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STAFF DEVELOPMENT AND CURRICULUM IMPLEMENTATION IN SECONDARY SCHOOLS IN NYAMASHEKE DISTRICT, RWANDA

Bimenyimana Jean,
Karungi Cissy[i]
Department of Education,
Kibogora Polytechnic,
Rwanda

Abstract:
The study is entitled "Staff Development and Curriculum Implementation of Secondary Schools in Nyamasheke District, Rwanda". This research was conducted with the purpose of analyzing the impact of Staff development on Curriculum implementation in secondary schools of Nyamasheke District. The study had three specific objectives. Firstly, it was designed to analyze the status of training related to Staff development in schools of Nyamaheke District. The second objective was to find out the challenges faced by schools of Nyamasheke District in curriculum implementation. Finally, the third objective was to analyze the relationship between staff development and curriculum implementation. The study established the relationship between independent variables (training; mentoring; coaching) and dependent variables (teaching methods and content coverage). The target population was made up of head teachers, teachers, and students from secondary schools of Nyamasheke District. The number of those schools targeted by this study was 10 secondary schools. The population was 5'425 people composed of 10 head teachers, 181 teachers, and 5.234 students. The respondents purposively sampled were 250 people composed of 10 head teachers, 160 teachers, and 80 students. Four boys and four girls were selected from every school for the purpose of gender balancing in the study. Data were collected using questionnaires and observation checklists and analyzed using both quantitative and qualitative techniques; data were analyzed using the statistical package for social sciences presented in tables. The study found that Staff development and Curriculum implementation have been more and more effective since 2016 according to Competence-Based Curriculum (CBC): 90% of teachers have been trained on the new curriculum since 2015; 80% of head teachers are bachelor holders in education and 20% of them are post-graduate diploma holders in education. The main challenge is that new documents applied to the new curriculum remain very few. Indeed, 30% of schools do not have well-equipped school laboratories with modern materials and SPSS has been used to analyze different data. The study concluded that there is hope that Curriculum implementation will succeed in the future. The research recommended that

[i] Correspondence email: cissynziza@gmail.com, bimenyimanajohn01@gmail.com

the Ministry of Education should help schools to equip all science and computer laboratories. The District Education Officer (DEO) and the school management were also advised to plan much training about new Curriculum implementation. The successful Curriculum implementation will benefit all stakeholders in education and the results of national examinations will be interesting in the future.

Keywords: cross-cultural communication challenges, cross-cultural communication, movies, content analysis

1. Introduction

Education is a precondition for development of any kind, for the reduction of unemployment and poverty, and for the establishment of lasting peace (Matsuura, 2001). At an individual level, education occupies a pivotal position in relation to other rights and in playing a "facilitative" role in the enjoyment of other human rights (Rutere, 2007). The Jomtien Conference (1990), the Dakar Conference (2000), and the Millennium Development Goals (2000) committed governments to honour the set-out goals which include the provision of education for all citizens. Specifically, the Dakar Framework of Action which was adopted at the Dakar Conference (2000) required that all member governments, international institutions, and Non-Governmental Organizations (NGOs) commit the necessary resources and effort to achieve a comprehensive and inclusive system of quality Education for All (EFA) by 2015 (UNESCO, 2007).

Basic education is the first step in attempting to overcome the enormous disparities affecting many groups including the urban poor, marginalized ethnic minorities and children not attending school and working (Delores & Draeke, 1996). The UNESCO Institute of Statistics (UIS) and UNICEF (2005) estimated that in 2001 / 2002 there were 115 million pupils of secondary school age who were out of school. The estimation further reported that the greatest absolute numbers of out of pupils were found in sub-Saharan Africa (45 million) and South Asia (42 million).

Since 2015, the authorities of Ministry of Education in Rwanda decided to bring improvement in education. Before, we were following Knowledge-Based Curriculum (KBC), which has been replaced by Competence-Based Curriculum (CBC). The establishment of the curriculum required the training of different categories of people, it means from the Ministry of Education to basic schools.

Staff development in curriculum implementation has not been given much attention which caused the failure in general. The Dakar Framework of Action (2000) acknowledged and advocated for the use of 3rd channel approaches including secondary education to ensure that by 2015 all pupils have access to complete public free education of good quality (MOEST, 2005). As Rwanda is developing very quickly in all fields, any reform is not due to the act of hazard.

Considering that the duration of primary education was 8 years which changed to 6 years since 1992, teaching programme had also to be changed. It has been remarked that the ending profile of Rwandan students at the end of secondary education could not help those candidates to survive correctly. This implies that the curriculum had to be improved.

Before 2015, Rwandan education was based on Knowledge-Based Curriculum which was neither effective nor efficient. This programme aimed at knowledge only. Thereafter, the programme was replaced by Competence-Based Curriculum which offers either.

Knowledge, competence, skills, attitudes, and values. The programme aims to help every finalist of secondary and high education to be effective and efficient in daily life.

Nevertheless, the main goal and objectives of Competence-Based Curriculum are not yet attained. That is due to the following reasons: qualification of teachers; level of staff trained on Competence-Based Curriculum; insufficiency or lack of teaching materials in accordance with Competence-Based Curriculum; and so forth. The Ministry of Education organized different trainings for staff authorities and teachers in 2015. Thereafter, the new curriculum is being implemented. The study will prove how the curriculum implementation is going on and what the challenges that seem to handicap the process are.

2. Objectives of the study

2.1 Specific objectives

The research was guided by the following specific objectives:

1) To analyze the status of training offered related to staff development.
2) To find out challenges faced by schools of Nyamasheke District in curriculum implementation.
3) To analyze the relationship between staff development and curriculum implementation.

3. Research design and methodology

3.1 Introduction

This chapter deals with the research methodology, discussing how the research will be conducted. It presents the procedures that will be used in conducting the study. The procedures are conducted under a number of topics, that is research design, sample size, target population, sampling procedure, data collection instruments, data collection procedure, and data analysis.

3.2 Research design

The main purpose of this research was to discover the effects of staff development on curriculum implementation. The researcher collected qualitative and quantitative data from respondents to be analyzed, then the researcher investigated on relationship between staff development and curriculum implementation using qualitative and quantitative methods. Consequently, the research design used was a mixed methods approach. The types of this study were exploratory research because quantitative data which were secondary school curriculum implementation in percentage were collected and analyzed with the goal of building on or explaining the qualitative data.

3.3 Location of the study

The study on staff development and curriculum implementation: a case study of secondary schools in Nyamasheke District, Rwanda, was conducted in Nyamasheke secondary schools in 10 schools out of 57 secondary schools in the district. The number of schools targeted was the schools that have concurrently ordinary and advanced levels.

Nyamasheke District is one of the 7 districts of the Western Province of Rwanda. Nyamasheke District was chosen because it is the district where the researcher comes from.

3.4 Target population

Population refers to the larger group to which a researcher wishes to generalize; it includes all members of a defined class of people, events, or objects (Ary, Cheser & Sorensen, 2006). The population of this study was the head teachers, teachers, and students in Nyamasheke District and the target population was the head teachers, teachers, and students in secondary schools of Nyamasheke District. The number of schools targeted was the schools that have concurrently ordinary and advanced levels. The population of this study was approximately 5.425 people of which 250 respondents were constituted by head teachers, teachers, and students of 10 secondary schools. The information was obtained from the sample size of the specific schools under study. To cover all schools of Nyamasheke District was not possible because of limited resources and time. That is why sampling techniques were applied.

3.5 Sample design

A sample is a group selected from a population for observation in a study (Ary, Cheser & Sorensen, 2006). To determine the sample of this study, Yamane (cited in Kasunic, 2005) provides a simplified formula to calculate sample sizes. The formula was utilized to find out the sample of this study. This simplified formula assumes a 95% confidence level and the maximum variance (p = 0.5).
The formula is:

$n = N / 1 + N (e)^2$

Where,
n is the sample size,
N is the population size,
e specifies the desired level of precision, where precision
e = 1- precision N
P = 0.95.

In this study,
N (the population size) is 5.425
e = margin of error = 1-0.95 = 0.05
$N = 5.425 / 1 + 5.425 (0.05)^2 = 250$

So, apart from ten head teachers of ten secondary schools, sixteen teachers (eight men and eight women) were selected from each school and eight students (four boys and four girls) were chosen from each school to respect gender balance.

Table 2.1 illustrates the sample size.

Table 2.1: Sample size

Category	Population	Sample size	Percentage (%)
Head teachers	10	10	100
Teachers	181	160	88.3
Pupils	5234	80	1.5
Total	5425	250	4.6

Source: Researcher.

3.6 Data collection instrument

Data was collected by using questionnaires and an observation checklist. Three sets of questionnaires were prepared. One questionnaire was for the head teachers of secondary schools and it contained three sections. The first section sought general identification of the head teachers, the second section dealt with the state of staff development, and the third section dealt with curriculum implementation in the school. The second questionnaire was reserved for teachers of secondary schools and it had three sections. The first section dealt with general identification of the teachers; the second section sought information about staff development and the third section dealt with curriculum implementation. The third questionnaire was reserved for students of Secondary Schools and it had two sections. The first section dealt with general questions about the students and the second section dealt with information about curriculum implementation in the school. In developing the questionnaire items, fixed-choice and open-ended format items were used. An open-ended format will be adopted to allow more spontaneity of response and provide more opportunities for self-expression (Mutai, 2000). An observation checklist is the systematic and accurate collection of visual evidence leading to informed judgements (Tilstone, 1998). The observation checklist was used to establish the available instructional materials and physical facilities and their adequacy in the curriculum implementation process.

4. Data presentation, analysis, and interpretation of findings

4.1 Questionnaire return rate

The research targeted three sets of respondents comprising of head teachers, teachers, and students of secondary schools in Nyamasheke District. An observation checklist was used by the researcher to establish the availability of physical facilities in secondary schools.

The response is shown in Table 3.1**.**

Table 3.1: Questionnaire return rate

Respondents	Sample	Returned	Percentage (%)
Head teachers	10	10	100
Teachers	160	160	100
Students	80	80	100
Observation checklist	10	10	100
Total	260	260	100

Source: Researcher.

Table 3.1 shows that one hundred percent (100%) of respondents returned the questionnaires. This further indicates that the research was successful at 100% good responses. The high response rate may be attributed to the fact that the researcher personally administered the instrument.

4.2 Description of the population

This study was carried out in 10 Nyamasheke secondary schools among 57 secondary schools which are found in Nyamasheke District. We identify 1 private secondary school and 56 public secondary schools. The schools involved in this study were secondary schools which are respecting the new curriculum since 2016. The respondents involved in this research were 250 people composed of 10 head teachers, 160 teachers, and 80 students.

4.3 Demographic data of the respondents

Demographic data is information regarding the characteristics of the human population (Dierckx, 2013). This section presents the demographic data of the head teachers, teachers, and students sampled for the study. The presented data includes gender and professional qualification of head teachers and teachers on one hand and gender and age of students on the other hand. This collected data was used to answer research questions related to the characteristics of the respondents.

4.3.1 Gender and professional qualifications of head teachers in secondary schools

To establish the gender of the head teachers, they were requested to indicate the same as represented below.

Table 3.2: Gender of head teachers

Gender	Frequency	Percentage (%)
Male	8	80
Female	2	20
Total	10	100

Source: Researcher.

Table 3.2 shows that the overwhelming majority (80%) of head teachers who responded to the questionnaires were male, while 20% were female. The data shows that gender distribution among the head teachers was not in line with government policy which stipulates that at least a third of either gender in public offices must be female.

The head teachers were further requested to indicate their level of professional qualification.

Table 3.3: Head teachers' professional qualifications

Education level	Frequency	Percentage (%)
A0	8	80
PGDE	2	20
Total	10	100

Source: Researcher.

Table 4.3 illustrates that 80% of head teachers were bachelor holders in education and 20% of them were post-graduate diploma holders in education. It shows the respect of Ministry of Education policy which stipulates, since 2012, that all secondary schools must be directed by bachelor head teachers and qualified in education. This shows that all head teachers of secondary schools in Nyamasheke District have adequate qualifications to manage curriculum implementation in the schools.

4.3.2 Gender and professional qualifications of teachers in secondary schools

The demographic data of teachers focused on their gender and professional qualifications.

Table 3.4 represents the distribution of teachers by gender.

Table 3.4: Gender of respondents/teachers

Gender	Frequency	Percentage (%)
Male	92	57.5
Female	68	42.5
Total	160	100

Source: Researcher.

Table 3.4 illustrates that out of 40 respondents, the male teachers had the highest representation of 57.5%, and females had the lowest representation of 42.5% in secondary schools who participated in this study. The collected data indicated that the majority of teachers are male teachers. This implied inadequate gender balance among the teachers which may negatively affect the curriculum implementation process.

Teachers were asked to indicate their professional qualifications and Table 3.5 illustrates this response.

Table 3.5: Professional qualification of teachers

Education level	Frequency	Percentage (%)
A2	4	2.5
A1	40	25
A0	100	62.5
PGDE	16	10
Total	160	100

Source: Researcher.

Table 3.5 shows that the highest representation of respondents 62.5% were Bachelor holders in general, 25% were diploma holders, 10% were postgraduate diploma holders and the lowest representation was 2.5% holding humanity's degree. Table 4.5 shows that the majority of teachers are qualified to be secondary school teachers (72.5%). The remaining percentage of teachers (27.5%) are found unqualified to be teaching in secondary schools. Moseti (2007) argues that the effective implementation of any curriculum depends on the quality of teachers of secondary schools in Nyamasheke District who are not qualified enough to handle curriculum implementation in secondary schools.

4.3.3 Age and gender of students in secondary schools

The study sought to establish the age of the students by requesting them their age as illustrated by Table 3.6

Table 3.6: Ages of students in Senior 1, 2, 4, 5 and 6

Class	Senior 1		Senior 2		Senior 4		Senior 5		Senior 6	
	F	%	F	%	F	%	F	%	F	%
Age (years)										
14	4	20	4	20						
15			12	60						
18					4	20			8	40
19					4	20	8	40	8	40
20									12	60
21									16	80
Total	4	20	16	80	8	40	8	40	44	55

Note: F = Frequency % = Percentage
Source: Researcher.

According to Table 3.6, Senior 1 (5%), Senior 2 (15%) and Senior 6 (10%) of students respected the Ministry of Education recommended age of 14, 15, and 19 years respectively. In Senior 2 (5%), Senior 4 (10%), and Senior 6 (45%), students were below or above the recommended age, which may impede proper curriculum implementation

because their cognitive maturity level is still low (Sharp, George, O'Donnell & Heron, 2009).

The study also sought to establish the gender of the students. Table 4.7 shows gender representation of the students.

Table 3.7: Gender representation of the students

Gender	Frequency	Percentage (%)
Boys	40	50
Girls	40	50
Total	80	100

Source: Researcher.

As illustrated by Table 3.7, the distribution of student respondents by gender was balanced: boys were equal to 50% and girls were equal to 50%. This was a deliberate attempt by the researcher to obtain views from both boys and girls equally concerning curriculum implementation in the schools.

4.3.4 Years of service in the position

Table 3.8: Years of experience at the position/head teachers

Years	Frequency	Percentage (%)
2-4	1	10
5 and above	9	90
Total	10	100

Source: Researcher.

Table 3.8 indicates that the highest representation (90%) of head teachers' working experience falls under 5 years and above; about 10% of respondents were between 2 and 4 years of experience. It shows that many head teachers are experienced enough to survey curriculum implementation.

Table 3.9: Years of experience/teachers in the position

Years	Frequency	Percentage (%)
0-1	2	5
2-4	12	30
5 and above	26	65
Total	40	100

Source: Researcher.

Table 3.9 shows that a great number of teachers (65%) who responded to the questionnaires were more experienced from 5 years and above, 30% of teachers were experienced at the position between 2 and 4 years; the lowest representation (5%) of teachers were experienced between 0 and 1 year of experience. This implies that, in general, teachers are experienced enough to implement the new curriculum.

4.4 The state of staff development in secondary schools of Nyamasheke District

Table 3.10: Qualification in education

Situation	Frequency	Percentage (%)
Agree	132	82.5
Disagree	28	17.5
Total	160	100

Source: Researcher.

Table 3.10 shows that a great number of teachers (82.5%) are qualified in education and the lowest number of teachers (17.5%) are not qualified in education. According to their projection, those who are not qualified in education are doing a graduate diploma in education, others intend to do it very soon. It shows that a great number of teachers will be qualified in education at the end of 2018. It shows that the implementation of a new curriculum could not fail, relating to the qualification of teachers.

Table 3.11: Teachers trained on the new curriculum

Situation	Frequency	Percentage (%)
Trained	144	90
Not trained	16	10
Total	160	100

Source: Researcher.

Table 3.11 shows that a great number of teachers (90%) have already been trained on the new curriculum since 2015 and the lowest number of teachers (10%) are not yet trained on the new curriculum. Those who are not yet trained are recently recruited because some teachers get new jobs in other services. It implies that the Ministry of Education has already planned it because there are District Master Subject Trainers (DMAST) and School Subject Leaders (SSL) who organize permanent training on new curricula for newly recruited teachers. It shows that the implementation of the new curriculum has been well planned by Ministry of Education and its success is not doubtful.

Table 3.12: Respect of the new curriculum delivered by MINEDUC

Situation	Frequency	Percentage (%)
Agree	152	95
Disagree	8	5
Total	160	100

Source: Researcher.

Table 3.12 shows that a great number of teachers (95%) respect the new curriculum delivered by Ministry of Education and the lowest number of teachers (5%) do not respect it. It shows that many teachers are interested in their job and would like to get good results at the end of the year.

3.5 Curriculum implementation in secondary schools of Nyamasheke District

The worth of a curriculum is only realized if the implementation is timely, proper, and fully done (Mwania, 2013). To determine the extent to which the curriculum was being implemented in secondary schools of Nyamasheke District, the researcher used a number of curriculum implementation indicators. Head teachers and teachers were asked to indicate the results they expected to get in 2018, the first year of the new curriculum evaluation.

Table 3.13: Results expected by head teachers in 2018

Results percentage	Frequency	Percentage (%)
75	1	10
80	1	10
85	3	30
87	1	10
95	1	10
100	3	30
Total	10	100

Source: Researcher.

Table 3.13 shows that head teachers expect to get good results in 2018 from 75% to 100%. That year of reference will show, for the first time, how the new curriculum has been implemented. Students of Senior 3 and 6 will sit for National Examinations following the new curriculum.

Table 3.14: Results expected by teachers in 2018

Percentage results	Frequency	Percentage (%)
60	4	2.5
80	4	2.5
85	8	5
89	4	2.5
90	12	7.5
92	28	2.5
95	4	17.5
97	40	2.5
98	4	25
100	42	32.5
Total	160	100

Source: Researcher.

Table 3.14 shows that the highest percentage of teachers, as curriculum implementers, attains 32.5%, who expect 100% of results. The lowest percentage of results will be 60% with the percentage of frequency equivalent to 2.5%. It shows the hope of success regarding the curriculum implementation.

3.5.1 Head teachers' response on student dropout rate in secondary schools

Table 3.15: Student dropout rate

Nº	School	Number of students at the beginning of 2019	Number of students at the end of 2019	Dropout	% of Dropout
1	G. S. St Joseph de Nyamasheke	556	556	0	0
2	G. S. St Dominique Savio de Nyanza	645	610	35	5.4
3	G. S. Shara	398	388	10	2.5
4	I. S. F. Nyamasheke	460	457	3	0.6
5	E. S. Tyazo	417	415	2	0.4
6	G. S. F. A. Kibogora	599	597	2	0.4
7	E. A. V. Ntendezi	587	587	0	0
8	G. S. Makoko	200	200	0	0
9	G. S. St Paul de Tyazo	619	619	0	0
10	G. S. St Nicolas de Nyamasheke A	805	805	0	0
	Total	5'286	5.234	52	0.9

Source: Researcher.

Table 3.15 shows that the student dropout rate is equivalent to 0.9%. The highest student dropout rate is found in the ninth and in the twelfth year of basic education. This could be attributed to the negative judgment of curriculum implementation: some students prefer to abandon in the ninth and the twelfth year of basic education and enter business, saying that studies are actually nonsense because of unemployment.

When asked about the extent to which they had covered the syllabus as per their schemes of work, teachers in secondary schools had varied responses as indicated Table 4.16.

Table 3.16: Covering the syllabus in relation to schemes of work

Situation	Frequency	Percentage (%)
With schedule	128	80
Behind schedule	32	20
Total	160	100

Source: Researcher

According to Table 3.16, many teachers (80%) in secondary schools of Nyamasheke District were within schedule in the syllabus coverage. This implies that in many secondary schools, curriculum is being adequately implemented.

Head teachers were requested to indicate the approximate percentage of students from their schools who transited to high institutions in the last two years and the response is illustrated in Table 3.17.

Table 3.17: Response of head teachers on students' transition rate to high institutions

Transition rate (Approximate %)	Frequency	Percentage (%)
55	5	50
65	2	20
Over 70	3	30
Total	10	100

Source: Researcher.

According to Table 3.17, in the majority (70%) of secondary schools in Nyamasheke District, less than 70 percent of students transited to high institutions. This is below the national transition percentage of 70 percent (Ministry of Education, 2012). The low transition rate in secondary schools could be attributed to the poor performance of Knowledge-Based Curriculum (KBC) which is being replaced.

4.5.2 Influence of training related to staff development and curriculum implementation

The first objective of the study was to find out the types of training offered related to staff development and curriculum implementation in schools of Nyamasheke District. To determine the extent to which adequacy of training influenced curriculum implementation, head teachers and teachers respectively were asked to indicate whether they felt training was important in curriculum implementation in secondary schools. They were also required to indicate whether their qualifications, experience, and in-service training were essential for curriculum implementation in secondary schools. The majority (83.3%) of head teachers and all teachers (100%) indicated that they felt they were essential as far as curriculum implementation is concerned. All of the human resources also indicated that their qualification, experience, and in-service training contributed positively to curriculum implementation. To establish the level of preparedness of head teachers and teachers in handling curriculum implementation in secondary schools, the respondents were requested to respond to the items that sought to establish the same. This is supported by SADC (2000) who argues that the quality and quantity of the human resource determines the quality of teaching and learning.

All the head teachers and teachers reported that teachers (100%) had attended in-service courses and in-service training in the two last years. When asked how they learned of new innovations in the education system and how they implemented them, the majority of the teachers (66.7%) said they relied on other teachers to learn the innovations. This was found to positively affect curriculum implementation in secondary schools since teachers are becoming formally updated on new innovations in teaching methods of curriculum implementation.

Head teachers and teachers were asked to indicate reasons why they thought the working experience was important in curriculum implementation in secondary schools. The majority of head teachers and teachers (66.7%) indicated that it helps in mastery of content which translates to effective curriculum implementation. On their working experience, head teachers' working experience falls under 5 years and above; about 10%

of them were between 2 and 4 years of experience. That situation helps them to provide direction in the implementation of curriculum in secondary schools.

4.5.3 Influence of instructional materials on curriculum implementation in secondary schools

To effectively implement the curriculum in secondary schools, adequate instructional materials are required in order to allow learners to complete assignments and do individual studies (Eshiwani, 1988). With the provision of school feeding to registered public and government-aided secondary schools, it is expected that the ratio of textbook to student will improve to 1:1 by 2012 (Ministry of Education, 2012). The same grants were to cater for stationeries and teaching aids to the students. It is on this basis that the researcher sought to examine the adequacy of instructional materials that influenced curriculum implementation in secondary schools in Nyamasheke District.

Teachers were requested to indicate reasons why they felt textbooks were important in the implementation of the curriculum in secondary schools and all of the teachers (100%) responded that textbooks contained the curriculum content that needed to be implemented. Head teachers and students were asked to indicate the ratio of textbooks to students in different subjects taught in secondary schools. The respondents gave different information and this prompted the researcher to analyze and interpret the data according to the source. The response of head teachers on the textbook-to-student ratio is represented in Table 4.18.

Table 3.18: Distribution of head teachers' response on textbook-to-student ratio

Ratio	Frequency	Percentage (%)
1:1	2	20
1:3	6	60
1:4	2	20
Total	10	100

Source: Researcher.

According to Table 3.18, the majority (80%) of secondary schools in Nyamasheke District had not met the Ministry of Education recommendation of a textbook-to-student ratio of 1:1 (Ministry of Education, 2007). This scenario led to poor curriculum implementation in the schools. The students were asked to respond to a question about the number of the other students who shared textbooks within all subjects in the school and the response is shown in Table 3.19.

Table 3.19: Students' response on textbooks to student ratio

Ratio	Frequency	Percentage (%)
1:2	32	40
1:3	24	30
1:4	24	30
Total	80	100

Source: Researcher.

Table 3.19 shows that all secondary schools in Nyamasheke District had not achieved the recommended government textbook-to-student ratio of 1:1. These findings imply that curriculum implementation in these schools is poor as students lack textbooks to make references and do extra work.

Students were asked to indicate whether the provision of stationeries in the school helped them to do their class work better and the majority (83.3%) of students answered affirmatively. Head teachers and students were asked to indicate whether students are provided with stationeries in the school as provided by the Ministry of Education. The responses of both head teachers and students are represented in Table 3.20.

Table 3.20: Response to school providing stationeries

Situation	Frequency	Percentage (%)
School providing stationeries	63	70
School not providing stationeries	27	30
Total	90	100

Source: Researcher

Table 3.20 illustrates that despite government provision of school feeding to secondary schools of Nyamasheke District, over one-third of the schools did not provide stationeries to the students. This could have negatively affected curriculum implementation since without stationeries students are not in a position to participate fully in the learning process.

Teaching aids are some of the essential inputs for good curriculum implementation (Dahir & Faize, 2011). Teachers were asked to state why they required teaching aids during the curriculum implementation process. According to teachers, teaching aids help learners to learn by seeing. Teaching aids also helped teachers to illustrate abstract concepts to the learners. Further teachers argued that teaching aids help in varying the teaching/learning styles. It is on these bases that the researcher sought to establish the adequacy of teaching aids in secondary schools of Nyamasheke District. Teachers and pupils were asked to indicate the distribution of teaching aids in the schools and the response is shown in Table 3.21.

Table 3.21: Response of teachers and students on distribution of teaching aids in secondary schools

Nº	Teaching aids	Percentage (%)
1	Maps	66.7
2	Atlases	16.7
3	Charts	16.6
Total		100

Source: Researcher.

According to Table 3.21, maps were found in many schools (66.7%), but atlases and charts were very poor (33.3% in general). The lack of atlases and charts indicated poor

curriculum implementation, especially in subjects like Geography which used atlases as primordial reference material.

3.5.4 Influence of students' characteristics on curriculum implementation in secondary schools

Students are the focal point of any curriculum implementation. The consideration of the students' characteristics is therefore crucial for any effective curriculum implementation to take place. Special needs students in secondary schools require special consideration if curriculum implementation will be effective in these schools (Ministry of Education, 2005). The researcher sought head teachers' responses on whether they felt that special education teachers were essential in the curriculum implementation process in secondary schools. They also indicated why they felt that special education teachers are important in secondary schools. The majority of teachers (83.3%) indicated that special education teachers were important in secondary schools as they cater to the special needs of the students which leads to effective curriculum implementation.

Concerning whether there were special needs students in secondary schools and whether there were trained teachers who would take care of the special needs of students in the schools, the head teachers' response is represented by Table 3.22.

Table 3.22: Head teachers' response on the number of special needs students against the number of special needs education teachers in secondary schools

Situation	Frequency	Percentage (%)
Number of special needs students	7	70
Special needs education teachers	3	30
Total	10	100

Source: Researcher.

According to Table 3.22, a great number (70%) of secondary schools had special needs students against 30% of special needs education teachers. This implied that most of the special needs students in secondary schools do not have access to special needs education teachers who are trained to handle their special needs. This negatively affects curriculum implementation especially among special needs students since their special needs may not be fully attended to.

3.5.5 Influence of teaching methods on curriculum implementation in secondary schools

Teaching methods used by teachers determine the quality of education implemented. Therefore, teachers should be aware of the teaching methods for the purposes of making a suitable choice when it comes to instruction (Twoli, 2007). To determine how teaching methods influence curriculum implementation in secondary schools of Nyamasheke District, teachers were requested to indicate if they felt that teaching methods were important in curriculum implementation in secondary schools. According to the findings, all the teachers (100%) indicated that teaching methods were important in curriculum

implementation. Concerning why they felt that teaching methods were important in curriculum implementation, the majority of teachers (70%) indicated that teaching methods were the means through which they delivered the curriculum content.

To establish the teaching methods used in secondary schools of Nyamasheke District, the researcher sought the response of teachers and pupils. Table 3.23 illustrates teachers' responses on teaching methods they used to implement the curriculum in the order by which they used them.

Table 3.23: Teachers' response on teaching methods used in secondary schools

Teaching methods	1st choice		2nd choice		3rd choice		4th choice		5th choice	
	F	%	F	%	F	%	F	%	F	%
Lecture	3	25	1	8.3	-	-	1	8.3	7	58.3
Discussion	8	66.7	2	16.7	2	16.7	-	-	-	-
Role play	6	50	-	-	5	41.7	-	-	1	8.3
Demonstration	4	33.3	4	33.3	2	16.7	2	16.7	-	-
Others	-	-	-	-	-	-	2	16.7	2	16.7

Source: Researcher.

As presented in Table 3.23, the data showed that the majority (66.7%) of the teachers used the discussion method of teaching in secondary schools as a first choice. There is very little use (33.3%) of other teaching methods apart from the four that had been suggested by the researcher in the questionnaire. The data implies that teachers in secondary schools of Nyamasheke District did not properly balance and vary the use of various teaching methods while implementing the curriculum. This negatively affected curriculum implementation in secondary schools of Nyamasheke District.

When asked why they used the various teaching methods, the teachers gave various reasons. The most frequently indicated response in each of the teaching by teachers is represented in Table 3.24.

Table 3.24: Teachers' reasons for using the teaching methods

Teaching method	Reason for using the method	Frequency	Percentage (%)
Lecture	Quick syllabus coverage	10	83.3
Discussion	Strengthens team work	6	50
Role play	Active by participation learners	7	58.3
Demonstration	Learning by observation	9	75
Others	Breaks monotony	4	33.3

Source: Researcher.

Although the majority (83.3%) of teachers used the lecture method only as a fifth choice as illustrated in Table 3.24, the majority of teachers (83.3%) who used the method regardless of whether it was a first, second, third, fourth or fifth choice were more interested in quick coverage of the syllabus without putting into consideration whether effective teaching and learning had taken place. This jeopardized the curriculum implementation process in secondary schools of Nyamasheke District.

Students were requested to indicate the teaching methods that teachers frequently used in their classes. Table 3.25 illustrates students' responses.

Table 3.25: Students' response to teaching methods frequently used by teachers in secondary schools

Teaching method	Frequency	Percentage (%)
Lecture	8	4.3
Discussion	72	39.1
Roleplay	32	17.4
Demonstration	72	39.1

Source: Researcher.

Table 3.25 shows that discussion and demonstration teaching methods were highly emphasized in secondary schools in Nyamasheke District compared to other methods. The neglect of other teaching methods like lectures disadvantaged auditory learners who understand better by listening (Chittom, 2012). This data implied that curriculum implementation in the schools is not being effectively implemented.

3.5.6 Influence of physical facilities on curriculum implementation in secondary schools

Cash (1993) argues that physical facilities including classrooms and furniture have a significant relationship with students' achievement. Students in undesirable physical environments will not concentrate during the teaching/learning process which leads to poor curriculum implementation. This scenario prompted the researcher to seek to establish the role of physical facilities on curriculum implementation in secondary schools of Nyamasheke District. The facilities included classrooms, desks, chairs, and sports fields. To obtain the required data, head teachers, teachers, and students were requested to respond to relevant questions. The researcher also prepared an observation checklist which was used to establish the availability and condition of various physical facilities in secondary schools. When asked whether they felt there was a positive relationship between physical facilities and curriculum implementation in secondary schools, the majority of head teachers (80%) indicated that there was a positive relationship between the two factors. Students were asked to indicate whether physical activities were important in their academic achievement and many (60%) indicated that physical activities were essential to their academic achievement.

When asked about the number of classrooms in the schools and the school population in secondary schools, the head teachers gave the figures shown in Table 3.26. The head teachers' response was used to calculate the average number of students per class which is represented in the same table.

Table 3.26: Researcher's observation on availability or unavailability of sports fields in secondary schools

Situation	Frequency	Percentage
Sports field available	7	70
Sports field unavailable	3	30
Total	10	100

Source: Researcher.

Table 3.26 shows that the majority (70%) of secondary schools in Nyamasheke District have sports fields. The remaining percentage (30%) represents secondary schools without sports fields. This implies that the curriculum in these schools is not wholly implemented as recommended by the Ministry of Education. Curriculum implementation in academic subjects is also negatively affected as students lack space to do physical exercises which relax their minds and enable them to concentrate on class work.

5. Summary of data presentation and interpretation

This chapter presented the findings and their interpretation of staff development and curriculum implementation in secondary schools of Nyamasheke District. The findings of the first research objective revealed that different trainings are offered relating to staff development and curriculum implementation in secondary schools of Nyamasheke District. For example, 90% of teachers have been trained on the new curriculum since 2015. The remaining percentage (10%) is being trained by District Master Subject Trainers and School Subject Leaders.

Findings of research objective two on the establishment of the relationship between staff development and curriculum implementation, the researcher discovered that all teachers (100%) are qualified in education and a great number of teachers (82.5%) are also qualified in education. The remaining percentage (17.5%) of unqualified teachers affects negatively curriculum implementation.

Findings of research objective three concerning challenges faced by secondary schools of Nyamasheke District in curriculum implementation, the researcher found that the inadequate gender balance among head teachers and teachers affects negatively curriculum implementation. The majority of head teachers (80%) are male, while 20% of them are female. Concerning teachers, 57.5% are male teachers, while 42.5% of them are female teachers. The Government Policy stipulates that at least 30% of employees in all services must be female. Indeed, the percentage of student dropout (0.9%) affects negatively curriculum implementation and acts against Education for All Policy. Concerning the teaching methods, 66.7% of teachers use the discussion method and 33.3% of teachers use other teaching methods. This affects negatively curriculum implementation. The findings also revealed that some secondary schools in Nyamasheke District (30%) do not have sports fields. This affects negatively curriculum implementation because of the lack of space to do physical exercises which relax their mind and enable them to concentrate on class work.

6. Summary of findings, conclusion, and recommendations

6.1 Introduction

This chapter covers the discussion of major findings, the conclusion of the study, recommendations, and suggestions for further studies. The first section points out the summary of the major findings according to the objectives of the study, the second section gives the conclusion of the study, the third one outlines recommendations drawn from conclusions, and the last section provides suggestions for possible areas of further studies.

6.2 Summary of the study

The study was guided by the following specific objectives: to find out the types of training offered related to staff development in schools of Nyamasheke District; to find out challenges faced by schools of Nyamasheke District in curriculum implementation; to establish the relationship between staff development and curriculum implementation.

6.2.1 Training related to staff development in schools of Nyamasheke District

It was noticed that a great number of teachers (90%) have already been trained on the new curriculum since 2015 and the lowest number of teachers (10%) are not yet trained on the new curriculum. Those who are not yet trained are recently recruited, because some teachers get new jobs in other services. It implies that the Ministry of Education has already planned it because there are District Master Subject Trainers (DMAST) and School Subject Leaders (SSL) who organize permanent training on new curriculum for newly recruited teachers. It shows that the implementation of the new curriculum has been well planned by the Ministry of Education and its success is not doubtful.

6.2.2 Challenges faced by schools of Nyamasheke District in curriculum implementation

The researcher found that the inadequate gender balance between head teachers and teachers affects negatively curriculum implementation. The majority of head teachers (80%) are male, while 20% of them are female. Concerning teachers, 57.5% are male teachers, while 42.5% of them are female teachers. The Government Policy stipulates that at least 30% of employees in all services must be female. Indeed, the percentage of student dropout (0.9%) affects negatively curriculum implementation and acts against Education for All Policy. Concerning the teaching methods, 66.7% of teachers use the discussion method and 33.3% of teachers use other teaching methods. This affects negatively curriculum implementation. The findings also revealed that some secondary schools in Nyamasheke District (30%) do not have sports fields. This affects negatively curriculum implementation because of the lack of space to do physical exercises which relax their mind and enable them to concentrate on class work.

6.2.3 Relationship between staff development and curriculum implementation

It was illustrated that 80% of head teachers were bachelor holders in education and 20% of them were postgraduate diploma holders in education. It shows the respect of Ministry of Education policy which stipulates, since 2012, that all secondary schools must be directed by bachelor head teachers and qualified in education. This shows that all head teachers of secondary schools in Nyamasheke District have adequate qualifications to manage curriculum implementation in the schools. Out of 40 respondents, the male teachers had the highest representation of 57.5%, and females had the lowest representation of 42.5% in secondary schools who participated in this study. The collected data indicated that the majority of teachers are male teachers. This implied inadequate gender balance among the teachers which may negatively affect the curriculum implementation process.

6.3 Conclusions

The researcher concluded that the extent of adequacy of human resources affected curriculum implementation in secondary schools. The extent of adequacy of human resource secondary schools is slow as indicated by their minimal qualification and short teaching experience. The research concluded that the lack of adequate instructional materials affected curriculum implementation in secondary schools. Instructional materials like textbooks, teaching aids, and inadequate class readers were likely to affect curriculum implementation in secondary schools of Nyamasheke District.

The researcher further concluded that failure to fully consider students' characteristics affected curriculum implementation in secondary schools. Inadequate special education personnel and failure to put students' age into perspective may negatively affect the curriculum implementation process. The researcher concluded that failure to vary and balance the use of teaching methods affected curriculum implementation in secondary schools. Over-emphasis on a few teaching methods at the expense of the other methods was likely to affect curriculum implementation. The researcher also concluded that inadequate physical facilities affected curriculum implementation in secondary schools. Poor conditions and unavailability of physical facilities such as classrooms, desks, and sports fields would easily affect curriculum implementation.

6.4 Recommendations

Based on the findings, the following were the recommendations for the study:

1) The Ministry of Education should provide more opportunities for practicing teachers to participate in the in-service courses. This is because many teachers of secondary schools have never attended in-service courses and this negatively affects curriculum implementation in these schools as teachers may use outdated instructional materials and teaching methods. The Ministry of Education can do this through provisions of free subsidized in-service courses over the school holidays to give many teachers in these institutions a chance to be retained.

2) The Government of Rwanda should provide adequate and regular school feeding to secondary schools so that schools are able to meet the recommended ratio of 1:1 on textbooks. The funds will also enable the schools to provide stationeries, enough teaching, and class readers to the students. This should be done by increasing the existing school feedings per student and releasing them in good time so that it can be efficiently planned for.
3) The Non Governmental Organizations which are the main sponsors of secondary schools should cooperate with the Government of Rwanda in the provision of teachers, instructional materials, and physical facilities which are some of the core factors in curriculum implementation yet they are lacking in many of the schools. Cooperation can be implemented through the formation of committees and commissions involving members from the Ministry of Education and Non Governmental Organizations, which should deliberate on issues affecting curriculum implementation in secondary schools.
4) The Government of Rwanda should provide land for public utility in all informal settlements where land for sports fields should be set aside. This will help learners to be able to engage in physical education, which is part of the primary school curriculum. The Government should do this by ensuring that public utility land is not encroached through informal settlement.
5) The Ministry of Education should train and deploy more special education teachers to secondary schools. This is because the schools have a shortage of these teachers yet there are students who require the essential services. This should be done through the provision of three or subsidized special education training to secondary school teachers so that they can effectively handle the special needs of the students of secondary schools.
6) Staff development and curriculum implementation in private secondary schools.
7) Community factors and government policy that influence curriculum implementation in secondary schools.

Conflict of Interest Statement

We, Karungi Cissy and Bimenyimana Jean, declare that we are the copyright holder of the article staff development and curriculum implementation in secondary schools of Nyamasheke District, Rwanda. Here in after referred to as the 'Work.' We have full rights to the Work, and to the best of our knowledge, there are no conflicts of interest that would compromise our ownership, control, or ability to assert our rights over the Work. Any potential conflicts, including financial interests, affiliations, or other obligations, have been disclosed and managed appropriately. We understand our responsibility to maintain the integrity of the Work's copyright and acknowledge that any conflicts of interest could impact our ability to enforce these rights.

About the Author(s)

Bimenyimana Jean holds a Master's degree in Educational (Planning, Management and Administration) from Mount Kenya University (MKU), and Bachelor's degree in Education (Computer and Entrepreneurship) from Mount Kenya University (MKU), Kenya. He joined Kibogora Polytechnic since 2019 as Assistant Lecturer of Economics and Entrepreneurship in Education Faculty till now. He teaches different modules related to economics, entrepreneurship and education in the faculty of Education at Kibogora Polytechnic. He supervises undergraduate research projects and he has been a teacher of entrepreneurship in secondary school for 10 years. His emphasis is capacity building.

Karungi Cissy holds a Master's degree in Business Administration specialization in International Business from University of Greenwich and Bachelor Degree in Business Administration, specialization in Accounting and Finance from Uganda Christian University. She joined Kibogora Polytechnic in 2017. She works as assistant lecturer and teach different courses related to business. She supervised more than twenty-six undergraduate students while conducting their research thesis. She has been Head of Examination Office at Kibogora Polytechnic. Karungi Cissy worked as an accountant at Holizon Construction company in the department of equipment and engineering.

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