

THE SIGNIFICANCE OF ENVIRONMENTAL FACTORS ON LEARNING AND LEADERSHIP LEVEL OF STUDENTS: THE CASE OF NEKEMTE CITY, ETHIOPIA

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ABSTRACT

Education is crucial and necessary for each and every person in order to improve knowledge, way of living as well as social and economic status throughout the life. Making sure people attain this can be difficult and to measure its efficiency at times. The purpose of this study was to examine the level of influence of leadership and learning environment on students' academic achievement. The study employed survey design, quantitative method and simple random sampling technique. The data was analysed using frequency distribution and independent samples t-test. The findings indicated that while both leadership and learning environment had a positive influence on the level of the students' learning achievement, leadership tended to have a greater influence than learning environment in the study area. Thus, the primary school principals in Nekemte need to keep on applying appropriate leadership styles besides establishing conducive learning environment in their respective schools; moreover, rigorous research supported by causal comparative model has to be conducted on the research problem so that it might contribute to alleviating the problem

Keyword: - Environment, leadership, leaning, students, Nekemte.

1. INTRODUCTION

Education is crucial and necessary for each and every person in order to improve knowledge, way of living as well as social and economic status throughout the life of a person. Acquiring proper education is the birth rights of everyone and restricting it obviously a crime. Education is the ultimate way to get victory over all the personal and social problems. Education is very important to all of us as it plays very important roles in our life. In order to live a better and peaceful life, we need to be educated. It transforms us completely from inside and outside by changing our mind and personality as well as improving our confidence level. It changes our life completely as it is constructive in nature. Education is universally considered as a master key for the process of personal, social and economic development, and hence for optimum human life [1]. Education is important is an understatement to the elite group of the academic world. It is more illustrated and put as there is more to it than what is seen. Education is a weapon to improve one's life and it is probably the most important tool to change one's life. It is a lifelong process that ends with death when taken to its ultimate destination. Education improves one's knowledge skills and develops the personality and attitude. Most noteworthy, Education affects the chances of employment for people. A highly educated individual is probably very likely to get a good job. In this essay on importance of education, we will tell you about the value of education in life and society.

In cognizant of the benefit of education, the stakeholders exert unreserved efforts for the success of the educational system. Governments, as stakeholders, have been designing and redesigning the education policies, strategies and programs of their respective countries as they would fit into the countries' development plans [2]. The communities

are extensively involving themselves in supplying various facilities for education in cognizant of the benefit of education to improve their living conditions in particular and to determine national development in general. Educational institutions are entitled to bring about all round development of students as their primary objective [3]. Unless the graduates could develop the desired level of behavior, the confidence that society and the government had on education to enhance development would be futile.

Despite the vital role education plays in enhancing personal, social and national development, its role in development has been hindered by the students' low academic achievement [4]. Unfortunately, the education system in the study area was suffering from the students' low academic performance as has been the case over the country at large. Thus, this study was designed for the purpose of investigating the relative roles of leadership and learning environment in students' academic achievement level in Nekemte.

2. Literature Review

2.1 Environment

In the process of learning, the environment plays a major role. This is commonly termed as the "learning environment" concept. It is defined as the level of conduciveness of social and physical conditions - included school conditions, classroom conditions, student-family background, and teacher's professional behavior; School-wide-sense of community, teachers' time allocation, teachers' working conditions, school size, and the co-curricular activities are among the school conditions; School-wide-sense of community - widely shared sense of community among the stakeholders - served as the emotive bonds, for example, between students and teachers which are crucial in motivating students and in succeeding academic achievement [5].

From the different authors who stated about the issue, Hargreaves is a prominent one. Hargreaves [6] states that those teachers who are assigned more responsibilities as curriculum developers and mentors etc. used to experience reduced continuity of instruction with their students. In fact, teachers' working condition including feedback about teachers' efforts, lesser student misbehavior, higher perceived school administrators' support, teacher incentive structures, high levels of classroom autonomy, and opportunities for professional development contribute in enhancing teachers' working conditions and students' achievements. Lee, Ready, and Johnson [7] indicated that schools of smaller size had increased chances of students to be monitored and to have close ongoing relationship with adults which enhanced their achievement. Leithwood stated that extracurricular activities contributed to better academic grades, higher educational aspirations, and greater feelings of control over one's life and reduced incidences of delinquency.

This implies that school-wide-sense of community, teachers' time allocation, teachers' working conditions, school size, and co-curricular activities, as components of school condition, might have certain influence on the students' academic performance in our study area too. Studies indicate that student learning is mostly influenced directly by classroom conditions such as class size, teaching loads, teacher's preparation, classroom-student grouping practices, and curriculum and instruction. Smaller class size is characterized by more time spent by teachers on individual instruction, and less time on classroom management.

The reduction of class size significantly increases student achievement, and its effects on the primary grades appear to be maintained three to four years later. Effective instructions depend on a deep understanding of the cognitive resources brought to class by individual students, along with opportunities to assess and monitor their learning progress. But in practice this is affected by teaching overload which includes the number of periods taught and different preparations required. For better success, the number of students taught by senior teachers in a semester needs be reduced from a typical 125 to 200 to fewer than 90.

Assigning teachers to areas of the curriculum in which they have formal certification is essential. In this regard, Leithwood stated that the proportion of a teacher's classes that he/she feels competent to teach determines the students' achievement. According to Serna [8], students those who are disadvantaged by their socioeconomic backgrounds learn more when they work in heterogeneous rather than in homogeneous ability groups. Brophy in Leithwood stated that a "rich" curriculum, which is beneficial for most students, involves features such as the clearly aligned instructional strategies, learning activities and assessment practice. They are also aimed at accomplishing the full array of knowledge, skills, attitudes and dispositions valued by the society; and the content of such a curriculum is required to be organized in relation to a set of ideas which are internally coherent and well-connected to other meaningful education. Thus, it may be deduced that class size, teaching loads, teachers' preparation, classroom-student grouping practices, curriculum and instructions might have a significant influence on the students' academic

achievement in the schools encompassed in our study area. Studies also indicate that learning has a significant relation with student-family background.

According to Dargie [9], students' academic behaviour has a direct influence while their social behaviour has an indirect influence on their academic achievement. With respect to the students' social behaviour, for example, it has an impact on student achievement in that students' classroom. Social behaviour used to influence teachers' preference of students which, in turn, has significant influence on students' academic achievement. In connection with the students' academic behaviour, Asgedom [10] emphasized on the role of students, stressing that learning was dependent on the learner's investment of mental effort and it was not the activities of their instructors that resulted in learning. Family socioeconomic status was related to the students' behaviour and their learning. Families of impoverished socio-economic status suffered from malnutrition, health problems, and living in highly congested housing which gave rise to family risk factors such as erratic parenting skills, poor parental supervision, family violence, and isolation.

With respect to parenting, Zeleke [11] stated that child rearing practices played a significant role in shaping the behaviour of children, and families of low socio-economic status were likely to have low expectations from their children's academic performance. Walberg [12] contended that family educational culture included academic guidance, occupational aspirations, and expectations from their children, the provision of adequate health, nutritional conditions and physical settings in the home conducive to academic work. As most of the studies discussed in this section are within the context of the country, the students' academic and social behaviours, and the parents' socio-economic status might also have certain influences on the students' academic performance in Ethiopia.

2.2 Leadership

Leadership is a real phenomenon that is important for the effectiveness of organizations. Organizations are created for specific objectives and leadership is in place to realize the achievement of these goals. The ultimate goal in the educational institutions is students' academic performance. Accordingly, studies indicate that leadership is second only to classroom instruction among all school-related factors that contribute to what students learn at school; and they quantitatively state that the total effects of leadership on student learning accounts for about a quarter of the total school effects. Another scholar states that the success or failure of a school depends upon the school principal [13]; he emphasizes his belief saying "As is the headmaster, so is the school".

Hence, it is pragmatic to investigate the relationship of leadership with the students' achievement in the study area in order to predict significance of its influence on the research problem. The review conducted on the learning environment implied that students' learning achievements could be influenced by the level of conduciveness of social and physical conditions specifically school conditions, classroom conditions, student-family background, and the teacher's behaviour, whereas the review conducted on leadership implied that leadership had strong positive correlation with learning achievement. Findings in the literature reviews had significant relevance to the current research under consideration and coincides with its purpose. Thus, in the light of the review of the literature, the study examined the degree of influence of leadership and learning environment on the students' learning achievement level in the study area.

3. Materials and Methods

Data was collected from both primary and secondary sources. Primary data was collected using the survey questionnaire, whereas secondary data was obtained from the schools' records. As regards to the secondary data, the average scores in three consecutive years of eighth grade regional examinations, of each of the sample schools, were secured from the records in the archives of Nekemte Education Bureau. The academic years considered were 2018, 2019, and 2020. Primary data was collected by using the survey questionnaire, suitably designed for this purpose. Two sets of questionnaires were used; the first set of questionnaires was for collecting the data on leadership practice and the second set for collecting data on the learning environment. Before conducting data collection, the survey questionnaires were pilot-tested in order to check the appropriateness of the items and Cronbach's alpha reliability measure (value of 0.89) confirmed that the items were reliable [14].

For collecting data on learning environment, 316 participants were included in the sample, comprising of 66 teachers and 250 students. Each of these categories of the respondents was included with the purpose of enhancing the reliability of the data. As regards to the selection of participants, all the teachers of both the upper primary

schools were covered as their number was limited, and simple random sampling technique was employed for selection of students. The data collection process was handled by the first researcher. Before running the process of data collection, informed consent of the participants was obtained; the researchers also confirmed and realized the confidentiality of the information provided by the participants. The data analysis was conducted applying SPSS version 20 to compute the participants' perceptions and the scores of the students' academic performance. The variables considered in the study were learning achievement, learning environment and leadership. Leadership and learning environment were independent variables, whereas learning achievement was the dependent variable. Thus, the frequency distribution and independent samples t-test were employed to investigate the participants' perceptions on leadership as well as to investigate the learning environment and its association with the students' academic performance; alpha value of .05 was used for testing significance level.

3. Results and Discussion

3.1 Descriptive Statistics of the Students' Academic Achievement

The grade scores of the students and information on the rate of the students' promotion, as secondary data, were gathered from the schools' records, and this was shown in Table 1.

Table -1: Mean Scores of Grade Eight Regional Exams for Burka Bekumsa and Laga Marga Primary Schools

No	School	Frequency Distribution								Total	Min	Max	X	SD
		Below Pass		Pass										
		< 36		36-49		>49		36-100						
		N	%	N	%	N	%	N	%					
1	Burka Bekumsa	76	63	34	28.30	10	8.30	44	37	120	23	64	34.71	8.37
2	Laga Marga	29	19	97	65.00	24	16.00	121	81	150	28	80	42.38	8.97

Table -2: Respondents' Perceptions Regarding Leadership Practice

Schools	Variables	Respondents				WM	T	sig	df
		Leaders		Teachers					
		X	SD	X	SD				
Burka Bekumsa	Visioning	3.85	.537	3.42	.801	3.50	1.344	.187	36
	Staff Empowerment	3.53	.821	3.50	.734	3.51	.088	.930	36
	Leadership Styles	2.73	.332	2.54	.204	2.58	1.903	.065	36
	Average Leadership practice	3.37	.432	3.16	.473	3.20	1.093	.281	36
Laga Marga	Visioning	4.25	.433	4.44	.329	4.40	-1.28	.206	37
	Staff Empowerment	4.39	.196	4.24	.501	4.26	.774	.444	37
	Leadership Styles	3.68	.251	3.15	.293	3.24	4.421	.000	37
	Average Leadership practice	4.12	.232	3.94	.298	3.97	1.365	.180	37

Note: t-critical (table) value = 2.02. **Key:** if $x < 2.75$ LP is ineffective, $x = 2.75 - 3.50$ moderate, $x > 3.50$ effective, X – mean, SD - standard deviation, WM – weighted mean, df – degree of freedom. As shown in Table 2, the results of independent samples t-test indicated that there was no statistically significant mean difference between the perceptions of respondents in Burka Bekumsa (as $t(36) = 1.093$, $p = .281 > .05$), and in Laga Marga Primary School (as $t(37) = 1.365$, $p = .180 > .05$). The table also displayed that the mean perceptions of the principal and teacher respondents on leadership practice were 3.37 and 3.16, having standard deviation of .432 and .473 respectively in Burka Bekumsa, and 4.12 and 3.94 with standard deviation of .232 and .298 respectively in Laga Marga Primary School. The weighted mean of the respondents' perceptions on leadership practice was 3.20 (≈ 3) and 3.97 (≈ 4) for Burka Bekumsa and Laga Marga primary schools, respectively. Therefore, leadership practice in Laga Marga Primary School was more effective than in Burka Bekumsa Primary School.

3.2 Perceptions on Conduciveness of Learning Environment

Data on the learning environment of the sample schools was collected using the second set of questionnaires. Table 3 is concerned with the respondents' perceptions, regarding leadership practice, in the sample schools. As shown in Table 3, the results of independent samples t-test indicated that there was no statistically significant mean difference between the perceptions of the teachers and student respondents on the learning environment in Burka Bekumsa (as $t(139) = 1.945$, $p = .094 > .05$), and in Laga Marga Primary School (as $t(156) = .151$, $p = .880 > .05$). The table also displayed that the mean perceptions of the teacher and student respondents on learning environment were 3.95 and 3.81, having standard deviations of .448 and .322 respectively in Burka Bekumsa, and 3.57 and 3.58 with standard deviations of .396 and .390 respectively in Laga Marga Primary School. The weighted mean of the respondents' perceptions on learning environment was 3.84 and 3.58 for Burka Bekumsa and Laga Marga primary schools, respectively. Therefore, the conduciveness of learning environment was high in both Burka Bekumsa and Laga Marga primary schools. However, Burka Bekumsa had slightly more conducive learning environment than that of Laga Marga Primary School.

Table -3: Respondents' Perceptions Regarding Learning Environment

Schools	Variables	Respondents				WM	T	Sig	Df
		Teachers		Students					
		X	SD	X	SD				
Burka Bekumsa	School Conditions	3.87	.715	3.902	.495	3.89	.280	.780	139
	Classroom Conditions	3.88	.735	4.02	.550	3.99	1.140	.256	139
	Student-family Background	4.121	.721	4.206	.478	4.18	.781	.436	139
	Teacher Behavior	3.959	.496	3.134	.613	3.31	6.875	.000	139
	Average Learning Env't	3.95	.448	3.81	.322	3.84	1.985	.094	139
Laga Marga	School Conditions	3.64	.425	3.80	.613	3.77	1.468	.206	156
	Classroom Conditions	3.68	.653	3.43	.738	3.48	1.796	.074	156
	Student-family Background	3.03	.618	3.09	.616	3.08	.557	.579	156
	Teacher Behaviour	3.92	.407	3.98	.601	3.97	.484	.629	156
	Average Learning Env't	3.57	.396	3.58	.390	3.58	.151	.880	156

The implication of these findings was that exercising appropriate leadership models and establishing conducive learning environment would lead to better students' academic achievement. Besides, dealing with leadership requires more emphasis than learning environment. However, the limitations of this study were that the findings may not be generalized beyond the districts from where the samples were taken as the sample size was limited. This calls for conducting further in-depth study in the problem area to alleviate the problem broadly. Thus, the result of this study would serve as a springboard of conducting further research.

4. Conclusion and Recommendation

The study led to the following findings: The students' academic performance was better in Laga Marga Primary School than in Burka Bekumsa Primary School for three consecutive years and on average as well; leadership

practice in Laga Marga Primary School was more effective than in Burka Bekumsa Primary School; learning environment in Burka Bekumsa Primary School was slightly more conducive than in Laga Marga Primary School. In light of these findings, it can be deduced that the students' academic achievement was higher in Laga Marga Primary School where there was more effective leadership practice and relatively less conducive learning environment, whereas lower in Burka Bekumsa Primary School where there was less effective leadership practice and relatively more conducive learning environment. This implies that leadership tends to have a greater influence on students' academic performance than learning environment in the study area. However, dependable conclusions could be reached based on rigorous study supported by causal comparative model. Accordingly, it was recommended that the primary school principals in Nekemte need to keep on applying appropriate leadership styles in their respective schools; In effect, they need to improve their leadership skills through relevant and systematically.

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