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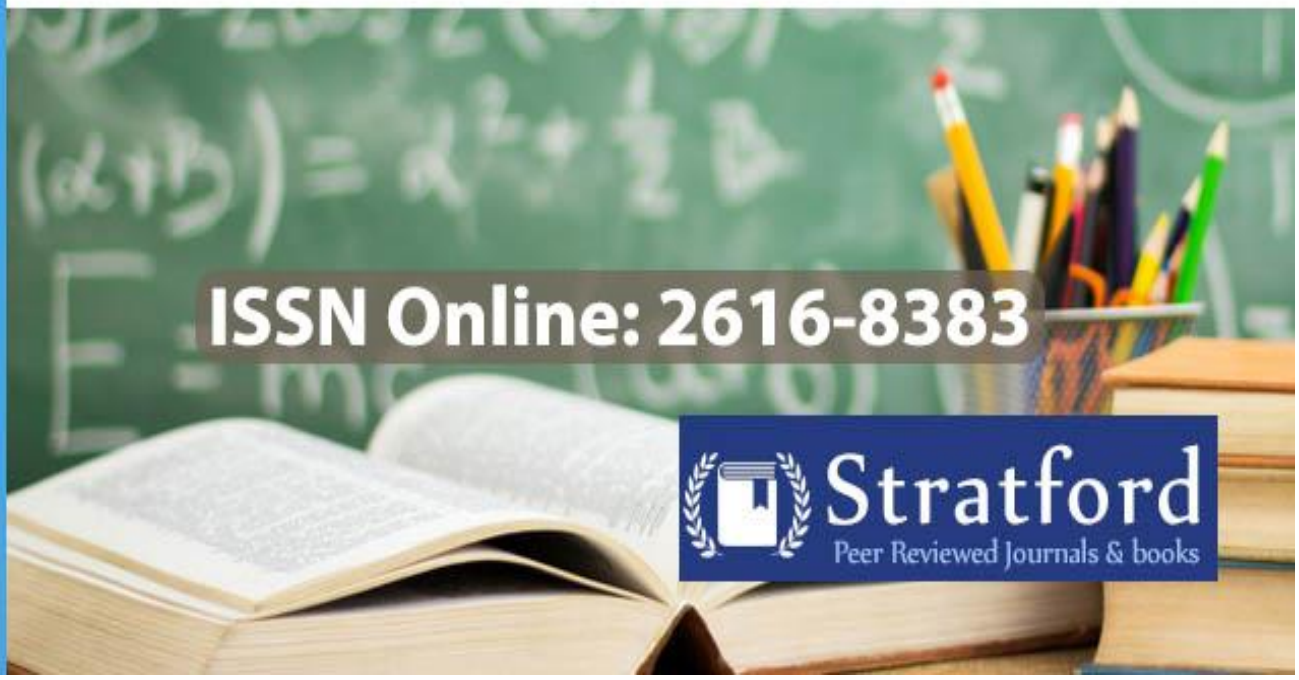

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Relationship between Instructional Materials Utilization and Learners' Academic Achievement in Public Nursery Schools in Nyamagabe District, Rwanda

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Abstract

Instructional materials utilization plays crucial role in education sector worldwide since they contribute to both learners' discipline as well as their academic achievement. The purpose of this study therefore, sought to determine the relationship between instructional materials utilization and learners 'academic achievement in public nursery schools in Nyamagabe District in Rwanda. The study employed a correlation research design. The study focused on a target population of 240 individuals, and a sample size of 150 respondents was obtained using Slovin's formula. Data collection instruments such as questionnaires and guided interviews were utilised. Descriptive statistics were employed to analyse the quantitative data using Statistical Product and Services Solution Version 21 (IBM SPSS) software. The findings revealed that instructional materials are used in nursery schools at 63 percent as it was confirmed by teachers of that section. It was also noted that 62.3 percent of teachers agreed that there is low learners' academic achievement in public nursery schools located in Nyamagabe district while head teachers indicated that learners' academic achievement in public nursery schools is low when compared to private schools. The study revealed that the use of instructional materials positively influences learners' academic achievement at rate between 107.3 percent. The study concludes that there is a significant and positive relationship between the utilization of instructional materials and the academic achievement of students in public nursery schools located in Nyamagabe District, Rwanda. The findings indicate that when teachers make effective use of instructional materials, such as flashcards, picture books, and various educational resources, students tend to perform better academically. The study recommends that educational authorities and intervening people should provide instructional materials and make effective set up that should enhance learners' achievement. The researcher suggests that further research may be done to instructional materials utilization on learners 'readiness to primary education in public nursery schools in Rwanda so as to come up with comparative analysis.

Keywords: *Instructional materials, learners' academic achievement, nursery schools and public schools*

1.0 Introduction

Any successful teaching and learning process requires instructional materials all around the world. Instructional materials defined as the real or tangible items that give auditory, sensory or all five senses during teaching and learning process (Afoma & Omotuyole, 2018). Additionally, instructional materials mean all materials used during teaching and learning process that help a teacher to reach to the set objectives and help learners to acquire knowledge concretely. As a result, instructional materials include any type of information carrier that can be used to motivate students and improve educational outcomes. According to Karaka et al. (2017), instructional resources assist the instructor in properly delivering content to the preschool learner and are thus an important component in the teaching process. Based on this understanding, the world conference on Early Childhood Care and Education, held in Moscow, Russia from September 27 to 29, 2010, emphasised the importance of providing instructional resources because it leads to high-quality education for all children (UNESCO, 2015). In Latin America, when compared to primary, secondary, and high school, early childhood education investment does not reach 0.6 percent of GDP, and instructional materials provided are less than 10% (UNESCO, 2016). The Mexican government implemented a programme to provide free textbooks as instructional materials to increase educational efficiency and equity, whereas teachers in the Philippines were given instructional resources such as manipulative toys, blocks, activity sheets, poems, jingles, rhymes, and songs after being trained in a specific early childhood programme. As a result, according to UNESCO (2018), the provision of instructional materials reduced children's absenteeism in summertime preschool.

Furthermore, when Early Childhood Education and welfare is supplied with school instructional resources, particularly teaching media, excellent student performance is obtained (OECD, 2015).In South Africa; early learning and care services are provided basing on support and funding from agencies from abroad such as donors where most educational agencies provide instructional materials as well as significant advocacy role with government department. UNESCO (2016); conducted a study and revealed that the international development goals on early childhood and care services achievement may lead to effective work of international donor agencies as focused in universal education and MDGs. In Kenya, as in most African countries, early childhood development education has been operated by societies and the secluded sector. Communities create and provide physical infrastructure for municipal ECDE centers, including land, construction materials, furniture labor and equipment as well as management (Ogutu,2015). The type and adequacy of physical infrastructure are mostly determined by the community's economic ability. According to the republic of Kenya (2015) acquired instructional materials are of high quality and are relevant to the learner. When procuring books, the schools follow the approved book policy.

Funding for instructional materials requires funding agencies, such as counties and others, to deposit funds into school. Instructional materials Bank Accounts (SIMBA). SIMBA is used for teaching and learning materials while GPA is used for things like utility bills and support employee. Since the introduction of free primary education in Kenya in 2003, the government has required every primary school to operate a SIMBA or GPA as an intervention mechanism for the supply of educational materials in both nursery and public primary schools. In Rwanda, like other sub-Saharan countries, children underlying the period from birth to six years need targeted and specific services as well as abuse and HIV/AIDS. Children aged 3 to 6 years old should have easy access to basic education to help them prepare primary school, as they are cognitively and

emotionally prepared by both parents and caregivers through the provision of instructional materials in nursery schools to equip them with knowledge and skills, as children at this stage learn through imitation (josephm,2019).In addition to this , meanwhile circumstances are met; the government of Rwanda will be ready to encourage different peer groups of youngsters that can lead to Rwanda's development goals to be achieved (MINEDUC.2018). The approach of empowering holistic and integration that is aiming at developing young children was ensured and provided by the Early Childhood Development Policy and its Strategic Plan where shown that instructional materials provision leads to learners' academic achievement. The demonstration of international research has shown that there are high economic returns and positive effects on both health and education outcomes as well as national economic development on ECD investment and encourage government to provide instructional materials in schools. In addition to this; for achieving both goals and objectives of EDPRS and Vision 2020; ECD policy should be effectively implemented.

1.1 Problem statement

Instructional materials are actual or physical artifacts that engage the five senses in a rigorous, Visual or both manner during the teaching and learning process (Oke,2016). The Rwandan government attempted to provide instructional materials at all levels of education, beginning with nursery schools, and to establish a system that ensures that every child begins primary school after attending nursery school. Instructional materials provision in nursery schools encompass any type of information carrier which is used for encouraging students and improve teaching and learning process. Instructional materials are capable to captivate students' interests, stimulating desires in learning and make learners participate in the lesson when effectively used (Mba, 2014). Additionally, instructional materials utilization should be compulsory in nursery schools where children learn by touching, seeing, hearing, smelling and tasting through singing and dancing, hence this can lead to learners' academic achievement (Hirst *et al* ;2015). Teaching learning materials that may be used in Rwanda nursery schools include audio visual aids (television, films), audio aids such as radio, visual aids such as flash cards, and tactile aides such as dolls and toys (K.L.I.E;2016). The provision of instructional resources in the nursery is regarded as a strong foundation in the early years that enables future learning, laying a strong foundation for children's lifelong learning and educational excellence, as well as eventual market competitiveness (Davis & Gardener ;2019). Despite the Rwandan government's efforts to empower nursery schools by providing instructional materials, children's academic achievement in nursery schools is low (Joseph, 2019). This could be due to a lack of adequate instructional materials such as flash cards, lettercards, letter charts, boxes, stalks, manila paper, wire, rope, swings, toothbrush, toothpaste, soap, water, towel, and oil, which leads to low learners' academic achievement in nursery schools. The goal of this paper was to investigate the relationship between instructional materials utilisation and students' academic achievement in nursery schools in Rwanda's Nyamagabe District.

1.2 Objective of the Paper

The objective of this paper was to determine the relationship between instructional materials utilization and students' academic achievement in nursery schools in Nyamagabe District in Rwanda.

2.0 Literature Review

2.1 Concepts of learners' academic achievement

Instructional supervision, according to wheanzare (2016), entails monitoring teachers' instruction related responsibilities, providing teachers with teaching tools, visiting classrooms to watch lessons, and offering guidance and support to help teachers accomplish their job adequately. Instructional supervision tasks done by head teachers, according to Osman and Mukuna (2018), include monitoring teachers 'attendance during lessons, developing and using lesson plans, and inspecting and providing appropriate educational resources. Professional development, according to Ganira, Odundo, and Muriithi (2016), is a rigorous and on-going effort to increase instructors' efficacy in raising student success. Teachers and school administrators must stay up with new information and adhere to best practices in education as evidenced by academic success in order to achieve the established goals and objectives. In this context, Githae, Odundo Mwangi (2015) argue that funding career development for early childhood educators should be a top priority in order to provide teachers with problem solving skills and creativity, both of which are essential at this level. Furthermore, instruction, team building, curriculum development, leadership and mentoring abilities are expected to be influenced by well-planned professional development. In line with this finding, Duflo *et al.* (2017) discovered that when students were assigned to instructors who received effective professional development, they achieved grater test scores, grades, self-esteem aspiration and motivation. Teacher who manage their classes utilizing instructional resources, on the other hand have good academic accomplishment, according to Ganira *et al,* (2016).

2.2 Instructional materials utilization.

Teaching materials are described as different materials in any format that affect the learning of students and the teaching of instructors. Instructional materials are defined by Doublegist (2015) as all five senses of vision, having to learn, having to hear, making contact, direct relationship. dour and flavors, but they're very essential to teach preprimary school because they enable the direct relationship between audio and their symbols, as well as words and the artifacts they reflect, and they are very important in teaching pre- primary school because they facilitate the direct association between sound and their symbols, as well as words and the artifacts they reflect. Furthermore, instructional materials or resources utilized by teachers to improve the effectiveness and efficiency of the teaching and learning process (Ayuackgbuo; 2014). Teaching aids must be used in four ways: they must be related to the specific lesson topic; they must be appropriate for the learners' age and puberty level (bold and colorful areas at the pre-school level), they must be previewed by the instructor prior to the actual learning experience to ensure that everything is in order, they must be accurate in subject matter and reasonable in other areas for the same learning experience as emphasized by the instructor, and they must be reusable (Doublegist ;2015). Some of the instructional materials for pre-primary education that the MoEVT (2015) recommends for use during the teaching and learning process include flashcards, pictures, calendars, toothbrushes, real objects, coins, fruits, balls, video, videotape, soap, musical instruments such as drums, sticks, flute, whistles, papers, and others. Because these are basic elements that can aid students in achieving high academic accomplishment, providing Teaching and Learning Resources (TLR) improves the efficacy of schools. All institutions or organizations, according to Maicibi (2003), are made up of human persons (workers) and non-human resources.

He also contends that by assembling the correct combination of quantity and quality human resources, he can sway other resources to assist the institution meet its aims and objectives. As a result, every business should make a deliberate effort to attract and retain top talent.

The availability of text books and supplementary teaching and learning materials (TLM), well trained, prepared, supervised, and motivated teachers (human resources), and adequate physical facilities are the most consistent characteristics in improving student performance, according to the Department for International Development (DFID) (Guidance note, a DFID practice paper, 2017). According to DFID, most African nations, including Malawi and Zimbambwe, continue to rely on the Malawi Institute of Education, which receives donor funding, to create monopoly state primary text books for teaching and learning materials. Tanzania, on the other hand, is prepared to reintroduce sole source text book deliver from the commercial sector, as well as may be reintroduce a novel public text book provisioning organization. Text books, charts, maps, and audio visual and electronic teaching equipment such as the radio, tape recorder, television, and video cassette recorder are examples of material resources. Pens, erasers, exercise book, crayons, chalk, drawing books, pencils, rules, slates, and school books are between the additional instrument's supplies (Atkinso, 2018). According to the Wold bank, school fund availability in terms of student textbooks delivery, infrastructure availability, and child educator ratio is in adequate (2016).

2.3 Instructional materials utilization and learners' academic achievement

Material resources, physical facilities, and human resources are the three essential components of teaching and learning resources (DFID, 2017). According to previous research on the availability of teaching and learning resources in education, instructional materials are not always available in schools. Educators have been concerned about the lack of educational materials. Learning, according to Lyons (2015), is a complicated activity in which students' motivation, physical facilities, instructional resources, teaching abilities, and curricular demands all interrelate. Because teaching and learning resources are the foundational resources that allow learners to achieve excellent academic performance, their availability boosts school effectiveness. Textbooks, charts, maps, audio visual and electronic instructional resources, such as transistor, tape stereo, TV, and filmed tape stereo, should all be supplied for teaching and learning in nursery schools. Paper purchases and writing tools include pens, erasers, workout books, crayons, chalk, drawing books, notebooks, pencils, and rulers. When students are involved in engaging, meaning full and relevant activities, they are less likely to miss school, which increase admission and learning outcomes. For a competent education learning process, these resources should be offered in sufficient number and excellence in schools. Several investigations on the influence of instructional materials on education have been carried out. Momoh (2019) investigated the impact of instructional materials on students' performance in the West African School Certificate Exams (WASCE). WASCE student achievement was connected to the educational resources provided. He came to the conclusion that material resources have a significant impact on student achievement because they help students understand abstract concepts and ideas while also preventing rote memorization. When teaching and learning resources are insufficient, education suffers; resulting in low academic success, high dropout rates, behavior issues, low teacher motivation, and unmet academic goals.

2.4 Effect of instructional materials utilization on learners' academic achievement

The Programme for International Student Assessment (PISA) of the Organization for Economic Cooperation and Development (OECD) demonstrates that resource restrictions impede instruction

and lower student accomplishment (OECD, 2017). Furthermore, differences in scholar academic performance typically reflect differences in school resources (OECD, 2017). According to John (2004), educational outcomes in schools are intrinsically linked to the use and suitability of education and learning resources in a variety of ways, low educational attainment is produced by poor utilization, underutilization, and unprepared educators. A critical issue influencing students' learning results is a lack of proper physical and material resources in schools. Schools without appropriate facilities, such as animal greeting cards, letter cards, letter charts and boxes, stalks, Manila paper, wire, rope and sticks, as well as tooth brush, tooth paste, soap, water, towel, oil, teaching learning materials, are unlikely to succeed. Mbaria (2016) looked into the relationship between educational materials and achievement in Ndaragwa district high schools, while Likoko, Mutsotso, and Nasongo (2015) looked into the adequacy of teaching materials and physical facilities in Bungoma country colleges and their impact on the quality of teacher preparation. High-performing schools have more teaching and learning resources than low- performing schools, according to the research, and there is a considerable difference in resource availability between the two. Furthermore, most organization challenge problems such as an absence of relevant resources, such as books and insufficient schooling tools, both of which have an adverse effect on the excellence of alumni produced.

In his study on the changes faced by head tutors in implementing the FDSE program in Wajir, Adan (2014) claims that most schools in the district face a major challenge in terms of adequacy of physical facilities, the only adequate materials existing are text books, but the institutes are in distressed need of school rom, toilets, and desks. Chairs, workshops, and coaching assistances were all encouraged, as was a larger amount of FDSE monies being redirected to TLR. Stakeholders in schooling are in control for providing and using facilities (National Education Policy, 2012). The Kenya government confirms that the general education agenda is applied by making an enabling community. Family members are also dynamic in the purchase of educational tools for children as well as the creation of physical infrastructure for PTA (Parents Teachers Association) initiatives. Since the FDSE was implemented, the government has struggled to provide teaching and learning resources in schools. Despite these suggestions, the Kamunge study claims that planning and availability of teaching and learning materials has continued a struggle in today's FDSE, with low long-term education results (2016).

2.5 Government policy

In Rwanda, like other sub-Saharan countries, children underlying the period from birth to six years need targeted and specific services as well as interventions for protecting children from different effects include poverty; diseases as well as abuse and HIV/AIDS. Children between 3-6 years should be provided easy access to basic education in order to help them being ready for entering in primary school since are cognitively as well as emotionally prepared by both parents and caregivers through providing instructional materials in nursery schools for the purpose of empowering them with knowledge and skills as children in this stage learn by imitation(Joseph;2013).In addition to this; meanwhile these circumstances are met; the government of Rwanda will be ready to encourage different peer groups of youngsters that can lead to Rwanda's development goals to be achieved (MINEDUC.2010). The approach of empowering holistic and integration that is aiming at developing young children was ensured and provided by the Early Childhood Development Policy and its Strategic Plan where shown that instructional materials provision leads to students' academic achievement. The demonstration of

international research has shown that there is a high economic return and positive effects on both health and education outcomes as well as national economic development on ECD investment and encourage government to provide instructional materials in schools. Furthermore, in order to achieve both goals and reading other researchers' thoughts on how instructional materials utilization relates to learners' academic achievement reveals that instructional materials utilization is significantly related to learners' academic achievement.

3.0 Research Methodology

This study utilised a correlation research design to determine the extent of the relationship between the use of instructional materials and the academic performance of students in nursery schools located in Nyamagabe District, Rwanda. The study focused on a target population of 240 individuals, and a sample size of 150 respondents was obtained using Slovin's formula. Data collection involved the utilisation of stratified and simple random sampling techniques, as well as purposive sampling. Data collection instruments such as questionnaires and guided interviews were utilised. Quantitative data analysis was conducted using descriptive statistics through the Statistical Product and Services Solution Version 21 software (IBM SPSS).

4.0 Findings

The purpose of this study was to investigate the correlation between the utilisation of instructional materials and the academic performance of students in nursery schools located in Nyamagabe District, Rwanda. The data management process involved utilising Statistical Product and Services Solution Version 21 (IBM SPSS) software, which facilitated the presentation of the data in the form of tables.

4.1 The extent to which instructional materials used in public nursery schools

By answering the research questions of this study which were developed, the questionnaires were distributed to get the findings from teachers and guided interview was given to head teachers of primary schools in Nyamagabe district. Table 1 displays the teachers' perception regarding the degree to which instructional materials are utilised in public primary schools.

Table 1: Perception of teachers on the extent to which instructional materials usage in public primary schools

Statements	SD		D		N		A		SA		Mean	Std
	F	%	F	%	F	%	F	%	F	%		
Instructional materials like Flash cards, picture books with greetings are used in this school.	6	4.1	24	22.1	7	4.8	68	49.7	26	19.3	4.72	0.81
Instructional materials like dolls, balls and bag beans are used at school.	24	22.3	8	6.2	4	2.8	31	24.4	65	44.3	4.49	0.91
Teachers use instructional materials in all 6 learning areas.	6	4.1	26	23.8	14	11.2	53	35.7	32	25.2	4.4	0.84
Students learn through singing and dancing.	21	19.7	14	10.2	7	4.8	40	31.4	49	33.9	4.34	0.86
Teachers in nursery use objects to count, containers to put things inside, and number cards.	25	31.8	13	18.5	3	1.7	30	17.3	42	30.7	4.32	1.09
Learners play with instructional materials in all 6 learning corners like cards of animals, clay for modeling animals etc.	13	9.3	11	8.2	13	9.3	34	25.9	60	46.8	4.24	0.96
Numerous charts of letters are found in all classes.	25	22.8	10	8.5	9	5.5	46	30.5	41	32.7	4.2	0.89
Teachers in nursery use letter cards, sound cards, picture cards, pencils, colors and story pictures in literacy corner in every teaching.	20	15.2	25	23.4	6	4.1	35	22.6	45	34.7	3.84	0.97

The study results presented in Table 1 reveals the teachers' perception in primary education regarding the utilisation of instructional materials in public primary schools. It shows that 72.7 percent of teachers agreed that learners engage with instructional materials in all six learning corners, such as animal cards and clay for modelling animals, with a mean score of 4.24. Additionally, 69 percent of teachers reported using instructional materials like flash cards, picture books with greetings are used in this school at 4.72 of mean ,68.7 percent of teachers agreed that instructional materials like dolls, balls and bag beans are used at school at 4.49 of mean,65.3 percent of teachers agreed that Students learn through singing and dancing at 4.34 of mean,63.2 percent of teachers agreed that numerous charts of letters are found in all classes at 4.2 of mean,60.9 percent of teachers agreed that teachers use instructional materials in all 6 learning areas at 4.4 of mean,57.3 percent of teachers agreed that teachers in nursery use letter cards, sound cards,

picture cards, pencils, colors and story pictures in literacy corner in every teaching at 3.84 of meanwhile 48 percent of teachers agreed that teachers in nursery use objects to count, containers to put things inside, and number cards at 4.32 of mean.

Head teachers of primary schools in Nyamagabe district were interviewed to assess the usage of instructional materials in public primary schools. The findings revealed that learners engage with instructional materials in all six learning corners, such as animal cards and clay for modelling animals. In addition, they stated that these instructional materials are not utilised effectively due to a lack of sufficient time to carry out such activities. Based on the perceptions of various respondents regarding the degree to which instructional materials are used in nursery schools, the researcher conducted a comparative analysis. The findings revealed that respondents share a common perception regarding the utilisation of instructional materials, but there are variations in the magnitude of this perception, as indicated in Table 1 and the interviews conducted with head teachers. In 2014, the United States Census Bureau published a report on children's engagement in the teaching and learning process. The report revealed that 57% of children aged 3 to 8 actively participate when exposed to various instructional materials.

4.2 Level of learners 'academic achievement in public nursery school

Table 2 displays the outcomes of the teachers' perception regarding the academic performance of students in public nursery schools.

Table 2: Perception of teachers on the level of learners 'academic achievement in public nursery school

Statements	SD		D		N		A		SA		Mean	Std
	F	%	F	%	F	%	F	%	F	%		
Learners use appropriate response.	23	21.3	10	8.5	5	3.2	31	26.3	53	40.7	4.50	0.98
Learners can name different animals.	9	6.3	28	21.5	4	2.8	47	36.7	42	32.7	4.50	1.04
There is an increment of learners who can count the first 10 numbers.	28	24.9	7	4.8	4	2.8	53	40.9	39	26.6	4.07	1.28
Learners have high level of exploring numbers, measurements, shape and pattern concepts.	26	22.8	6	4.1	7	4.8	59	40.5	33	27.8	4.06	1.22
Learners are able to connect movements of their body with the songs and the sounds of musical instruments.	21	18.3	28	25.1	5	3.2	36	19.7	41	33.7	3.82	0.95
Rate of learners' ability to tell real letters of alphabet is at high level.	24	22.7	15	13.2	7	4.8	47	28.8	38	30.5	3.55	1.31
Learners are able to coordinate the movements of hands and legs.	20	14.9	25	19.1	6	4.1	33	26.7	47	35.2	4.22	0.98

The study finding in Table 2 indicates the perception provided by teachers who teach in primary schools related to the level of learners 'academic achievement in public nursery school. The perceptions of 69.4 percent of teachers indicated that learners can name different animals at 4.5

of mean,68.3 percent of teachers agreed that learners have high level of exploring numbers, measurements, shape and pattern concepts at 4.06 of mean,67.5 percent of teachers agreed that there is an increment of learners who can count the first 10 numbers at 4.07 of mean , 67 percent of teachers agreed that learners provide appropriate response at 4.50 of mean, 61.9 percent of teachers agreed that learners are able to coordinate the movements of hands and legs at 4.22 of mean and 59.3 percent of teachers agreed that rate of learners' ability to tell real letters of alphabet is at high level at 3.55 of meanwhile 53.4 percent of teachers agreed that learners are able to connect movements of their body with the songs and the sounds of musical instruments at mean of 3.82. The results of table 2 shows that there is a low ability of learners to name different animals as indicated by the mean of 4.5. Head teachers were also interviewed on the level of learners 'academic achievement in public nursery school and emphasized that there is low learners' academic achievement, where learners show low level of movement coordination of hands and legs. By making comparative interpretation basing on views from different respondents related to learners' achievement, it was shown that learners' achievement is low in public nursery schools due to insufficient utilization of instructional materials and indicate that once instructional materials are appropriately used, learners' achievement can be improved significantly. According to Nikki (2019), instructional materials are often expensive and should be provided freely by government in order to promote instructional materials utilization in schools which leads to better academic achievement.

4.3 Correlation between instructional materials utilization and learners' academic achievement

There were a need to determine the relationship between instructional materials utilization and learners 'academic achievement in public nursery schools in Nyamagabe District in Rwanda. Thus, table 3 shows the findings on how instructional materials are correlated to learners' academic achievement in public nursery schools located in Nyamagabe district.

Table 3: Correlation between instructional materials and learners' academic achievement

		Learners 'academic achievement	Instructional materials utilization.
Learners 'academic achievement	Pearson Correlation	1.000	
	Sig. (2-tailed)		
	N	131	
Instructional materials utilization.	Pearson Correlation	.529**	1.000
	Sig. (2-tailed)	.00	
	N	131	131

**. Correlation is significant at the 0.01 level (2-tailed).

The study investigated the relationship between instructional materials utilization and learners' academic achievement basing on independent variable. The results in the table 3, revealed that there is a significance high degree of positive correlation between instructional materials utilization and learners' academic achievement where Pearson coefficient of correlation states the

correlation (r) of 0.529 with the p-value =0.000<0.01. This means that the use of instructional materials in teaching provides enough evidence that promote the learners 'academic achievement. As stated in interview, it was shown that the more use instructional materials in teaching the more learners' academic achievement improved. These findings are in line with the study of Broh (2002), which shows that the use of instructional materials has significant influence in all levels of education especially in classes of small children like nursery and primary schools.

4.4 The influence of instructional materials utilization on learners' academic achievement

Table 4 displays the coefficient of determination (R square) for the relationship between the utilization of instructional materials and learners' academic achievement.

Table 4: The R square of instructional materials utilization and learners' academic achievement

					Change Statistics				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	R Square Change	F Change	df1	df2	Sig. F Change
1	.708	.501	.485	.85670	.501	31.570	3	127	.000

a. Predictors: (Constant), Instructional materials like dolls, balls and bag beans are used at school., Teachers in nursery use letter cards, sound cards, picture cards, pencils, colors and story pictures in literacy corner in every teaching., Teachers use instructional materials in all 6 learning areas .

The table 4 indicates the influence of instructional materials utilization on learners' academic achievement. The findings presented indicate that there is a high degree of correlation (r) of 0.708 and R square of 0. 501. It means that instructional materials utilization influence learners' academic achievement at 50.1 percent.

5.0 Summary of findings

The objective of this study focused on determining the relationship between instructional materials utilization and students' academic achievement in nursery schools in Nyamagabe District in Rwanda. It was noted that there is a weighty high grade of positive relationship between instructional materials and learners' academic achievement in public nursery schools where Pearson coefficient of correlation shows the correlation (r) of 0.529 where the P-value =0.000< 0.01. This means that instructional materials utilization provides enough evidence that promotes learners' academic achievement in public nursery schools. The effective use of instructional materials has a significant impact on learners' academic achievement, ranging from 87.2 percent to 121.4 percent.

6.0 Conclusion

The study concludes that there is a significant and positive relationship between the utilization of instructional materials and the academic achievement of students in public nursery schools located in Nyamagabe District, Rwanda. The findings indicate that when teachers make effective use of instructional materials, such as flashcards, picture books, and various educational resources, students tend to perform better academically. Moreover, the study highlights the need for increased

support and resources, possibly from the government, to ensure the availability and accessibility of these instructional materials in schools. By doing so, it is suggested that the educational system in Nyamagabe District can improve student learning outcomes and contribute to better overall academic achievement in public nursery schools.

7.0 Recommendations

Through the presented findings of this paper as well as drawn conclusion, the recommendations were also established.

1. The concerned Ministry of Education ought to provide early childhood education facilities in all public nursery schools in order to improve learners' academic achievement.
2. Educational designers should make effective set up that should boost learners' academic achievement so as to make up effective implementation of utilization of instructional materials in public nursery schools.
3. Head teachers should supervise the implementation of utilization of instructional materials daily so that learners' academic achievement in public nursery schools can be improved through helping learners to use greetings appropriately, to read alphabet, to construct models playing and to improve literacy and numeracy.

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