

Institutional Factors and Curriculum Fidelity in Vocational Training Centres in Kampala City, Uganda

Richard Ochwo¹ 

Kyambogo University, Uganda

Mugizi Wilson² 

Kyambogo University, Uganda

George Wilson Kasule³ 

Kyambogo University, Uganda

CORRESPONDENCE

Email: wugizi@kyu.ac.ug

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Abstract: *The subject of curriculum fidelity continues to be a crucial area of investigation to uncover how the responsible stakeholders implement the curricula developed in relation to their intended purpose. This study investigated the institutional factors influencing curriculum fidelity in vocational training centres in Kampala, Uganda. Specifically, this study examined the influence of instructors' self-efficacy, institutional support, and leadership effectiveness on curriculum fidelity in vocational training centres. This quantitative study adopted the correlational research design. The study involved a sample of 108 instructors from eight selected vocational training centres in Kampala, Uganda. The data were collected using a self-administered questionnaire. Descriptive statistics and inferential analyses, specifically Pearson linear correlation and regression, were used to analyse the data. The findings revealed that instructors' self-efficacy, institutional support, and leadership effectiveness positively and significantly influenced curriculum fidelity. The study concluded that instructors' self-efficacy is imperative for curriculum fidelity,*

institutional support is essential for curriculum fidelity, and effective leadership is vital for curriculum fidelity. Therefore, it was recommended that the Ministry of Education and Sports and principals of vocational training centres should enhance the efficacy of instructors; vocational institutions should offer support to the instructors to ensure curriculum fidelity; and the Ministry of Education and Boards of Governors should ensure that vocational training centres have effective leadership. The practical contribution of the study is that it identifies institutional factors necessary for curriculum fidelity. These are instructors' self-efficacy, institutional support, and leadership effectiveness.

Keywords: Curriculum fidelity, institutional factors, institutional support, leadership effectiveness, self-efficacy.

1. Introduction

Curriculum fidelity is a concept that describes faithfulness to a teaching programme by those implementing it. This means that the instructors do not deviate from the aims and teaching procedures stipulated by the curriculum developers. Lakin et al. (2019) defines it as the extent to which an educational programme is taught as originally intended while maintaining the design of the programme developers. Therefore, the concept of "curriculum fidelity" describes how closely a curriculum is implemented in accordance with its original design and describes the similarity between the stated and implemented programmes. Curriculum fidelity is how well a revised or developed curriculum functions in the context of educational institutions (Süer & Kinay, 2022). Curriculum fidelity is achieved when the essential components of a planned or revised programme are successfully carried out in accordance with the desired results (Nevenglosky et al., 2018). Fidelity of implementation occurs when learners acquire the intended experiences, knowledge, competencies, ideas, and attitudes required to make them function effectively in society (Hamunyela et al., 2022). When a curriculum is implemented as intended, it has a positive impact on students

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because they experience the benefits of education. Therefore, educators have the daunting task of operationalising the curriculum and interpreting its goals for students, considering the link between curricular activities and students' demands (Fix et al., 2019).

Interest in curriculum fidelity stems from the challenges associated with it. While curricular reviews, revisions and modifications have been a routine practice in education institutions both in developed and developing countries with frequent experimentation using different curricular models, the challenge has been that initiating, implementing and sustaining change has not been very easy (Mashekwa, 2019). Educators worldwide have been frustrated by the fact that the implementation of a new or revised curriculum in some educational institutions occurs with great success but fails in others (Lakin et al., 2019). Further, while consistent curriculum reviews and modifications have recommended that teachers implement learner-centred instruction, the reality is to the contrary (Du et al., 2019). Teaching in educational institutions, especially in developing countries, has continued to be teacher-centred rather than student-centred. Instructors mainly assign students activities requiring them to learn comprehensive content they choose with no student input. Few instructors use practices that promote student cognition but instead use teacher-centred approaches, which inhibit students' critical thinking (Kasule et al., 2022).

In Uganda, vocational training centres fall under Technical, Vocational Education and Training (TVET), which is known as Business, Technical and Vocational Education and Training (BTVET). BTVET institutions include schools, technical institutes, colleges or centres offering approved BTVET courses leading to the award of certificates or diplomas (The BTVET Act, 2008). However, the challenge to curriculum fidelity in these institutions is that while the Ministry of Education and Sports (MoES) is directly responsible for vocational education and training in accordance with the BTVET Act 2008, direct policy mandate over the provision of tertiary education is vested with the National Council for Higher Education (NCHE). The NCHE approves the curricula of BTVET institutions giving them considerable authority over curriculum design, assessment, and certification (Jjuuko et al., 2021). This creates a lacuna of a lack of harmonised curriculum for all institutions. Nonetheless, the institutions are required to follow a learner-centred approach to teaching and learning, which emphasises that the learner and learning activities be the central issues (Okware & Ngaka, 2017). This is because, generally, with vocational education institutions, the focus of the curricula is to produce a workforce for the labour market with practical skills useful for solving societal problems (Chen et al., 2021). Therefore, the suggested implementation strategy for curricula is to expose learners to appropriate school facilities and equipment and to systematically integrate and synchronise educational programmes in schools and skills acquisition programmes with direct work in the workplace through an internship or industrial work practice (Wibowo et al., 2022).

The above arrangement means that in Uganda, BTVET certificate and diploma programmes offered within the framework of the BTVET Act have different curricula because each institution develops its programmes. However, the challenge of institutions being independent in managing their curricula is that implementation does not follow a single systematic approach and implements curricula with different efficacy. For instance, while NCHE requires BTVET institutions to emphasise practical training through industrial training and internships (NCHE, 2019), there are enormous challenges with respect to institutionalising vocational placements. There are fewer opportunities for thousands of placement-seeking students from over 500 BTVET institutions and more than 30 universities. The situation is exacerbated by the limited growth of jobs and work opportunities due to a weak economy that impedes the availability of quality work placements. Many learners struggle to find placement positions in small and medium enterprises (SMEs) and non-governmental organisations (NGOs) (Jjuuko et al., 2021). In addition, BTVET institutions lack instructional materials and infrastructure like lecture rooms, workshops, tools, equipment, books, and libraries. Therefore, while BTVET is practically oriented, teaching is theoretically oriented (Okello, 2011). Lack of practical skills and job-relevant abilities is the main issue facing the BTVET system in Ugandan

institutions since the training programs fall short of providing learners with these skills. Many BTVET institutions usually offer courses with little opportunity for students to engage in the practice (Jjuuko et al., 2019). This situation requires interrogating Curriculum Fidelity in Vocational Training Centres. In their study on curriculum fidelity and factors affecting fidelity in the Turkish context, Bumen et al. (2014) indicated that the factors affecting curriculum fidelity in Turkey included teacher characteristics, curriculum properties, teacher training and institutional factors (instructors' efficacy, support and leadership effectiveness), among others. With institutions independent in the implementation of their curricula, it became imperative for this study to examine how institutional factors influenced curriculum fidelity in vocational training institutions in Uganda.

1.1 Hypotheses

- H1: Instructor teaching self-efficacy significantly influences curriculum fidelity in Vocational Training Centres.
- H2: Institutional support significantly influences curriculum fidelity in Vocational Training Centres.
- H3: Leadership effectiveness significantly influences curriculum fidelity in Vocational Training Centres.

2. Literature Review

This segment is a review of the theory and related literature. The theoretical review provided the underpinning basis of the study. The related literature helped to identify gaps that justified the need for this study.

2.1 Theoretical review

The Institutional Theory introduced by Meyer and Rowan (1977) informed this study. The Institutional Theory postulates that organisations are driven by the desire to match their structures and behaviours with the principles, customs, and standards upheld by the institutions they depend on (e.g. government, consumer groups or accrediting bodies). The theory posits that organisational changes such as curriculum revisions or modifications are a consequence of institutional pressures, namely coercive, mimetic, and normative isomorphism (Birken et al., 2017). Coercion is a response to social pressures from cultural norms in society as well as from formal and informal influences from other organisations on which the organisations depend. Mimetic isomorphism is about the uncertainty that motivates organisations to mirror their operations consciously or unconsciously on those of more respectable or prosperous competitors. Normative isomorphism is a result of professionalisation, and it is fuelled by comparable professionals and strengthened by their interactions within expanding professional networks, via which new models quickly spread (Roszkowska-Menkes et al., 2017). Therefore, organisations change as an adaptive response to strong pressures to comply with rules, regulations, and mandates.

Consequently, organisations implement evidence-based interventions which are legitimate to the institutions within their environment. The evidence-based interventions adopted are those that align with the professional norms of the organisation (Birken et al., 2017). In curriculum fidelity, such evidence-based interventions include institutional factors that are teaching efficacy, institutional support and leadership effectiveness (Bumen et al., 2014). Importantly, the institutional theory identifies institutional factors that affect programmes implementation, in the case of this study, curriculum implementation. Therefore, this study investigated how institutional factors, namely instructors teaching self-efficacy, institutional support and leadership effectiveness, influenced curriculum fidelity.

2.2 Institutional factors and curriculum fidelity

Institutional factors are elements inherent in the operating environment that make it easy or difficult to implement the goals of the organisation effectively (Sikombe & Phiri, 2021). Institutional factors for curriculum fidelity include instructors teaching self-efficacy, institutional support, and leadership effectiveness (Bumen et al., 2014). Defined, instructors teaching self-efficacy is about how teachers rate themselves in terms of their abilities. Teachers who have a high level of self-efficacy employ more successful teaching techniques, are less likely to experience burnout, and are more devoted to their career than those who doubt themselves (Morris et al., 2017). Therefore, instructors with high self-efficacy are likely to ensure curriculum fidelity. Scholars (Agormedah et al., 2022; Aytac, 2021; Bumen et al., 2014; Clayback et al., 2022; Cobanoglu & Capa-Aydin, 2015; LaChausse et al., 2014; Thierry et al., 2022) studied the association between instructors teaching self-efficacy and curriculum fidelity. However, the studies revealed contextual and empirical gaps. Contextually, except for the study by Agormedah et al. (2022) done in primary schools in Ghana, all the studies were skewed outside educational institutions in Africa. Hence, the association between instructors' self-efficacy and curriculum fidelity has been less explored in educational institutions in Africa. At the empirical level, contrary to the other studies, Clayback et al. (2022) reported an insignificant relationship between instructors' self-efficacy and curriculum fidelity, suggesting that the relationship was still inconclusive hence the need for further examination.

With respect to institutional support, the organisation's active efforts in the form of regulations, guidelines, financial aid, and other forms of help encourage staff to carry out their responsibilities very effectively and successfully. In educational institutions, institutional support is provided in terms of research, technical and instructional support (Falola et al., 2020). Institutional support is related to superior teacher work attitudes which are necessary for curriculum fidelity (Williams et al., 2019). Fidelity of curriculum implementation requires considerable support in terms of personnel, time, and external support. By providing the infrastructure required to operationalise the curriculum, institutional support reduces variation in implementation (Combs et al., 2022). Scholars (Bumen et al., 2014; Chan et al., 2017; Combs et al., 2021; Combs et al., 2022; Gelmez-Burakgazi, 2020; LaChausse et al., 2014; Nevenglosky et al., 2018; Syomwene, 2018; Thierry et al., 2022; Williams et al., 2019) have investigated the relationship between institutional support and curriculum fidelity. However, none of these studies captured the contexts of educational institutions in Africa. In addition, while all the other studies concurred with the existence of the relationship between institutional support and curriculum fidelity, Williams et al. (2019) did not, which implies a lack of consensus on the relationship between the variables. These contextual and empirical gaps necessitated this study in the context of educational institutions in Uganda.

Regarding leadership effectiveness, it describes the leader's ability to influence and drive the behaviours of subordinates to perform their duties leading to the attainment of organisational objectives (Soputana & Mogeab, 2014). Therefore, leadership effectiveness refers to an individual's capacity to influence a group to carry out its responsibilities in an astounding manner (Madanchian et al., 2017). Leadership effectiveness is characterised by assertiveness in decision-making, ability to establish working procedures, providing encouragement to subordinates, guiding them, and communicating (Soputana & Mogeab, 2014). All these are elements necessary for effective curriculum fidelity. Scholars (Asghar et al., 2020; Bahtilla et al., 2020; Bumen et al., 2014; Cheserek et al., 2021; Dube & Jita, 2018; Juharyanto et al., 2018; Okoth, 2018; Syomwene, 2018) have investigated the influence of leadership effectiveness and curriculum fidelity. While previous research shows that effective leadership is related to curriculum fidelity, none of the studies captured the context of educational institutions in Uganda. Therefore, this study was carried out to assess the effectiveness of leadership in Ugandan institutions and how it affected curriculum fidelity.

3. Methodology

This section covers the methodology that guided the collection and analysis of data. The data collected and analysed were the basis for the presentation, interpretation and discussion of the findings.

3.1 Research design and sample

The study was quantitative in nature, involving the collection of numerical data necessary for inferential analysis. Therefore, the study adopted the correlational research design. The correlational research design was followed because it enables data collection necessary for establishing relationships between determinant and outcome variables (Rohrer, 2018). In this study, the determinant variables were institutional factors, while the outcome variable was curriculum fidelity. Thence, the link between institutional factors and curriculum fidelity in vocational training centres was explored. The sample comprised 108 instructors from eight selected Vocational Training Centres in Kampala City. Simple random sampling technique was used to obtain the instructors that participated in the study.

3.2 Measures of constructs

A self-administered questionnaire was used to collect data. The outcome variable of curriculum fidelity was measured in terms of structural fidelity, instructional fidelity, and student engagement. Structural fidelity describes the designers' expectations for the body of knowledge that instructors must deliver to achieve high implementation in terms of content knowledge, pedagogical knowledge, and knowledge of assessment. Instructional fidelity is about the instructor's behaviours and interactions with students when implementing the curriculum. Student engagement concerns the attitudes of students because of interaction with instructors, peers, and instructional materials (Stains & Vickrey, 2017). The independent variable was measured in terms of instructors' teaching self-efficacy (Bülent & Güven, 2022), institutional support (Razak et al., 2016) and leadership effectiveness (Aarons et al., 2014). The indicators of the measures were measured on a five-point Likert agreement scale where 1= strongly disagree (SD), 2 = disagree (D), 3 = not sure (NS), 4 = agree (A), and 5= strongly agree (SA). The data collected were subjected to Factor Analysis using the Statistical Package for Social Scientists (SPSS) to ascertain the construct validity of the question items of the constructs. The items loading highly above 0.50 were retained, while those loading low or cross-loading were discarded. Reliability was also tested using Cronbach's alpha. For the different constructs, the reliabilities attained were as follows: structural fidelity ($\alpha = 0.70$), instructional fidelity ($\alpha = 0.76$), student engagement ($\alpha = 0.858$), teaching self-efficacy ($\alpha = 0.78$), institutional support ($\alpha = 0.712$) and leadership effectiveness ($\alpha = 0.79$). Since all the Cronbach's alphas were above the benchmark of 0.70, the question items of the different constructs were deemed reliable.

3.3 Data analysis and ethical issues

The data collected were summarised into frequency tables which helped to identify errors and correct them. The data were subjected to parametric tests, which enabled to establish linearity and normality. Data analysis involved carrying out Pearson linear correlation and regression analysis. Correlational analysis at the preliminary level helped to show whether a relationship existed between institutional factors and curriculum fidelity, while regression analysis helped to establish if institutional factors were significant determinants of curriculum fidelity.

The data were collected from each respondent after securing his or her consent. During the collection and analysis of the data, the researchers ensured that the respondents' identities remained anonymous. Confidentiality was also ensured in the whole process of carrying out the study by ensuring that no information the respondents provided revealed their identities. The researchers also

balanced risks and benefits by ensuring that the study did not pose any danger to the respondents by reporting data in an aggregate form, not to reveal the identities of the respondents.

4. Results

This section presents the study results, including their analysis and interpretation. The results include the participants' demographic characteristics and inferential statistics, namely correlation and regression results.

4.1 Demographic profiles

The study considered demographic profiles that were the sex of the respondents, their age, level of education attained and working experience. The demographic profile results are presented in Table 1.

Table 1: Demographic Profiles of Participants

Items	Categories	Frequency	Percent
Sex	Male	85	78.7
	Female	23	21.3
	Total	108	100.0
Age groups	Up 30 years	18	16.7
	30 - 40 years	47	43.5
	40 years and above	43	39.8
	Total	108	100.0
Education Level	Certificate	6	5.6
	Diploma	31	28.7
	Bachelor's Degree	56	51.9
	Postgraduate qualifications	15	13.9
	Total	108	100.0
Working Experience	less than 1 year	12	11.1
	1-5 years	20	18.5
	5- 10 years	26	24.1
	10 years and above	50	46.3
	Total	108	100.0

The results in Table 1 show that the majority (78.7%) of the instructors were males, while the females were 21.3%. These results suggested that males were the dominant group. This suggested the need to attract females into teaching in vocational institutions to attract more female students. The results on age showed that the larger percentage (43.5%) was of those between 30 and 40 years, followed by 39.8% who were 40 years and above, and 16.7% were up to 30 years. Therefore, the data collected was representative of instructors from different age groups. The results on education level revealed that the larger percentage (51.9%) had a bachelor's degree, followed by 28.7% who had a diploma, 13.9% had postgraduate qualifications, and the least percentage (5.6%) was of those with certificates. These results indicate that the majority of the respondents were highly qualified instructors who could ably report on curriculum fidelity in the institutions. The results on work experience showed that the larger percentage (46.3%) had worked for ten years and above, followed by 24.1% with experience of five to ten years and 11.1% with experience of less than one year. However, with most of the instructors reporting experience of more than five years, the findings communicate what was going on in the institutions with respect to curriculum fidelity.

4.2 Curriculum fidelity and instructional factors

To test the association between instructional factors and curriculum fidelity, a preliminary analysis was carried out. This involved correlating institutional factors: instructors’ teaching self-efficacy, institutional support, and leadership effectiveness on curriculum fidelity. The results were as indicated in Table 2.

Table 2: Correlation of Curriculum Fidelity and Instructional Factors

Constructs	Curriculum Fidelity	Instructors’ Teaching Self-Efficacy	Institutional Support	Leadership Effectiveness
Curriculum Fidelity	1			
Instructors Teaching Self-Efficacy	0.702**	1		
Institutional Support	0.665**	0.554**	1	
Leadership Effectiveness	0.849**	0.634**	0.529**	1
	0.000	0.000	0.000	0.000

Correlation is significant at the 0.05 level (2-tailed).

The results in Table 2 revealed that institutional factors, namely instructors’ self-efficacy ($r = 0.702, p = 0.000 < 0.5$), institutional support ($r = 0.665, p = 0.000 < 0.5$) and leadership effectiveness ($r = 0.849, p = 0.000 < 0.5$) had a positive and significant relationship with curriculum fidelity. Therefore, at the preliminary level, hypotheses one to three (H1-H3) were supported. To determine whether institutional factors, namely instructors teaching self-efficacy, institutional support, and leadership effectiveness, predicted curriculum fidelity, a regression analysis was carried out. The results are in Table 3.

Table 3: Regression of Curriculum Fidelity on Institutional Factors

Institutional Factors	Standardised Coefficients Beta (β)	Significance p
Instructors Teaching Self-Efficacy	0.185	0.002
Institutional Support	0.243	0.000
Leadership Effectiveness	0.604	0.000
Adjusted R ² = 0.798		
F = 142.228, p = 0.000		

The results in Table 3 show that institutional factors, namely, teaching self-efficacy, institutional support, and leadership effectiveness, explained 79.8% of the variation in curriculum fidelity in vocational training centres ($R^2 = 0.798$). This means that other factors not considered under this model accounted for 20.2% of the variation in curriculum fidelity. Instructors teaching self-efficacy ($\beta = 0.185, p = 0.002 < 0.05$), institutional support ($\beta = 0.243, p = 0.000 < 0.05$), and leadership effectiveness ($\beta = 0.604, p = 0.000 < 0.05$) had a positive and significant influence on curriculum fidelity in educational institutions. However, the respective betas (β s) showed that leadership effectiveness had a more significant influence, followed by institutional support and instructors’ self-efficacy, respectively.

5. Discussion

The findings showed that instructors’ self-efficacy significantly influenced curriculum fidelity in vocational training centres. This finding is supported by the findings of previous scholars. For

instance, Agormedah et al. (2022), Aytac (2021), Bumen et al. (2014), Clayback et al. (2022), Cobanoglu and Capa-Aydin (2015), LaChausse et al. (2014), and Thierry et al. (2022) that reported that instructors teaching self-efficacy had a significant positive relationship with curriculum fidelity. However, the finding was contrary to Clayback et al. (2022), who reported that the relationship between the two variables was insignificant. Nonetheless, with the finding of the study supporting the findings of most previous scholars, it can be surmised that instructors' self-efficacy influences curriculum fidelity. The results also revealed that institutional support had a significant positive influence on curriculum fidelity. This finding concurred with previous scholars such as Bumen et al. (2014), Chan et al. (2017), Combs et al. (2021), Combs et al. (2022), Gelmez-Burakgazi (2020), LaChausse et al. (2014), Nevenglosky et al. (2018), Syomwene (2018) and Thierry et al. (2022) who all established that institutional support had a significant positive relationship with curriculum fidelity.

Nonetheless, the finding above was inconsistent with what Williams et al. (2019) reported, that the relationship between institutional support and curriculum fidelity was insignificant. However, with the finding consistent with the findings of most previous scholars, it can be adduced that institutional support has a significant positive influence on curriculum fidelity. This suggests that institutional support is imperative for curriculum fidelity. Further, the study established that leadership effectiveness had a significant positive influence on curriculum fidelity. This finding was in agreement with Asghar et al. (2020), Bahtilla et al. (2020), Bumen et al. (2014), Cheserek et al. (2021), Dube and Jita (2018), Juharyanto et al. (2018), Okoth (2018), and Syomwene (2018) who revealed the existence of a significant positive relationship between leadership effectiveness and curriculum fidelity. This means that if vocational training centres have effective leaders, curriculum fidelity is achieved.

6. Conclusions

The findings reported in this study have lent credence to the outcomes of previous research that instructors' self-efficacy is imperative for curriculum fidelity. Instructors must have the capacity to prepare effective lesson plans and conduct lessons as provided in the curriculum, use methods and techniques appropriate to the objectives and content, ensure that teaching materials are available for every lecture and effectively use them, and satisfactorily make students understand the objectives of what they teach. Instructors also have to be able to give timely and accurate instructions to students, conduct and adapt activities supporting individual differences, organise learning experiences appropriate to students' ability, enable students to actively participate in lessons, and use the lesson time effectively.

In addition, institutional support is essential for curriculum fidelity. This involves helping instructors to be the best they can be professionally, supporting their creativity, helping them learn the needed job skills, paying them appropriately, caring for them and their families, and rewarding them based on performance. Further, effective leadership is vital for curriculum fidelity. This is when the leaders' set clear job performance standards, develop plans to facilitate job performance, remove obstacles to instructors' job performance, are knowledgeable about job performance and support work effort. This is also when the leaders recognise and appreciate instructors' efforts, support their further learning, and react to critical issues regarding job performance.

7. Recommendations

This study recommends that the Ministry of Education and Sports and principals of vocational training centres should enhance the efficacy of instructors. This should involve enhancing their capacity to prepare effective lesson plans and conduct lessons as provided in the curriculum, equipping them with methods and techniques appropriate to curriculum objectives and content, providing them with sufficient teaching materials and enhancing their teaching abilities. Instructors also need to be monitored to ensure they give timely and accurate instructions to students, conduct

and adapt activities supporting individual differences, organise learning experiences appropriate to students' ability, enable students to actively participate in lessons, and use the lesson time effectively. The vocational institutions also should offer support to the instructors to ensure curriculum fidelity. Thus, institutions should help to develop professionally, be creative, provide them with needed job skills, pay appropriately, care for them and their families, and reward them based on performance. The Ministry of Education and Boards of Governors should ensure that vocational training centres have effective leadership. Therefore, the appointment of principals and their deputies should consider that they have the capacity to provide effective leadership.

8. Conflict of Interest: Authors declare no conflict of interest whatsoever.

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Appendix A: Study Instrument

Constructs	Items	Measured
Section A: Demographic Profiles		
Demographics Variables (BV)	BV1	Sex (1 = Male, 2= Female)
	BV2	Age group (1= Less than 30 years, 2 = 30-40 years, 40 years and above).
	BV3	Education level (1= Certificate, 2= Diploma, 3 = Bachelor’s Degree, and 4 = Postgraduate qualifications)
	BV5	Number of years working in the institution (1= Less than 1 year, 2 =1-5 years, 3 = 5-10 years, and 10 years and above)
Section B Dependent Variable: Curriculum Fidelity		
Structural Fidelity (SF)	SF1	In all my lectures, I assign students challenging learning tasks to enhance their critical thinking
	SF2	In all my lectures, I engage students in participatory learning activities
	SF3	In every lecture I ensure that I teach from the known to the unknown
	SF4	In my lectures, I engage students through question and answer
	SF5	I promote teamwork between students as they carry out assignments
	SF6	I ensure that students learn deeply by teaching theory simultaneously with practical activities
	SF7	I provide students assignments after every lecture such that I support learning by providing them feedback
Instructional Fidelity (IF)	IF1	In every lecture, my explanations are based on responses provided by students to the questions I ask
	IF2	I ensure that individual learning interests of every student are catered for before I move to the next learning activity
	IF3	When students provide incorrect answers, I correct them by reasoning with them
	IF4	I am able to make students who are less involved in class discussions to become actively involved
	IF5	I make to walks around the classroom during as students carry out practical assignments
	IF6	I make effort to listen to discussions of every group when carrying out practical assignments
Student Engagement (SE)	SE1	When I am teaching, majority of the students show that they enjoy learning new things during lectures
	SE2	Most of the students I teach show interest in mastering what they are learning
	SE3	Most of my students show it to me they they are trying to do well in their studies
	SE4	Most of the students pay attention during my lectures without losing focus
	SE5	Majority of the students fully participate in lectures activities
	SE6	Most of my students are able to translate what I teach them into their own ideas`

- SE7 Most of the students come to me for clarification when they fail to understand something during lectures
- SE8 During lectures, most students ask questions to help them understand what they are learning

Section C: Independent Variable: Institutional Factors

Instructors Teaching Efficacy (TE)	TE1	I prepare effective lesson plans and conducts lessons as provided in the curriculum
	TE2	For every lecture, I select and use methods and techniques appropriate to the objectives and content
	TE3	I ensure that teaching materials are available for every lecture and effectively use them
	TE4	In every lecture, I satisfactorily make students understand the objectives of what I teach
	TE5	All the time I am able to give timely and accurate instructions to students
	TE6	All the time I am able to conduct and adapt activities supporting individual differences during the teaching process
	TE7	I ensure I organise learning experiences appropriate to students' ability even when the days content is not aligned in that way
	TE8	I organise special learning activities for students who need special attention
	TE9	I enable students to actively participate in my lessons
	TE10	I assign tasks based on research and inquiry
	TE11	I create a democratic and free classroom environment
	TE12	Much of the time I use the lesson time effectively
Institutional Support (IS)	IS1	My institution help its instructors to be the best they can professionally
	IS2	The culture of my institution encourages instructors to express creativity on the job and outside of their job
	IS3	My institution helps its instructors learn the needed job skills.
	IS4	Almost all instructors at my institution are a recognised experts in their fields
	IS5	My institution provides all required training resources
	IS6	I do not hear many complaints from my fellow instructors about their pay.
	IS7	My institution cares about its staff and their families
	IS8	Everyone in my institution is rewarded based on performance
Leadership Effectiveness (LE)	LE1	My principal has established clear standards job performance
	LE2	My principle has developed a plan to facilitate job performance
	LE3	My principle has removed obstacles to instructors job performance
	LE4	My principal is knowledgeable about job performance
	LE5	My principal supports employee efforts leading to effective job performance
	LE6	My principal recognises and appreciates instructors efforts
	LE7	My principal supports instructors efforts for further learning
	LE8	My principal reacts to critical issues regarding job performance facilitating instructors effectiveness
