and garment making was the most preferred course while, agribusiness was the least preferred course among those who enrolled into the sampled VTCs between the years 2014 to 2019. And that both the BCGB did not assume a definite trend.

3.2 The trends between the BCGB and gross enrolment in VTCs

The third objective of the study was to determine the relationship between BCGB and gross enrolment in VTCs between the years 2014 to 2019. A study by Palmer (2015) had expressed concerns about investment of government funds into education institutions where there was little feedback on such investments. Therefore, the purpose of this objective was to establish whether the BCGB had a significant relationship with enrolment. To achieve this, the study analyzed the admission registers and the accounts records that were available in the sampled VTCs. The data that was collected from these records was supplemented with the data collected from the interviews administered on the VTCs managers (principal instructors), the sub county vocational education training officers (SCVETOs) and the questionnaires that were administered on VTC trainees. Table 3. illustrates the BCGB and gross enrolment in the sampled VTCs in Bungoma county between the years 2014 to 2019. The information in table 3 is further illustrated in figure 3.

Table 3: BCGB and enrolment in the sampled VTCs in Bungoma County

Year	BCGB	Male enrolment	Female enrolment	Total enrolment
2014	3920.4	1810	1240	3050
2015	3500.6	2107	1315	3422
2016	4455.4	1970	1228	3198
2017	6366.5	1737	1055	2792
2018	7827.3	2898	1975	4873
2019	10000	3568	2077	5645

Figure 3 shows that as BCGB was increased, the total enrolment in the VTCs also increased between the years 2017 to 2019. The opposite was also true for the years 2014 to 2017.



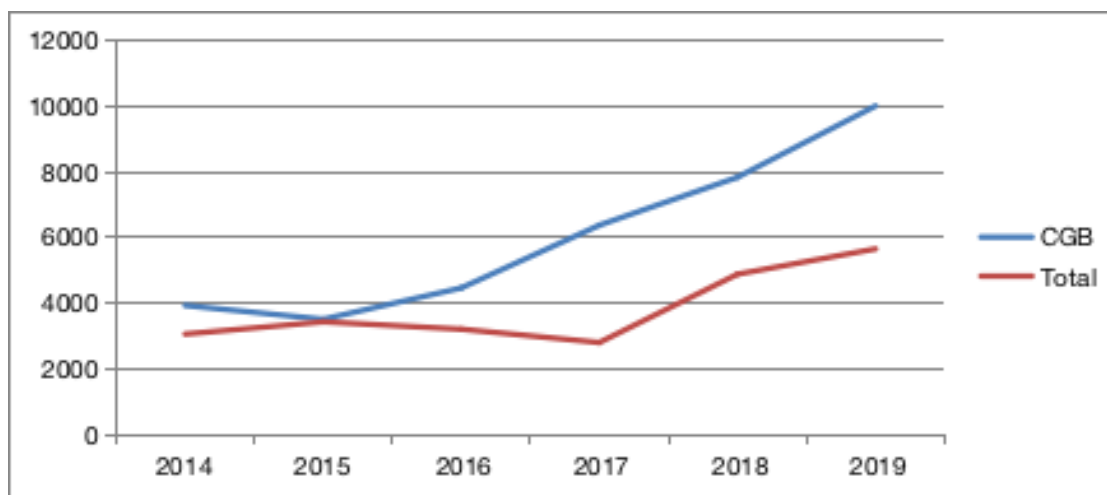


Figure 3: Illustration of the relationship between BCGB and gross enrolment

3.3. Trend of the county government bursary and completion rates

The second objective of the study was to determine the trend of the BCGB and completion rates from public VTCs in Bungoma County between the years 2014 to 2019. To establish the completion rates, enrolment and completion from the sampled VTCs were tabulated per course per year. By applying the assumption that every course is estimated to be completed in a maximum of two years, whereby for instance, if the current year is 2016, the second preceding year would be 2014. The study used the formula shown:

$$\text{Completion rate} = \frac{\text{completion in current year}}{\text{Enrolment in second year preceding current year}} \times 100$$

Table 4.: BCGB and Completion rates per course

	% 2015	% 2016	% 2017	% 2018	% 2019
G. M	40.9	12.9	13.2	15.6	15.1
M.V.M	108.3	19.6	15.7	15.9	18.7
Mas.	530.8	14.5	19.8	23.5	33.9
E. W.E	24	25.5	18.9	35.3	35.6
H. D	12.7	32.1	25.4	18.8	40.4
C&J	26.4	10.1	7.8	16.7	11.1
ICT	3.6	0.9	12.3	3.9	6.1
P.P.F	36.4	25	22	85.1	66.3
A.W	60	16.9	10.9	54.7	42.2
Driv.	0	0	0	0	0
F.T.	0	18.5	4.6	25	61.3
U.L	0	64.9	79.6	0	0
A.B	0.5	0	0	3100	1900
Total	39.7	16.4	16.1	22.0	24.2
BCGB	168029	213861	305594	375711.7	480000
Average BCGB	3500.6	4455.4	6366.5	7827.3	10000



Table 4 shows that on average, the year 2015 had the highest completion rates per course (39.7%) while the year 2017 had the lowest completion rates per course (16.1%). The table also shows that agribusiness had the highest completion rates (3100%) in the year 2018 while driving recorded no completion (0%) between the years 2015 to 2019 in the sampled VTCs. The trend of the BCGB and completion rates per course per year is illustrated in table 5.

Table 5: Trend of the BCGB and completion rate

Year	Total BCGB	Trend	Completion rate	Trend
2015	168029	-10.71	39.7	N/A
2016	213861	27.28	16.4	-58.7
2017	305594	42.89	16.1	-1.8
2018	375711.7	22.94	22	36.6
2019	480000	27.76	24.2	10

Table 5 shows that the trend of the BCGB and completion increased and then decreased. Thus, there was neither a steady increase nor decrease in both the BCGB and completion rates. The information in table 6 is further illustrated in figure 4. Whereby, the figure shows that the BCGB and the completion rates per course fluctuated between the years 2015 to 2019. Thus, neither the BCGB nor the completion rates exhibited a definite trend.

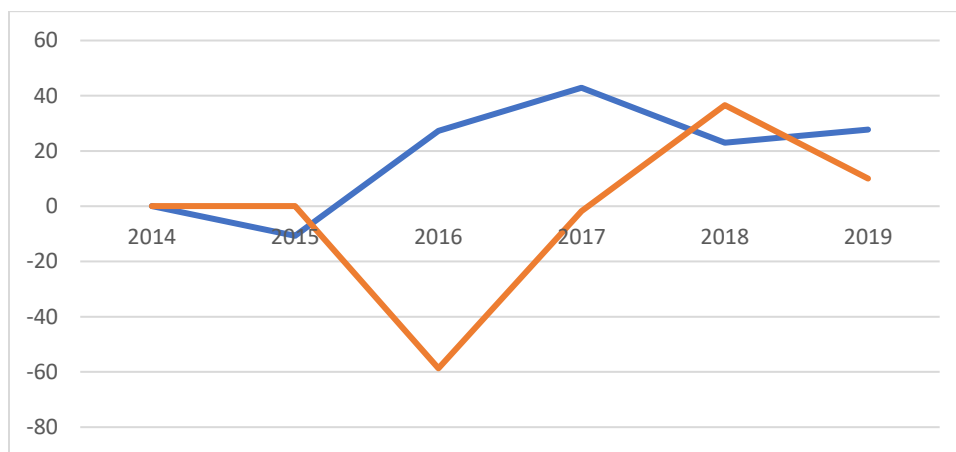


Figure 4: Trend of the BCGB and completion rates

From the questionnaires that were administered on the VTC trainees, majority of the respondents 198 (65.1%) indicated that they had been absent from school while, minority of the respondents 106 (34.9%) indicated that they had never been absent from school. The reasons for absenteeism are listed in their order of popularity: Sick 52, school fees 55, to attend funeral 52, working at your trade 45. From the interview that was administered on VTC principal instructors (managers), it was also established that the lunch program came in handy in retaining the trainees in school especially in the afternoon thus 48 (100%) of the respondents. From the findings, it was noted that an intervening variable like regularity of attendance may influence completion rates in the VTCs. The findings of the current study were in tandem with those of the study by Orwasa (2010) which established that the dropout rate was high. However, unlike the current study, the study by Orwasa, (2010) was conducted on secondary schools. Moreover, access as a dependent variable fell outside the scope of the study by Orwasa (2010). Fluctuation in the trend of completion rate should be a matter of concern especially for the educational planner because of the vagueness which may hinder implementation of effective and efficient decisions especially in a county like Bungoma.

3.4 Responses on the trends of access

Table 6 shows responses of the trainees' responses on their attitudes towards VTCs.



Table 6: Responses on attitudes of VTC trainees on the question whether VTCs are for failures

Category	Response	Respondents	Cumulative no. of respondents
5	Strongly disagreed	163	163
4	Disagreed	89	252
3	Undecided	10	262
2	Agreed	26	288
1	Strongly agreed	16	304
Median =5			

The median was arrived at by, first establishing the mid-point (i.e., total number of respondents divide by 2 thus, $304 \div 2 = 152$). The study identified the category where the mid-point falls (strongly disagreed (163)) from the cumulative column. The difference between the middle-point and the actual number of responses was arrived at by subtracting the number of respondents in the previous category from the mid-point ($152 - 163 = -11$) to illustrate how many places away from the bottom category (5) the median was. To identify where the mid-point (152) sits in the range between 4.5 and 5.49, the study divided the value acquired from working out the difference between the middle-point and the actual number of responses in the previous category (-11) with the mid-point (152) i.e., $(-11/152 = -0.07)$ this was added to 5 ($-0.07 + 5 = 4.93$) to give a median of 5 (strongly disagreed). This implied that majority of the VTC trainees do not view VTCs as institutions for failures. And as such, attitude towards VTCs may not have largely, influenced trainees' enrolment into the sampled VTCs in Bungoma county, in the period under study.

The findings in Figure 4 confirmed three earlier studies, one by Palmer (2015), which had noted that all TVET institutions were likely to face the challenge of inequitable access, the other study by Baikuntha (2020), which established that TVET budgetary allocation in Nepal fluctuated and the other one by Ngugi and Muthima (2017) which established that there were great disparities in enrolments according to gender in TVET subsector. However, unlike the current study, the study by Palmer (2015), Baikuntha (2020) and Ngugi and Muthima (2017) were conducted on TVET in East Asia, Nepal and in Kenya generally, respectively. Besides, a study by Maina (2019), noted that, Africa's TVET is an expensive affair. Meaning that the findings from East Asia and Nepal may not be generalizable for Africa. This therefore ascertained that gender parity as an intervening variable may have influenced enrolment into the VTCs. Therefore, the question: what was the trend of the Bungoma County Government Bursary (BCGB) and enrolment between the years 2014 to 2019? Was answered that BCGB and enrolment fluctuated between the years 2014 to 2019.

4. Conclusion

On the trends of the BCGB and enrolment, the BCGB and gross enrolment fluctuated between the years 2014 to 2019. It can be concluded that the intended purpose of the bursary allocation was not achieved as expected on the trends of the BCGB and completion rates, the BCGB and completion rates fluctuated between the years 2014 to 2019. It can be concluded that students take longer than expected to complete their courses.

5. Recommendations

1. On trend of Bungoma County Government bursary (BCGB) and gross enrolment, the study recommends diversified funding alongside further diversification of courses in line with the labor market demand, aspirations of the modern youth and the ever-changing world of technology. This will eliminate the fluctuation of the access.
2. On trend of the BCGB and completion rates, the study recommends the introduction an extra subsidy to cater for the entire costs of the programme thus increasing the rate of concentration, attendance and completion in the VTCs.

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