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A survey of students who perform well in math and science: A case study in Baidoa, Southwest State of Somalia

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Abstract
Somalia is a nation resuscitating from the depth of the mother of all crisis: a protracted civil war that has left a legacy of statelessness, poor governance, unaccountability, and all sorts of poor public services that affect the sectors of health and education, among others. Upon the collapse of the military regime of Siad Barre in 1991, private schools by business entrepreneurs and welfare associations revived the much-needed education sector without appropriate policy or strategy. Yet, the sector became operational without much regard for quality. Over the years, students graduated from secondary schools and higher education institutions although much research has not been conducted in the field of education. In view of that background, the current study attempts to explore factors that are concerned with the perception and attitude of students regarding their performance in math and science in two schools in Baidoa, Southwest State of Somalia.

Keywords: Baidoa; math education; student performance; science education; southwest state of Somalia

Introduction

A vast number of students do not perform well in math and science, a reason which leads to many pupils either hating the subjects or dropping out of school. Some parents influence, persuade or force their children to try hard at science and math to lay a strong foundation of their future career. To be an outstanding leader in a professional career in engineering, technology or in science, a section of educated parents believe that children should focus on the study of science and math. Another widely presumed notion is the belief that good performers in math and science have higher mental capability and sharper cognizance and therefore are more intelligent than their counterparts in other fields of study, although the latter's qualification may be as "generally gifted and not excellent in math" (Myers *et al*. 2017, p. 2) [31].

Whatever the highly studied "spatial abilities" (Carroll 1993) or accusations levelled against the concept, the fact remains that the debate on cognitive ability and mental performance continues to date. Although for some time the concept of spatial ability suffered a relegation to lower status due to "inconsistencies of spatial skills as predictors for educational success" (Buckley *et al* 2018 quoting Lohman 1996) [28], currently the scholarly "interest in spatial ability has seen a resurgence as it is becoming increasingly linked through correlational evidence with educational performance specifically in the areas of science, technology, engineering and mathematics (STEM)" (Buckley *et al* 2018 citing Höffler 2010; Lubinski 2010) [7, 21].

Considerably, therefore, the resurgent interest broadening the body of knowledge surrounding science, technology, engineering, and mathematics individually, or as a cohort in STEM, has recreated a reason to investigate and problematize the pedagogical concept of science and math from wider perspectives. Consequently, factors including curriculum, learner attitude, parents' education levels and jobs were. Among other factors, brought to investigative attention. Therefore, in order to contribute to the growing body of knowledge in the area of STEM, this study was carried out on 40 primary and secondary/high school students selected from 4 classes in 2 schools in Baidoa, Southwest State of Somalia.

Review of Literature

Math and science, and in many recent cases with engineering and technology, have been regarded as vital instruments in shaping the advancement witnessed in our lives and much so in our world. Studies were carried out that investigated different aspects of students' performance in the field and factors influencing their attitude, interest, learning habits, strategies and social environment at home and school. Smith (2004) [32] strongly claims that parents' background has a tremendous impact on learner performance in math, denoting the importance of cultural context despite its variance across families.

Studying math students' performance in the tiny Kingdom of Lesotho in southern Africa, Iheanachor (2007) [23] revealed how factors related to social and academic background of teachers, the quality of professional development (PD) they access, teaching methods and practice they apply all contribute effectually to the

achievement of the student in studies in math. According to Iheanachor, teacher qualifications, subject majors and the years of experience can be predictors of students' achievement in mathematics. In their investigation of students' success in math in the context of Pakistan, Ali *et al*. (2010) [3] observed instructional method and found that engagement in problem-solving approaches remarkably enhances students' performance in mathematics compared to traditional teaching method i.e., limiting teacher centrality (teacher-centered approach) and increasing learner activity (learner-centered approach) and responsibility with teacher as facilitator.

Science and math, taken together with engineering and technology within the realm of STEM, have received worldwide commendation among the stakeholders of the academic community.

Among the proponents are Tassell *et al*. (2012, p.1) [32] who maintain, "The key to producing more scientists and mathematicians is improving mathematics and science preparation." But in order to be more precise in the evaluation process of the students' performance, Tassell *et al* (2012, p. 2) [32] refer to a study by ACT (2008) that lower levels of study such as the 8th grade results can be relied on to be more useful than observing the students' competency relevant to course work completed in high school, grade point average (GPA) obtained or other background characteristics. Finkelstein and Fong (2008) [17] seem to support the ACT study, delineating that students who step up into high school studies, without solid foundation from the previous lower grades, have the risk of being unable to stand the harder work awaiting them in high school learning (Tassell *et al*. 2012, p. 2) [32].

Observing the matter from a perspective of enthusiasm, Sears and Kessen as cited in Gardner (1975, p. 1) [18] claim, "The first task and central purpose of science education is to awaken in the child the sense of the joy, the excitement, and the intellectual power of science." Similar affirmation was forwarded by Rogers (quoted in Gardner 1975, p. 1) [18] who corroborated: "We must attend to feelings of wonder and delight over something seen or done, to intellectual satisfaction with an experiment or a mathematical argument." Analyzing the substance in Sears and Kessen's and in Rogers' statements, Gardner (1975, p. 1) [18] elaborates that the terms "Joy", "excitement", "satisfaction", "wonder", and "delight," give a reflection of "a growing recognition by curriculum developers that the development of cognitive abilities in science is not enough, and that the ultimate aims of science education include attitudes as well."

While cognitive ability it attributed its due credit, Tsereteli *et al*. (2010) [36] in their study of 5385 students 15-16 years of age revealed that non-cognitive issues such as "parent learning attitudes, involvement and belief of child's success and finally teachers' teaching style," were rated among "the best predictors for the sense of success in school environment." Furthermore, students' attitude towards science and math, their enthusiasm, and personal perception of the subjects' usefulness as disciplines of study need due consideration for experts to measure (Gardner 1995) [19]. In a systematic review of articles on students' performance in mathematics, Ayebale *et al*. (2020, p.S73) [4] emphasize that an amalgam of factors including the teaching methods instructors approach, students' attitude in dealing with and taming the subject itself as well as the teachers' attitude need consideration.

A section of scholars also believe that what makes studying math and science so indispensable in human life is their relevance in personal, national and international business undertakings, scientific inquiries, technological advancement, approach to decision science, and problem-solving techniques where problematization of figures is a necessity (Kele 2018; Tanveer *et al* 2000) [26, 34]. In the same line of thought, certain scholars, as also mentioned above, contextualize the relevance of parent' role as constructive influencers on the performance of their children in mathematics (Wamala *et al*. 2013; Kiwanuka *et al*. 2015; Mii and Makgato 2006) [39, 27, 30].

Research Method

The study utilized the case study method as recommended by Creswell (2014) [9], Eno and Dammak (2014) [14], Yin (2009) [40] and follows a descriptive path to discuss students' perceptions and attitudes and background information related to their performance in math and science in the Somali context, particularly in the city of Baidoa, Southwest State, Somalia. A sample size of 40 students was selected consisting of 20 students from Dr. Ayuub Primary and Secondary School and 20 from Baidoa Model Primary and Secondary School. Each school cluster was composed of 10 Primary Grade 8 students and 10 High School Grade 12 or Form 4, as locally known. A structured questionnaire with open-ended and close-ended questions was used to collect data (Jick 1979) [24], capturing both numerical findings and human experience and attitude of the students. Although the questions were set in English, the researchers had the advantage of fluency in the Somali Maay language locally communicated in the area to explain the questions to the students while filling the responses in English. Later, statistical package for social science (SPSS) was applied to arrive at the current results.

Analysis and Discussion

This section presents the results of the survey carried out across the two schools. It uses tables to demonstrate the frequencies and percentages of the data as well as the analysis and discussion.

Table 1: Distribution of Sample According to School and Level

S/N	School name	Levels (Primary/Secondary	Sample Size
1	Baidoa Model PSS	Primary Grade 8	10
2	Baidoa Model PSS	Secondary form four	10
3	Dr Ayuub PSS	Primary Grade 8	10
4	Dr Ayuub PSS	Secondary Form four	10
Total			40

Table 1 illustrates the number of respondents and their schools. It presents number of students represented in each of the four participant classes as well as each of the two schools participating in the study. As the table shows, selection of the sample was based on equal numbers of 20 students from each school consisting of 10 primary grade 8 students and 10 secondary grade 12 students.

Table 2: Gender of Respondents

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Male	20	50.0	50.0	50.0
	Female	20	50.0	50.0	100.0
	Total	40	100.0	100.0	

The gender classification of the respondents was 50% females and 50% males; thus, the adopted gender balance was fair in terms of equal participation as shown in Table 1, without considering the actual ratio of the average gender population in each of the institutions or classes the respondents were selected from. The study adopted an inclusive system of 20 girls and 20 boys to arrive at a sample of 40, knowing that certain sources have accused the education sector of gender disparity and inequality in classroom participation, research activities, and representation in research studies where equal gender participation is not often encouraged, although other sources have emphasized the advantages of gender equality (SADEV 2022; UNESCO 2019; USAID 2008). The basic philosophy guiding the study's equal participation approach is based on Herz's and Sperling's (2004) globally appreciated advocacy that "investing in girls' education delivers high returns not only for female educational attainment, but also for maternal and children's health, more sustainable families, women's empowerment, democracy, income growth, and productivity," (Evans *et al*. 2020) [16].

Table 3: Age of Respondents

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	10-15	12	30.0	30.0	30.0
	16-20	28	70.0	70.0	100.0
	Total	40	100.0	100.0	

The age bracket of respondents was arranged according to two clusters of 10-15 and 16 to 20 years. The result confirms 12 students (30%) fall within the age group of 10 to 15, while pupils between 16-20 were 28 (70%). Thus, the majority of the respondents were those from age 16 and above as shown in Table 2. As we targeted learners in primary and secondary school levels, Table 2 confirms that the majority of the student sample studied corresponds to the age groups required for those levels in school, making their responses reliable to represent the age groups. However, mention should be made here that although in some countries a set of ages are standard for certain class levels, the Somali situation differs those norms in some aspects, considering prolonged crises of civil war coupled with natural and man-made disasters (Concern 2019) [8]. These challenges necessitate the practice of some overage pupils studying in primary classes rather than age-relevant secondary or high school level classes. Other reasons for such late enrolment into formal school learning can be attributed to the duration it takes for some children to attain mastery of the Holy Qur'an in Madrasas (Qur'anic schools); high influx of internally displaced persons (IDPs), and return of some pupils to school after several years as drop-outs.

Table 4: Grade Level of the Respondents

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Primary	20	50.0	50.0	50.0
	Secondary	20	50.0	50.0	100.0
	Total	40	100.0	100.0	

The educational level of the respondents was 50% primary while 50% was secondary school; thus, the result shows that the equal number of respondents was chosen from each school and also from each level. According to the findings in Table 4, the researchers gave equal opportunity of participation to primary level and secondary level students of both targeted schools. This concept of triangulation of different levels of students in the same study helps to strengthen the validity and reliability of the study.

Table 5: Students' Perspectives on whether they Like Math and Science or not

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	35	87.5	87.5	87.5
	No	5	12.5	12.5	100.0
	Total	40	100.0	100.0	

The respondents replied to whether they like math and science or not. The question is framed around the general notion that student who excel in a subject usually tend to like it. To confirm or disprove that notion through the students' perception, the question yielded 35 positive responses (87.5%), while 5 among them (12.5%) affirm that despite their good performance, they do not seem to like them. The results in Table 5 support the old belief of the relationship between a student and performance in a subject as indicated in that student's love or desire for the subject.

Table 6: Reasons for liking or not liking math and science

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Help from family member or friend	17	42.5	42.5	42.5
	No one helps me with it	5	12.5	12.5	55.0
	It is interesting	17	42.5	42.5	97.5
	Other	1	2.5	2.5	100.0
	Total	40	100.0	100.0	

The results in Table 6 demonstrate the responses to a question asked as a follow up to the preceding one in Table 5. It was aimed to confirm whether the respondents have specific reasons behind their desire for math and science or whether they can mention reasons for not liking. According to the results, 42.5% are encouraged by help from relatives while an equal number of 42.5% expressed personal interest in the subjects. Contrary to these two categories, 12.5% admit that nobody helps them in their study of the subjects, compared to about 2.5% who responded by selecting the category of "others". However, the data support that 85% of the students are either interested in the subject or are helped with their study of the subjects by their relatives. As a consequence of the assistance, students feel they are not alone, a factor which can increase motivation for the desire to improve. Data therefore inform us how help by a friend or family member contributes to or triggers the students' passion to overcome the difficulties that may lay in understanding the math and science lessons and assignments. It is more significant to know that unlike the students who get help from relatives, there are others who are personally interested in the subjects, a reason to suggest the importance of the role of intrinsic motivation compared to their peers who may be motivated by a relative's help or the counterparts who opted not to discuss the matter at all in detail.

Table 7: Study time spent on math and science per day

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1-2 hours	30	75.0	75.0	75.0
	3-4 hours	4	10.0	10.0	85.0
	5-6 hours	2	5.0	5.0	90.0
	more than 6 hours	4	10.0	10.0	100.0
	Total	40	100.0	100.0	

Table 7 illustrates that 30 among the 40 student respondents (75%) spend between 1-2 hours per day working on math and science; a small number of 4 (10%) spend 3-4 hours while 4 students or (10%) spend more than six hours each day studying the subjects. Data support that only 5% of the respondents spend about 5-6 hours per day, confirming that a 75% majority of the students spend less than three hours per day on math and science. Observed from another perspective, the results are telling us about the stress some students are undergoing in coping with the subjects to maintain their good performance. A situation like this hinders them from finding for themselves time to attend to activities outside the study—even when they are at home and are supposed to be relaxing and engaging in youth activities such as sports. Although the number of respondents under this pressure is 5%, parents need to consider the extended time of learning after school when they should have been relaxing or doing other non-academic activities to refresh the mind. A long period of daily study as expressed by the 5% of students carries the risk of burning out so fast and as a result diminishing the current enthusiasm.

Table 8: Influencers toward liking math and science

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Brother	6	15.0	15.0	15.0
	Sister	1	2.5	2.5	17.5
	Teacher	21	52.5	52.5	70.0
	Father/Mother	12	30.0	30.0	100.0
	Total	40	100.0	100.0	

According to responses analyzed in Table 8, close to 53% of the students are influenced their teachers, 30% by either the father or mother, 15% by a brother, while 2.5% are influenced by a sister. Students are unequivocal about the role of the teacher as significant factor with a strong impact on their study of math and science as a

majority of them testify to that. The role of the parents as influencers is mentioned by 30% which is in second rank from the teachers, and therefore an important factor as well—making the role of teachers and parents account for approximately 83%, while influence from brothers and sisters amounts to less than 18%. Thus, according to the data, majority of the motivation drive and influence toward loving math and science is attributed to the teachers—elucidating how a subject teacher is regarded by many students as their role model in their excelling at a subject.

Table 9: Parents' occupation

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Public Sector	4	10.0	10.0	10.0
	Private sector	3	7.5	7.5	17.5
	Farmer	7	17.5	17.5	35.0
	Pastoralist	4	10.0	10.0	45.0
	Business person	22	55.0	55.0	100.0

According to the data in Table 9, 55% of the math and science lovers' parents are business owners who can afford to spend money on child education, compared to 17.5% who come from parents who are in the low-income section of the society as farmers. Only 10% of students have their parents working in the public sector while parents of 7.5% work in the private sector such as local and international non-governmental organizations (NGOs) as well as local companies some of which are well-established in the district of Baidoa. Students whose parents practice pastoralism are 10%, and slightly above those in the private sector. Although some studies relate students' performance to parents' education or jobs (Abu Bakar *et al*. 2017; Idris *et al*. 2020) [1, 22], the results demonstrated in this study support the notion that children of peasants and pastoralists can still, perform well or better than their classmates from families of educated and working-class parents.

Table 10: Major challenges in learning math and science

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Teacher problems	1	2.5	2.5	2.5
	Learning resources	6	15.0	15.0	17.5
	Language	24	60.0	60.0	77.5
	Classroom/students	9	22.5	22.5	100.0

Out of 4 options, students were asked to share their opinion regarding what they perceive as the single major challenge facing them in their learning of math and science among a choice of four responses. The idea was to find out whether these major learning challenges were related to social or material or behavioral patterns. In response, 60% complained about language barrier as the most significant challenge in their study. This brings into focus the language debate prevalent in Somali education in that students use English medium which is generally an area or a subject Somali education has a crucial problem as neither teachers nor learners are proficient in the language. Comparatively, 22.5% believe most of their challenges are related to either their school environment or the students who study with them. Learners in this study who mention availability of learning resources, such as books etc. as a challenge, consist of 15% of the total while only 2.5% perceive teacher-related problems as their challenge. The results indicate the major challenge facing these students is the medium of instruction, in other words, language barrier. However, this not surprising, considering the fact that the challenge in the medium of instruction, in other words the linguistic challenge, has been an enduring conundrum in Somalia education. The problem can be analyzed from several areas although only two perspectives are discussed in the current context-none of which seems to be advantageous to the pupil. One is related to the dominant practice that students are taking subjects, memorizing scientific words and formulas related to these subjects not in Maay, their mother language (dominant among the Rahaweyn people and across southern Somalia) as medium of instruction. Instead, they are learning in Maxaa (also known as Maxaa-tiri) language-the standardized, state-sponsored Somali language (Eno *et al*. 2016). The second conundrum tied to the language issue is that of English which is the medium for math and science which neither the teachers nor the pupils have developed a considerable proficiency level suitable for mediation of teaching and learning in the classroom (Eno 2017; Eno 2018; Eno *et al*. 2019) [11, 12, 13]. Actually, the language problem is clearly evidenced in the National Exam of the academic year 2019-2020 when after analysis of the results Southwest (Baidoa district included) students performed well in all subjects or averagely on par with their peers in the other States, except in Somali language, an indication why the pupils in the current study complain about the medium of instruction. Not surprisingly, though, students in non-Maay speaking states i.e., those using Maxaa-tiri as their mother tongue, have performed the Somali language exam better than the Maay-speaking pupils as it favors them for being their mother tongue and therefore their dominant medium of everyday communication. Another significant challenge mentioned by 22.5% is related to the classroom or school environment which is not up to the required standards. For instance, in a recent study on backbenchers, Eno *et al*. (2021) [15] highlight the uncomfortable classroom conditions which certain students in Baidoa have to tolerate during their learning and

how the discomfort makes pupils change their geographical locations within the classroom such as poor lighting and ventilation, to name a few.

Table 11: On taking tutorials/ private teaching for math and science

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	21	52.5	52.5	52.5
	No	19	47.5	47.5	100.0
	Total	40	100.0	100.0	

The students were asked whether they go for private teaching or tutorials to enhance their performance in math and science to which 52.5% replied they do. In comparison, 47.5% responded that they do not seek further help. Therefore, the result indicates that a little more than half of the students in this study benefit from private teaching outside the school system, a common practice in Somalia for students to take private tutorials to remedy any learning deficiency and enhance performance. However, the result also reveals that not all those who perform well seek remedial or tutorial assistance as a little less than half of the students are not accessible to private teaching in those subjects. Inaccessibility maybe attributed to: (a) Private schools or individuals offering tutorial/remedial sessions may be unavailable in the some of the areas where the students live; (b) The tutorial/remedial fees may be unaffordable to some; or (c). Relatives might be helping them as mentioned above in Table 6. Generally, learners who go for private tuition are students from high income families that can afford the extra investment in their child's education.

Table 12: Timeliness/lateness to school per week

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Never	31	77.5	77.5	77.5
	once a week	8	20.0	20.0	97.5
	twice a week	1	2.5	2.5	100.0
	Total	40	100.0	100.0	

Most of the respondent students, 77.5%, maintain that they never come late to school, In comparison, 20% admit they may come to school late about once a week, while 2.5% rate their late arrival to school twice a week. Data display that absenteeism is not a common problem experienced by most of the students covered in the survey. A comparative analysis of the three variables measured shows that students who are "never" late to school exceed in number to the combined total of the two other categories consisting of students who either report late once or those who report late twice a week. Avoiding tardiness demonstrates students' fondness for study. It gives a reflection of how the pupils take their responsibility as humans who have accepted and internalized their role. The true assumption one can get here is how the students play their role as future professionals with an understanding of accountability at an early stage in their life. Observed from another side, most of the students who are fond of their study of math and science subjects respect the institutional rules and regulations regarding timeliness in their arrival to school, considering the result that 77.5% are on time, followed by those late only once a week at 20%, while 2.5% come late twice a week. Although lateness twice a week in an 18-weeks semester of study is a lot and unacceptable, conditions are harsh and very unfavorable to the pupil attending school in Baidoa. Walking long distance, attending classes with empty stomach and returning home hungrier with the day's first meal coming at lunch time are among the situations many Somali students daringly tolerate, with Baidoa being among the harshest hit districts. Parents of poor families, despite the hardships in Baidoa and other parts of the country, are laudable for sending the children to school, notwithstanding the hunger.

Table 13: Time spent studying math and science in the weekends

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1 hour	18	45.0	45.0	45.0
	2 hours	11	27.5	27.5	72.5
	3 hours	5	12.5	12.5	85.0
	4 hours	6	15.0	15.0	100.0
	Total	40	100.0	100.0	

This question focuses on the hours students spend studying math and science during the weekends. The results display that 45% of the respondents spend only one hour of study on math and science; 27.5% dedicate two hours reading their math and science lessons and exercises, 15.5% give four hours of study while 12.5% spare three hours of their weekend for work on the subjects. According to data, most of the students do not spend much time to study math and science over the weekend. The reason could be that most of them spend a great deal of time during the week and use the weekend as an opportunity for relaxation and other non-academic activities. It could also mean that not much assignment is offered to them over the weekend, which allows them to reduce the stress over study they took during the week.

Table 14: Future Career

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Scientist	3	7.5	7.5	7.5
	Engineer	5	12.5	12.5	20.0
	Doctor	19	47.5	47.5	67.5
	Pilot	1	2.5	2.5	70.0
	Other	12	30.0	30.0	100.0
	Total	40	100.0	100.0	

The respondents were asked their preference of a future career in regard with their current desire and goof performance of math and science. Accordingly, 47.5% expressed their willingness to be medical doctors; 30% selected "other" and therefore unknown as to what career path they will follow, at least at this stage, 12.5% would like to be engineers, 7.5% would prefer to see themselves as scientists while a minor group of 2.5% would be satisfied to be pilots. Despite the distinctness of the anticipated future careers admired by the respondents, it is interesting that about 70% of the students chose a career related to either math or science or both, as shown in Table 14. It is however worrisome that 30% are not thinking of choosing any of the career options provided in the list of responses.

Conclussion and Recommendations

Conclusion

This research study focused on understanding the perception of students who perform well in math and science by surveying 40 students selected from four classes in two schools in Baidoa, Southwest State of Somalia. The result demonstrates that the students spend a considerable time working on the subjects after class on daily basis. They also spend some time attending to their learning of the subjects even during the weekend. Moreover, they aspire to maintain a good attendance record and a minimum delay to school in the week. These characteristics indicate the students' passion for the subjects and the good quality of influence as well as assistance they receive either from a teacher, relative, family member or paid tutors. In spite of the positive picture and glamour, the pupils nevertheless mention challenges which, among others, the major one is language because they are not well versed in either English or Maxaa Somali, the two media dominantly used in the instruction. Others challenges such as classroom environment as well as social setting of the schools have been mentioned. As a result of the above findings and discussion, the study proposes the recommendations given in the next section.

Recommendations

The study suggests the following recommendations to be considered by the various stakeholders in the education sector:

1. To build a positive attitude toward student's performance in math and science, family and friends should support the students in dealing with the subjects.
2. The Ministry of Education (state and federal) must develop an appropriate medium policy which is advantageous to pupils using Maay as their mother tongue.
3. The Ministry of Education (state and federal) to consider a robust English language training for teachers.
4. Development partners at federal and state levels to assist in the development of Maay-based curriculum to help Maay-speaking students overcome the linguistic challenges in their education.
5. More research on math and science education needs to be done to foster further knowledge and enhancement of matters related to teaching and learning.

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