

Relationship Between Curriculum Management And Student Academic Performance

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Abstract

The purpose of the study was to examine the relationship between curriculum management by school principals and student academic performance. The context of the study was in select public secondary schools in Kirinyaga and Nyeri counties, Kenya. The study applied a concurrent mixed research design. The target population was students, teachers, and principals from public secondary schools in Kirinyaga and Nyeri counties. Stratified random sampling was adopted, which resulted in 331 students, 305 teachers, and 30 principals. Data collection was through questionnaires for students and teachers and interviews conducted with the school principals. Regression analysis was computed using SPSS, and the qualitative analysis was completed using the NVivo software. Study results indicate that curriculum management has a significant influence on student academic performance ($p < 0.05$). Curriculum management in the study relates to the role of school principals in adopting approaches that would enhance the effective implementation of the curriculum. Curriculum management was also examined in the context of the ability of school principals to mobilise relevant resources required to support learning. The study recommends that school principals should enroll in curriculum-related courses in order to improve their overall preparedness for curriculum implementation.

Keywords: Curriculum management, public secondary schools, implementation

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I. INTRODUCTION

Despite its complexity and multidimensional nature, the study of leadership continues to generate tremendous interest due to its significance in administration and governance in the globalized world. Although there is no commonly accepted definition of leadership, scholars have described it as the art or process of mobilizing and influencing people toward achieving specific objectives (Kouzes & Posner, 1995). Leadership practices are, on the other hand, termed as forms of execution or operations aimed at offering direction to a group of people in an organization (Crevani & Endrissat, 2016). Thus, leaders are seen as visionaries and strategists tasked with the responsibilities and practices required for the effective administration of organizations.

In the context of educational management, leadership practices are key to the effective administration of teaching programs as well as the enhancement of positive school culture and learning climate. The Edith Cowan University – ECU (2019) describes instructional leadership (IL) as a management approach in which school leaders' focus on students' educational performance by giving precedence to teaching quality. School leaders achieve such goals by focusing on various directional practices such as teachers' professional development, curriculum management, and fostering a positive school learning environment, among others.

School principals play crucial roles in the growth and development of learning institutions. As a result, principals are seen to be key in the implementation of key policies and structures within the schools. According to Irungu (2020), one of the major responsibilities of school principals relates to their roles in offering instructional leadership. Taylor and Richards (2018) observe that one of the most important instructional roles of principals involves supervising the implementation of the curriculum. As a result, the concept of the instructional role of school principals in curriculum management has received increased scholarly attention among scholars over the past few decades. For instance, in the United States, McBrayer et al. (2020) found that school principals have an instructional role of checking the quality of teaching and ensuring the effective implementation of instructional programs. Similarly, in the United Kingdom, Munna (2021) found instructional leadership practices to be appropriate in promoting the quality of curriculum delivery.

Thomas and Jhariel (2019), in a study involving principals and teachers in Indian schools, established that IL practices, such as supervision and monitoring of instruction in classrooms, can influence students' performance. Such regular monitoring and giving feedback increase teachers' commitment toward improved quality of teaching and learning processes. Essentially, principals' practices influence the general performance

of teachers and students while promoting compliance, trust and zeal for service as well as occupational commitment among the teaching staff. Supervision and monitoring also present principals with opportunities to understand the level of teachers' abilities, skills and teaching instructional strategies, giving them insight into areas requiring greater attention for career and professional development initiatives. The Current study sought to investigate the relationship between curriculum management and student academic performance.

II. CONTEXT

A few studies have examined the curriculum management practices of school principals and their impacts on student academic performance (Mwangi, 2016). In his study, Mwangi (2016) found that school principals have the role of supervising and monitoring instruction which significantly affects the performance of learners. Despite the role played by school principals in enhancing instructional delivery through curriculum management, students' performance in public secondary schools in national examinations has been persistently below average. The above was evident in Kirinyaga and Nyeri counties, Kenya, where the majority of students scored below average in the national examinations. Existing studies in Kirinyaga and Nyeri counties, Kenya, have linked the performance to a lack of adequate physical and human resources to facilitate learning (Irungu, 2020). Across the two counties, there has been limited evidence on the extent to which curriculum management practices by school heads affect student academic performance. In the context of the above, the main aim of the study is to examine the association between curriculum management and student academic performance in Kirinyaga and Nyeri counties, Kenya.

III. LITERATURE REVIEW

Literature on curriculum and instructional management in public schools has been on the rise. According to Tavares (2015), effective management of school curricula helps to improve the performance of instructional school principals. The structure of the school curriculum helps both school heads and the teaching staff to frame performance targets, monitor student performance, and design policies for rewarding exceptional performance, which directly influences the performance of students (Graziose et al., 2017). Taylor and Richards (2018) emphasised that teachers are the most critical agents facilitating the execution of school curricula. This means that school heads should design and promptly communicate the school curriculum to allow teachers to organise the structure of the lesson plans consistently to ensure it maximises performance indicators that promote student performance.).

Mitchell (2021) recommends that school heads should conduct regular training on curriculum implementation to ensure that they have the right knowledge of the instructional programs required in an institution. Efficient school heads recognize the value of staff empowerment, cooperation and collaboration in guaranteeing effective learning and teaching. Empowered staff will willingly deliver their mandate resulting in improved student performance. As part of staff development, Mitchell (2021) argued that school heads must also be fully empowered so that they have the right knowledge to supervise and lead the instruction process.

Instructional leadership goal is to assist instructional leaders in making favourable curriculum changes which are essential when it comes to academic performance. School heads, considered to be instructional leaders, are important players in the execution of educational reforms. According to Odoh and Obiakor (2021), principals are capable of executing the major amendments that result in the continuous improvement of student's performance in a fast-changing environment. The school principal has the duty of ensuring that the curriculum is followed to the letter and that there is total compliance from all the involved stakeholders. However, as noted by Michael et al. (2021), school principals are not lone players in the curriculum implementation process and should involve other stakeholders, including departmental heads and policymakers. The above means that school heads have a duty to solicit feedback on curriculum matters and ensure that the issues are efficiently applied to improve student academic performance.

According to Bush and Glover (2016), school heads should incorporate teachers' opinions while framing the school curriculum to ensure it fosters inclusivity. In their research, Schleiff et al. (2021) indicated that designing a clear school timetable with clear deliverables holds the potential to achieve the objectives of the school curriculum. Lopez and Rugano (2018) observed that schools' timetables need to underscore primary areas of learning, such as numeracy and literacy, for all students. Tingle et al. (2019) outlined that occasional evaluation of the effectiveness of the school curriculum enables school heads to evaluate the effectiveness of the teaching and learning process, allowing necessary adjustments to the curriculum to be made. Taylor and Richards (2018), note that students should be the central focus in designing the school curriculum, given that success or failure of the school curriculum depends on the students. Syomwene (2018) emphasised that school heads should collaborate with teachers, parents and non-teaching staff while designing school curricula to ensure it best fits the needs of all stakeholders of the institution.

It is worth noting that the structure of a curriculum is a vital component in education as it allows teachers to create a framework for how they want their students to study and achieve academic excellence.

School heads need to create a suitable structure to make it easier for teachers to complete the daily tasks required. The structure is also crucial to keep students on track and prevent the feeling of being left behind (Graziose et al., 2017). Many school-going children are young and thus need to be helped by school heads and teachers rather than pressuring them to take responsibility for their learning. As the curriculum is one of the most crucial parts of education, school principals should consider what students are being taught and ensure the content they receive is applicable outside a school environment (Taylor & Richards, 2018).

According to Tingle et al. (2019), teachers should constantly evaluate their lesson plans and schemes to ensure it addresses the needs of individual students to increase the chance of improving student performance. In their research, Taylor and Richards (2018) outlined the need for school principals to create forums through which they would invite specialists to train teachers and non-teaching staff on curriculum implementation. Lehl et al. (2020) agreed with Taylor and Richards (2018) by noting that continuous training could improve the effectiveness of each stakeholder in facilitating the successful implementation of the school curriculum and eventually improve student performance.

Lopez and Rugano (2018) explained that for effective implementation of school curricula, school heads should formulate an active Parent Teachers Association to oversee students' learning experience. Sharing the same opinion, Graziose et al. (2017) outlined that understanding the student learning experience allows school principle to identify potential drawbacks of the school curriculum. However, Schleiff et al. (2021) criticised the reliability of school curricula, noting that some school principals over-emphasise some roles while disregarding others, which negatively affects the overall performance of the institution. In line with the above, there is a need for school principals to collaborate with all stakeholders while framing the school curriculum to ensure effective management.

A school curriculum can only be effective with the efforts of all stakeholders. However, Lehl et al. (2020) noted that the success of a school curriculum lies strongly with school principals and teachers. The two stakeholders are the first direct curriculum users since a school's effectiveness depends on the teaching quality, as Graziose et al. (2017) points out those teachers' critical roles include curriculum planning and delivery. Teachers are required to write daily lesson plans and modify them to suit students' needs and environments. Teachers study the curriculum and identify the necessary resources to impart learning. According to Taylor and Richards (2018), the curriculum is created to benefit students; hence, the students are directly involved in the failure or success of implementing a school curriculum. In this case, the involvement of students in the implementation of the school curriculum plays an important role in creating buy-in among the students.

IV. METHODOLOGY

The study applied a concurrent mixed-method research design. The design involves applying qualitative and quantitative methods concurrently (Creswell & Clark, 2011). The design allowed the researcher to collect qualitative data from interviews and quantitative data from questionnaires simultaneously. Questionnaires were shared in person with students and teachers. Similarly, the researcher conducted face-to-face interviews with principals, which were recorded and later transcribed to facilitate qualitative analysis. The items used in the questionnaire were tested for validity and reliability through pilot testing. The items used to develop a questionnaire and interview questions were drawn from existing literature which further improved the validity and reliability of the research.

The target population was the students, teachers and principals drawn from select public secondary schools in Kirinyaga and Nyeri counties, Kenya. The inclusion of students, teachers and principals was found critical in exploring instructional practices from different perspectives. Stratified random sampling was applied in the study. The sampling allowed the researcher to divide the secondary schools into three main strata; county, sub-county and extra-county schools. Data on the total population of students, teachers and principals was acquired from the county Department of Education. Yamane's formula was applied in the sample calculation, which resulted in a sample of 398 students, 374 teachers and 37 principals. The questionnaire and interview response rate included 331 students, 305 teachers and 30 principals who were included in the final analysis of the study. The sample was considered to be representative of student, teacher and principal populations in Kirinyaga and Nyeri counties, Kenya.

Analysis was conducted in two major steps involving thematic and quantitative analysis. Qualitative data from interviews was coded using the Nvivo software and resulted in the themes described in the study. Under quantitative analysis, descriptive statistics was used to provide a summary of the variables used in the study. The next step was regression analysis. The main dependent variable was the student's academic performance, while the main independent variable was curriculum management. The variables were measured by coding the responses of participants using a five-point Likert scale. The analysis was computed using SPSS v.26.

V. DISCUSSION OF FINDINGS

The objective of the study was to evaluate the impact of curriculum management on the performance of students in selected public secondary schools in Kirinyaga and Nyeri counties, Kenya. Table 1 below shows the results of the regression analysis. The results have been used as a basis for rejecting the hypothesis of the study given $p = .000$ for $p < 0.05$. The study had hypothesized that curriculum management had no statistically significant influence on student academic performance in Kirinyaga and Nyeri counties, Kenya. The conclusion made from the findings is that curriculum management has a statistically significant effect on student academic performance.

Table 1
Impact of Curriculum Management

Coefficients ^a		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
Model		B	Std. Error	Beta		
1	(Constant)	.718	.129		5.564	.000
	Curriculum Management	.609	.055	.677	11.127	.000

a. Dependent Variable: Student Performance

The results in this study could be interpreted to mean that the overall methods used to manage school curricula could have a direct impact on the performance of students. In this study, curriculum management describes all approaches used to develop and improve the learning process. The approaches have also been assessed based on the specific measures taken by school principals to ensure the correct implementation of the curriculum. For instance, the findings indicate that the majority of school principals are able to regularly evaluate teaching methods used by teachers while at the same time ensuring that the curriculum has been implemented correctly. The findings on curriculum management in this study agree with the results by Schleiff et al. (2021), who noted that the knowledge and skills acquired by students are, to a large extent, dependent on the management and implementation of the curriculum. It means that learning institutions with better management of curriculum are likely to have students with a better understanding of instructional content, which has a direct impact on performance.

While the curriculum applied in the selected public secondary schools is developed at the national level, the actual implementation is tasked to teachers through the creation of lesson plans. The school principals, therefore, have a role of regularly inspecting the practices used by teachers to ensure that they are consistent with the needs of students and the institution. The ability of curriculum management to positively influence the performance of students in public secondary schools could be largely dependent on implementation. In this case, public secondary schools are able to implement their curriculum based on their needs.

Similarly, the influence of curriculum management on student academic performance could also be based on instructional time dedicated to specific subject areas. The findings of this study could also be interpreted to mean that schools that are able to balance instructional time are more likely to have higher-performing students. The observations above are consistent with findings by Orodho and Nzoka (2014), who noted that the ability of students to acquire an in-depth understanding of a subject area is dependent on instructional time offered by teachers. Therefore, for institutions with higher student academic performance, teachers are able to dedicate more teaching time to complex concepts or other aspects of learning, such as skills development and critical thinking. All the aspects identified above relate to curriculum management and would play a critical role in improving the performance of students.

The current study confirms that student academic performance in public secondary schools is largely dependent on the effective implementation of the curriculum. Study results are consistent with Taylor and Richards (2018), who found that the curriculum determined the content taught to learners, which had a direct influence on their performance. Similarly, Tavares et al. (2015) found that the curriculum allowed teachers to create well-organised structures for their classes which was a major determinant of academic performance. As a result, school principals have a role in ensuring that the curriculum is efficiently applied by the teachers. The above also entails providing the resources required for the effective implementation of the curriculum.

VI. RECOMMENDATIONS

This study recommends that school principals should enroll in curriculum-related training courses. In this case, the success of implementing the curriculum is based on the principals' knowledge and the ability to apply the right instructional methods. Due to the dynamic nature of the learning environment, it is recommended that school principals should not just rely on curriculum knowledge acquired during their college/university education. As observed by Taylor and Richards (2018), more training programs play a critical role in

augmenting principals' knowledge. School heads could achieve the above by attending workshops and seminars organized by the Ministry of Education and other professional bodies within the sector. The curriculum knowledge can also be increased by enrolling in further curriculum or management studies. Such training would be critical in improving the professional preparedness of school principals engaged in curriculum implementation.

VII. CONCLUSION

The curriculum adopted in the selected public secondary schools was found to have a significant influence on the performance of students. The findings are based on the specific activities undertaken by the school principals. For instance, the majority of participants indicated that the school principals had put efficient measures to ensure the implementation of the curriculum. Similarly, the findings also indicate that the majority of the principals in public secondary schools in Kirinyaga and Nyeri counties-Kenya were able to provide all the resources required for the implementation of the curriculum. Equally, the school heads supervise teachers' and students' work to determine whether they are consistent with the existing curriculum and policy documents. The study also recommends that school principals should take lessons to have first-hand experience and understanding of instructional practices and curricula used in the institution.

In summary, the study found that the instructional role of school principals in curriculum management had a significant influence on academic performance for students in select public secondary schools in Kirinyaga and Nyeri counties, Kenya. Specifically, the study found that school principals have a responsibility to supervise instructional methods used by teachers while offering timely feedback and feasible recommendations for improving the execution of the curriculum. Similarly, the study found that principals in public secondary schools could improve the implementation of the curriculum by soliciting appropriate resources which could be used to support the effective application of the curriculum. The findings in this study are relevant in the current era of the competency-based curriculum (CBC). Through instructional leadership, the school principals have a responsibility to ensure that the instructional content offered matches the skills and competencies as espoused under the CBC curriculum

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