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A Comparative Analysis of High and Low Performing Schools in Agriculture in Eswatini

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Abstract

Analysis of the school performance in external Agriculture examination showed that there were schools that consistently performed well and those constantly performing poorly in Eswatini. Unfortunately, there is no study that has sought to analyze the characteristics of the high performing and low performing schools in agriculture in Eswatini. Thus, the purpose of the study was to analyze the high and low performing schools in Agriculture in Eswatini. A comparative analysis targeting 27 schools: 15 high performing and 12 low performing schools was conducted. All the 38 teachers and 26 teachers from high and low performing schools respectively, participated in this study. A questionnaire was used in data collection. Three experts from the Department of Agricultural Education and Extension at University of Eswatini and two agriculture teachers validated the questionnaire. Thirty agriculture teachers who were not involved in the study were used in pilot testing to establish inter-item reliability using Cronbach's Alpha and the reliability coefficient was .82. Data were analyzed using descriptive statistics. Findings revealed that high performing schools possessed the following features over low performing schools: motivation of learners to excel in academic work, practice farming in school garden, student making consultations with teachers, provision of extra lessons for students, monitoring class attendance and absenteeism, and teachers attending classes regularly. Also, the Ministry of Education and Training, headteachers, agriculture teachers and parents were more involved in high performing schools than in low performing schools. Therefore, the study recommended that special attention should be made to assist all stakeholders in low performing schools improve the academic performance.

Keywords

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Analysis of the school performance in external Agriculture examination showed that there were schools that consistently performed well and those constantly performing poorly in Eswatini. Unfortunately, there is no study that has sought to analyze the characteristics of the high performing and low performing schools in agriculture in Eswatini. Thus, the purpose of the study was to analyze the high and low performing schools in Agriculture in Eswatini. A comparative analysis targeting 27 schools: 15 high performing and 12 low performing schools was conducted. All the 38 teachers and 26 teachers from high and low performing schools respectively, participated in this study. A questionnaire was used in data collection. Three experts from the Department of Agricultural Education and Extension at University of Eswatini and two agriculture teachers validated the questionnaire. Thirty agriculture teachers who were not involved in the study were used in pilot testing to establish inter-item reliability using Cronbach's Alpha and the reliability coefficient was .82. Data were analyzed using descriptive statistics. Findings revealed that high performing schools possessed the following features over low performing schools: motivation of learners to excel in academic work, practice farming in school garden, student making consultations with teachers, provision of extra lessons for students, monitoring class attendance and absenteeism, and teachers attending classes regularly. Also, the Ministry of Education and Training, headteachers, agriculture teachers and parents were more involved in high performing schools than in low performing schools. Therefore, the study recommended that special attention should be made to assist all stakeholders in low performing schools improve the academic performance.

Keywords: academic performance; agriculture; comparative analysis; low performing school; high performing school

Introduction

The teaching of agriculture in Eswatini has evolved from Agricultural Science to Modern Agriculture and Pre-vocational Agriculture. Agricultural Science was taught as one of the subjects in the Ordinary Level (O'Level) Syllabus, and was largely theoretical, offered by the Cambridge Overseas Examinations Syndicate (Simelane, Mkhwanazi & Dlamini, 1999). The Modern Agriculture Programme replaced the Agricultural Science in 1985, after the National Education Review Commission (NERCOM) Report. Modern Agriculture was meant to inculcate positive attitudes towards agriculture as a profitable, worthwhile and enjoyable way of life for the youth to support the school garden scheme and to support pre-vocational agriculture programmes (NERCOM Report, 1985).

At senior secondary school, the development of agriculture was influenced by the change of syllabus from Ordinary Level (O'level) to International General Certificate of Secondary Education (IGCSE) and then to Eswatini General Certificate of Secondary Education (EGCSE). Such changes were created by the need to offer a relevant syllabus. Currently, Morden Agriculture students are doing the EGCSE syllabus at senior secondary schools. The students at the end of the programme write the external examination coordinated by the Examinations Council of Eswatini (ECESWA). By year 2014, analysis of the school academic performance in the external Agriculture examination showed that there were schools that had consistently performed well (n=15) and those that had constantly performed poorly (n=12) (Examination Council of Swaziland, 2011; 2012; 2013).

In 2012, the Eswatini Ministry of Education and Training reiterated that in the previous year some senior secondary schools remained on the top while other schools remained at the bottom. Some schools consistently performed well while others continuously performed poorly in the Agriculture external examination. Such a situation forced parents to place their children in certain schools and even withdrew them from the poor performing schools and enrolled them in better performing schools. Unfortunately, there is no study that has sought to analyze the characteristics of the high performing and low performing schools in Modern Agriculture in Eswatini. Thus, this study sought to analyze the high and low performing schools in Modern Agriculture in Eswatini.

Theoretical/Conceptual framework

The study was framed using the Systems Analysis Theory postulated by Sheppard in 1998. The theory proposes that there are three main indicators within a system, namely; *input*, *process,* and *output* indicators. Input indicators refer to the relevant physical facilities such as personnel and financial resources devoted to education (Sheppard, 1998). Archbald (1996) described input variables as "givens", because the system has little or no control over them in the short term. Indicators of these variables are useful for understanding the demographic conditions affecting the school such as poverty, ethnic composition and employment. The process indicators refer to the manner in which the resources are distributed in a system. This may refer to school principals' management practices and leadership styles. The output indicators reveal the quantitative and qualitative value of the products, or the level of skills produced by the education system. Archbald (1996) aptly noted that output indicators reflect the system's performance on educational goals such as academic

achievement, values, student behaviour, and parental satisfaction.

In this study, the input indicators are mainly the stakeholders such as headteacher, parents, teachers, learners, the Ministry of Education, community, industries / companies, and associations. The process indicators are the influences presented by the stakeholders and the characteristics exhibited by the low and high perming schools. Lastly, the product indicator is the learners' academic performance in Agriculture.

Academic performance in school is associated with parental involvement (Narad & Abdullah, 2016), school environment (Narad & Abdullah, 2016), peer influence (Hanushek, Kain, Markman, & Rivkin, 2003), learning facilities (Singh, Malik, & Singh, 2016), socio-economic background such as school location, and good physical facilities such as classrooms, libraries, workshops (Kibaara & Ndirangu, 2014). Raychaudhuri, Debnath, Sen, and Majumder (2010) found that academic performance of students depends on various socio-economic variables like students' participation in the class, family pay, teacher-student ratio, presence of qualified teachers in school, and gender of the student. Similarly, Ceylan and Akerson (2014) and Papanastasiou (2008) found that students' socioeconomic status and educational background of their families influenced academic performance. Nolen (2003) revealed that classroom characteristics affect students' academic performance more than the motivational characteristics. Academic performance is also influenced by classroom teaching practices, student-centered activities, and students' attitudes (Odom, Stoddard, & LaNasa, 2007). However, Noble, Roberts, and Sawyer (2006) found that academic performance of students does not depend on their academic activities, perceptions of their adapting strategies and background qualities (such as family pay, circumstances at household level, and parents' level of education).

Rhona and Michael (2012) concluded that characteristics distinguishing high-achieving schools from low-achieving schools were: school climate established by staff for learning, meeting improvement-planning goals, parental engagement, and engagement of students in learning. Shannon and Bylsma (2007) identified the following characteristics for high performing schools: (i) clear and shared focus, (ii) high standards and expectations for all students, (iii) effective school leadership, (iv) high levels of collaboration and communication, (v) curriculum and instruction aligned with standards, (vi) frequent monitoring of teaching and learning, (vii) focused professional development, (viii) supportive learning environment, and (ix) high levels of community and parental engagement. High performing schools recorded a more favourable ecology, milieu, and school culture than the low performing schools (Makewa, Role, Role, & Yegoh, 2011). The most prominent consistent characteristics of high-achieving and low-achieving schools were home background, as indicators of socio-economic status and parental support for academic achievement. Students in the high-achieving schools had higher levels of book ownership, study aids, possessions in the home, parental education, and spent less time working in the home. Also, students in high-achieving schools had high aspirations for higher education (Anonymous, 2015).

Academic performance in low performance schools results from inability of the government to implement job satisfaction measures in educators (which inhibits adequate transfer of knowledge to learners), gross learners' misconduct, parents' inability to counsel learners, non-productive education system, and use of corporal punishment (Enwereji, Mbukanma,

& Chukwuere, 2017). Learners' negative behaviors in the learning environment in Botswana contributed to the decline in their academic performance (Enwereji et al., 2017; Moswela, 2014). Low academic performane is characterized by community poverty, which results in stress on the organization of the school. The stress is evidenced by low expectations for student achievement, high teacher absenteeism, and high rates of teacher turnover (Corallo & McDonald, 2001). Brawner, Stephens, Stripling, and Eash (2016) in a study that sought to establish the impact of teachers on an Australian Community, reported that teachers contribute to the student growth in their academic performance.

Academic performance of students also depends on the school stakeholders (Burby, 2003). Moswela (2014) stated that school stakeholders are people involved in leading and directing learners towards their competent development. These stakeholders include parents, teachers and the government. School stakeholders include parents, teachers, learners and non-teaching staff, and individuals elected to represent the interest of the community (Gastic, Irby, & Zdanis, 2008). Msila (2014) argued that the school frequently interacts with such commonly acknowledged stakeholders.

The headteachers and teachers as main stakeholders, should play an integral role in ensuring that learners receive quality education by employing different strategies to control disruptive behaviors in the classroom (Chukwuere, Mavetera, & Mnkandla, 2016; Dibapile, 2012; Isaiah & Nenty, 2012). The headteachers and the teachers should develop a school climate that is conducive to teaching and learning in order to enhance academic performance (Cheruto & Kipkoech, 2011). The head teachers should share the goals with the teachers and the learners (Sapungan & Mondragon, 2014). Similarly, several studies have found that parental involvement, support and interest on the progress of the learners, improved school academic performance (Burke & Hara, 2008; Moswela, 2014).

Other stakeholders influencing the school academic performance are Ministry of Education, community, industries / companies, and associations (Shannon & Bylsma, 2007). The Ministry of Education contributes by crafting policies to enhance student learning and academic performance (Moswela, 2014). The community should be engaged through formal partnerships and informal relationships and activities. The community members, including parents should have active voices in school improvement processes (Shannon & Bylsma, 2007). Schools are also working in partnership with other external agencies and community organizations. School leaders work with agencies such as industries and associations, to enrich the curriculum of students. Furthermore, companies sponsor various student projects (Bell & Cordingley, 2014).

Academic performance of students is the centre around which the whole education system revolves. The success and failure of any educational institution is measured in terms of academic performance of students. Both the schools and parents have very high expectations from students with respect to their academic performance, as they believe that better academic results lead to better career options and future security (Narad & Abdullah, 2016).

Purpose & Objectives

The purpose of the study was to compare the high and low performing schools in Agriculture in Eswatini. The objectives of the study were to:

1. Describe the respondents' demographic characteristics and background information of high

and low performing schools in Agriculture.
2. Compare the academic characteristics of high and low performing schools in Agriculture as perceived by agriculture teachers.
3. Compare the stakeholders' influence on high and low performing schools in Agriculture as perceived by agriculture teachers.

Methodology

The study was a comparative analysis of high and low performing schools in Agriculture in EGCSE external examination. It targeted 27 schools: 15 high performing schools and 12 low performing schools. There were 38 agriculture teachers from high performing schools and 26 agriculture teachers from low performing schools involved in the study. Thus, a total of 64 agriculture teachers were involved in the study. The selection of the schools was based on the performance over a period of three years (2011-2013). The study involved all the low performing schools underperformed during this period, and all the high performing schools excelled over this period.

A self-administered questionnaire was developed from the literature and used in data collection. The questionnaire had three sections, namely: characteristics of the school [12 items], the performance of the stakeholders [26 items], and demographic characteristics and background information [10 items]. The self-administered questionnaire used a Likert-type scale to measure the characteristics and stakeholders' influence on high and low performing schools in Agriculture in Eswatini. The Likert-type scale had the following ranges: 1= strongly disagree, 2=slightly disagree, 3=disagree, 4=agree, 5=slightly agree, and 6=strongly agree. The respondents were requested to indicate their level of agreement regarding the characteristics and stakeholders' influence on the school's academic performance. The questionnaire was validated by three experts from the Department of Agricultural Education and Extension at University of Eswatini, and two agriculture teachers. A field test on the instrument was also carried out with the help of two agriculture teachers. Thirty agriculture teachers, who were not involved in the study, were used in pilot testing the instrument to establish inter-item reliability using Cronbach's Alpha. The Cronbach's Alpha revealed that the instrument was 82% reliable. The test-retest reliability coefficient for the individual items was .87.

The researchers collected data in February 2015. The questionnaires were delivered personally by the researchers to the agriculture teachers in both high and low performing schools. Mobile phone numbers of the respondents were requested in order for the researchers to check if the questionnaires had been completed before they went to collect them. Letters seeking permission to conduct the study were written to the school principals and the respondents and permission was granted. To ensure confidentiality and anonymity, the questionnaire was formulated such that respondents' names were concealed. Also, the data were only accessible to the researchers. Thus, the hand delivering of the questionnaire and cell phone numbers did not affect the confidentiality as nothing linked the questionnaires with the respondents. Descriptive statistics such as frequencies, percentages, means and standard deviations in the Statistical Package for Social Sciences (SPSS) version 20 were used for analysing the data. Interpretations for means less than 3.5 was that respondents disagreed, while means that were 3.5 and above was that respondents agreed with that particular statement.

Findings

Demographic Characteristics & Background Information

Table 1 presents the demographic characteristics and background information of the agriculture teachers from both high and low performing schools. Male teachers dominated in both sets of schools: high performing (n=25, 52.5%) and low performing (n=16, 61.5%). However, differences existed in marital status of the respondents and a majority of the teachers were single in the high performing schools (n=20, 52.6%) while low performing schools were dominated by married teachers. The agriculture teachers had bachelor's degree in both high performing schools (n=26, 63.2%) and low performing schools (n=15, 57.7%). Interestingly, most of the teachers were senior in high performing schools (n=26, 64.8%) while most of the teachers were junior in the low performing schools (n=19, 73.1%). Most of the teachers from both high performing schools (n=19, 50.0) and low performing schools (n=17, 65.4%) had taught for a maximum of 10 years. The class sizes of teachers in low performing schools were generally bigger than in high performing schools: high performing schools, 30 students and below (n=16, 42.1%) and low performing schools, 31 – 40 students (n=12, 46.2%). High performing schools were mainly located in semi-urban areas (n=17, 44.7%) whereas low performing schools were mainly located in rural areas (n=14, 44.7%). Lastly, most of the schools for both sets were day schools: high performing (n=34, 89.5%) and low performing (n=24, 92.3%).

Table 1
Demographic Characteristics and Background Information of Respondents

Demographic and background variables	**High-performing schools (n=38)**		**Low-performing schools (n=26)**	
	f	***%***	***f***	***%***
Sex				
Female	13	34.2	10	38.5
Male	25	65.8	16	61.5
Marital status				
Single	20	52.6	10	38.5
Married	18	47.4	16	61.5
Highest level of education				
Diploma	9	23.7	6	23.1
Bachelor's degree	26	68.4	18	69.2
Masters' degree	3	7.9	2	7.7
Age				
30 years and below	24	63.2	15	57.7
31 – 40 years	11	28.9	6	23.1
41 years and above	3	7.9	5	19.2
Position				
Agriculture teacher	12	31.6	19	73.1
Senior agriculture teacher	26	68.4	7	26.9
Teaching experience				
1 - 10 years	19	50.0	17	65.4

11 – 20 years	17	44.8	8	30.8
Above 20 years	2	5.2	1	3.8
Class size				
30 students and below	16	42.1	8	30.8
31 – 40 students	10	26.3	12	46.2
41 – 50 students	9	23.7	3	11.5
More than 50 students	3	7.9	3	11.5
School location				
Urban	7	18.4	3	11.5
Semi-urban	17	44.7	9	34.5
Rural	14	36.8	14	53.8
School type				
Boarding school	4	10.5	2	7.7
Day school	34	89.5	24	92.3

Comparison of Characteristics of High and Low Performing Agriculture Schools

Table 2 reveals that high performing schools were doing well because of the following reasons: motivation to excel in academic work (M=5.42, SD=0.75), practice farming in school garden (M=5.15, SD=0.94), student making consultations with teachers (M=5.13, 0.93), provision of extra lessons for students (M=5.07, SD=0.88), monitoring class attendance and absenteeism (M=5.05, SD=1.01), and teachers attending classes regularly (M=5.02, SD=1.10), and so on. On the other hand, the low performing schools were not doing well because of the following reasons: students not making consultations with teachers (M=1.81, 1.09), low motivation to excel in academic work (M=1.89, SD=1.03), having no provision for extra lessons for students (M=1.97, SD=0.95), having no practice on farming in school garden (M=2.08, SD=1.09), indiscipline among students (M=2.30, SD=0.97), teachers not attending classes regularly (M=2.42, SD=0.85), teachers failing to prepare lesson plans daily (M=2.65, 0.89), inadequate facilities and equipment (M=2.74, SD=1.15), and so on.

Table 2
Comparison of Characteristics of High and Low Performing Agriculture Schools

Characteristics	**High-performing schools (n=38)**		**Low-performing schools (n=26)**	
	M	***SD***	***M***	***SD***
Motivation to excel in academic work	5.42	0.75	1.89	1.03
Practice farming in school garden	5.15	0.94	2.08	1.09
Provision of extra lessons for students	5.07	0.88	1.97	0.95
Provision for students' educational trips	4.31	1.29	2.93	1.09
Instilling self-discipline to the students	4.84	0.82	2.30	0.97
School having sufficient agriculture facilities / equipment	4.73	1.00	2.74	1.15
Teachers prepare lesson plans daily	4.78	1.16	2.65	0.89
Provision of extra-curricular activities	4.78	1.18	3.11	1.21

Monitoring student class attendance / absenteeism	5.05	1.01	4.23	1.24
Meting discipline to unbecoming students	4.89	1.08	2.30	0.73
Teachers attend classes regularly	5.02	1.10	2.42	0.85
Students make consultations with teachers	5.13	0.93	1.81	1.09

Note: Participants indicated agreement on a 6-point Likert-type scale: 1= Strongly Disagree, 2 = Slightly Disagree, 3 = Disagree, 4 = Agree, 5 = Slightly Agree, 6 = Strongly Agree.

Comparison of Stakeholders' Influence on High and Low Performing Agriculture Schools

Table 3 depicts that headteachers in high performing schools were influential through the following: create environment to nurture learning and growth for staff and students (M=5.00, SD=1.09), leading by example (M=4.63, SD=1.21), conveying a deep sense of mission (M=4.34, SD=1.36), and forging links with the community to enhance learning (M=4.00, SD=1.11). However, the situation was the opposite in low performing schools. Findings revealed that the head teachers were unable to: create an environment to nurture learning and growth for staff and students (M=1.24, SD=1.07), lead by example (M=2.24, SD=1.24), forge links with the community to enhance learning (M=2.66, SD=1.03), and so on.

Table 3
Comparison of Stakeholders' Influence on High and Low Performing Agriculture Schools

Characteristics	**High-performing schools (n=38)**		**Low-performing schools (n=26)**	
	M	***SD***	***M***	***SD***
Headteachers				
Create environment to nurture learning and growth for staff and students	5.00	1.09	1.74	1.07
Lead by example	4.63	1.21	2.24	1.24
Sharing of vision with the students	4.15	1.24	3.27	1.07
Convey a deep sense of mission	4.34	1.36	3.20	1.16
Forge links with community to enhance learning	4.00	1.11	2.66	1.03
Agriculture Teachers				
Have love for all learners in the school	4.76	1.17	2.12	.71
Promote innovation and creativity in students	4.52	1.15	2.27	.96
Seek to learn continuously	4.44	1.32	3.50	1.27
Help students find potential within themselves	4.50	1.20	2.43	.85
Parents				
Support school with effort such as paying fees and buying learning materials	4.36	1.45	2.47	1.02
Care for their children's education by showing interest in what they do	4.44	1.15	2.66	1.19
Instill a sense of responsibility in their children	4.39	1.38	2.43	.85
Community				
Provides support to needy students	4.10	1.46	4.04	1.14
Offers bursaries to vulnerable students	3.76	1.58	3.66	1.32
Accommodates young people as members	3.97	1.38	2.97	1.34

Ministry of Education and Training				
Involved in setting the strategic direction of the school	4.84	.97	2.92	.68
Works with the school to formulate policies	4.42	1.19	3.30	.83
Provides support for the teachers to effectively discharge duties	4.15	1.28	3.33	1.06
Collaborates with other ministries and non-governmental organizations to assist the school	4.23	1.19	3.11	1.14
Industries				
Collaborate with schools to formulate effective students' programmes	3.21	1.45	3.50	1.33
Support placement of teachers for professional development	3.17	1.30	2.53	1.17
Offer scholarships for the students	3.22	1.44	2.23	1.17
Professional associations				
Advocate for the future of the students	3.11	1.32	3.46	1.24
Provide the school with history of education	2.56	1.14	3.46	.94
Provide mentorship and role modelling for the students	3.32	1.33	3.30	1.22
Offer scholarships to the students	2.76	1.49	2.92	1.19

Note: Participants indicated agreement on a 6-point Likert-type scale: 1= Strongly Disagree, 2 = Slightly Disagree, 3 = Disagree, 4 = Agree, 5 = Slightly Agree, 6 = Strongly Agree.

The study also revealed that the agriculture teachers from both high performing schools (M=4.44, SD=1.32) and low performing schools (M=3.50, SD=1.27) sought for professional development continuously. However, the study also revealed that the agriculture teachers from high performing schools have love for all learners in the school (M=4.76, SD=1.17), promote innovation and creativity in students (M=4.52, SD=1.15), and help students find potential within themselves (M=4.50, SD=1.20). On the other hand, the agriculture teachers from low performing schools lacked love for all learners in the school (M=2.12, SD=0.71, do not promote innovation and creativity in students (M=2.27, SD=0.96), and do not help students find potential within themselves (M=2.43, SD=0.85).

Parents from high performing schools were contributing to the academic performance of the students by caring for their children in showing interest in what they do (M=4.44, SD=1.15), instilling responsibility in the children (M=4.39, SD=1.38), and supporting school with efforts such as paying fees and buying learning materials (M=4.36, SD=1.45). Contrary, parents from the low performing schools were not forth coming in instilling responsibility in the children (M=2.43, SD=0.85), supporting school with efforts such as paying fees and buying learning materials (M=2.47, SD=1.02), and caring for their children in showing interest in what they do (M=2.66, SD=1.19).

Findings of the study revealed that the community was doing well in both high and low performing schools in the following areas: providing support to needy students (high performing – M=4.10, SD=4.04, and low performing – M=4.04, SD=1.14), and offering bursaries to orphaned and vulnerable students (high performing – M=3.76, SD=1.58 and low performing – M=3.66, SD=1.32). However, the community accommodated young people as

members from high performing schools (M=3.97, SD=1.38) better than young people from low performing schools (M=2.97, SD=1.34).

The Ministry of Education and Training is more involved in high performing schools than in low performing schools. The Ministry is involved in setting the strategic direction of the school (M=4.84, SD=0.97), works with the school to formulate policies (M=4.42, SD=1.19), collaborates with other ministries and non-governmental organizations to assist the school (M=4.23, SD=1.17), and provides support for the teachers to effectively discharge duties (M=4.15, SD=1.28). Unfortunately, the Ministry is not involved in all these areas in the low performing schools.

Conclusion & Implications

The differences existing between high performing and low performing schools' demographic variables in terms of marital status, position of the teacher, class size and school location are contributing to the differences in the academic performance of the agriculture learners. Generally, married teachers have more family responsibilities than single teachers; consequently, low performing schools not doing well. The senior positions occupied by the agriculture teachers in high performing schools provide more opportunities for exposure than the junior teachers in the low performing schools. Also, the high teacher-student ratio in low performing schools may be responsible for the poor performance than the low teacher-student ratio enjoyed by the teachers in the high performing schools. Finally, the schools located in rural areas are generally not well resourced compared to schools located in urban areas. The teaching and learning conditions in rural schools are not conducive; hence they have a negative effect on the academic performance of learners (Simelane, 2015). Van Wyk (2003) argued further that the lack of infrastructure and resources, as well as the overcrowded classrooms, typically found in rural schools, make disciplining of learners difficult. According to Fiske (2000) research shows that learners in urban areas out-perform learners in rural areas.

High performing schools possessed the following features over low performing schools: motivation to excel in academic work, practice farming in school garden, students making consultations with teachers, provision of extra lessons for students, monitoring class attendance and absenteeism, and teachers attending classes regularly. The findings imply that rural schools need special attention and class sizes must be kept low as they tend to affect academic performance (Van Wyk, 2003) in Agriculture. Wagstaff, Combs and Jarvis (2000) found that educators do not feel empowered to deal with learners' absenteeism and tend to blame parents, cars, television, and learners' work schedule. Nolen (2003) revealed that classroom characteristics affect students' academic performance more than the motivational characteristics. Academic performance is also influenced by classroom teaching practices, student-centered activities and students' attitudes (Odom, Stoddard, & LaNasa, 2007). High performing schools are characterized by good school climate (Rhona & Michael, 2012), clear and shared focus (Shannon & Bylsma, 2007), high standards and expectations for all students (Shannon & Bylsma, 2007), effective school leadership (Shannon & Bylsma, 2007), frequent monitoring of teaching and learning (Shannon & Bylsma, 2007), favorable milieu (Makewa et al., 2011), and favorable school culture (Makewa et al., 2011). On the other hand, low performing schools are characterized by gross learners' misconduct (Enwereji et al., 2017, Moswela, 2014),

parents' inability to counsel learners (Enwereji et al., 2017), use of corporal punishment (Enwereji et al., 2017), high teacher absenteeism (Corallo & McDonald, 2001), and high rates of teacher turnover (Corallo & McDonald, 2001).

The headteachers, agriculture teachers and parents from high performing schools were more involved in ensuring that the leaners do well in academic performance than those from poor performing schools. Interestingly, the Ministry of Education and Training provided more support to the high performing schools than the low performing schools. Even though the industries were partly involved, their support was towards the low performing schools than the high performing schools. The community was supportive to both high performing schools and low performing schools; except in accommodating the young people; where those from high performing schools were more accommodated than those from low performing schools. Finally, teacher or subject associations were not supportive to both high and low performing schools. The findings imply that all school stakeholders (including industries) both in low and high performing schools should collaborate; ensuring that the teaching of agriculture is successful (Mokoena, 2012). Head teachers play an integral role in the following: making sure that learners receive quality education (Dibapile, 2012; Isaiah & Nenty, 2012); developing a conducive culture for teaching and learning (Cheruto & Kipkoech, 2011), and providing motivation for individuals in the school (Sapungan & Mondragon, 2014). Chukwuere et al. (2016) found that teachers provided a suitable learning environment for all learners. Similarly, Brawner, et al. (2016) in a study that sought to establish the impact of teachers on an Australian Community, reported that teachers contribute to the student growth through their student performance.

The findings of the study were affirmed by Moswela (2014), who concluded that the Ministry of Education contributes by crafting policies to enhance student learning and academic performance. Shannon and Bylsma (2007) recommended that the community should be engaged through formal partnerships and informal relationships and activities. Parental involvement is important in enhancing students' academic performance (Burke & Hara, 2008), as it creates stability and a conducive environment to learning and academic success of the students (Hatry et al., 2004). The community members, including parents should have active voices in school improvement processes. School leaders should work with agencies such as the industry and associations, to enrich the curriculum of students. However, the findings imply that the industry and associations are not doing much for the schools. Industries should sponsor various student projects (Bell & Cordingley, 2014) while associations should represent the interest of the schools or the subject (Moswela, 2014).

Generally, the findings of the study imply that schools offering agriculture around the world should conduct a comparative analysis of low and high performing schools guided by the methodologies used in this study. This may reveal the practices that have influence on the differences on the academic performance so that appropriate remedial action can be taken. Finally, the Systems Analysis Theory (1998) was found relevant in the comparative analysis of the high and low performing schools in Eswatini, hence similar studies can use this theory.

Recommendations

The study made the following recommendations:

1. The Ministry of Education and Training should pay more attention to rural schools and monitor the class sizes, as they tend to underperform. The Ministry should make sure that necessary facilities and equipment for practicals, such as the school garden are available in low performing schools, so that they are useful during the teaching and learning process.
2. The school headteachers should monitor that both agriculture teachers and learners are always present when there is a class in the low performing schools. The headteachers should also ensure that the agriculture teachers from the low performing school, prepare daily lesson plans before they go to class.
3. Agriculture teachers and parents should motivate students from low performing schools to do well. Agriculture teachers should also arrange remedial or extra classes for students from the low performing schools.
4. Learners should be encouraged to make consultations with teachers where necessary.
5. Industries and the Teacher Associations should strengthen their involvement in the teaching and learning of agriculture in both high and low performing schools.

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