## **FULL-LENGTH ARTICLE**

# Teachers Involvement in Enhancing Students Academic Achievement at Classroom Level: The Case of Selected Ethiopian Public Secondary Schools

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ABSTRACT: The study investigated teachers' involvement in enhancing students' academic achievement at classroom level in selected Ethiopian public secondary schools. To this end, 30 public secondary schools (top 10, middle 10 and lower 10 achievers) were purposefully selected based on the average results of three consecutive years of matriculation results. The data were collected through a questionnaires consisting of five lickert scales from a randomly selected 300 teacher respondents. The collected data were analysed quantitatively using Statistical Package for Social Sciences (SPSS) version 29. Descriptive analysis shown that, 72.2%, 72% and 71.6% of teacher respondents revealed that teachers involvement in using structured teaching, teachers strength in evaluative potential of their students' performance and teachers ability in giving opportunities for learners in practicing their own learning, respectively, were considered as the major roles expected of teachers to enhance the academic achievement of students. Similarly, 71.4% and 68.8% of teacher respondents indicated that teacher involvement in maintaining curriculum quality and setting high expectations for students' achievement contributes for the enhancement of students' academic achievement. Based on the findings, we recommend that Ethiopian curriculum designers and policy makers should improve secondary schools curriculum quality, and secondary school teachers should increase their efforts in setting high expectation of students' achievement, using structured teaching, giving opportunities for their students to practice their learning and increasing their evaluative potential to assess students learning.

Key Words: academic achievement; learners'; public schools; teachers Involvement, Ethiopia

## INTRODUCTION

Teachers' involvement in enhancing students' academic achievement plays a major role in fostering student learning and assists teachers' professional development (Kyriakides, 2007). Teachers involvement in enhancing students' academic achievement improve students' learning by establishing a conducive learning environment through provision of equal educational opportunities for all students, regardless of their background (Sun et al., 2007). There has been a global and international debate regarding teachers' involvement in enhancing students' academic achievement and researchers are not unanimous on what constitutes better students achievement (Kyriakides, 2007; Day et al., 2016; Allen et al., 2015).

Teacher's role in enhancing students' academic achievement embodies a multitude of variables or oncepcts. Day et al., 2016 and Scheerens (2013) have equated teachers role in enhancing students' academic achievement with strives teachers are making to attain school goals in relation to students' academic achievement. In contrast, Kazazoglu (2013) has argued that school goal attainment as predictor of teachers role in enhancing students' academic achievement is broader enough and inadequate to show the specific roles teachers are expected to play in enhancing students' academic achievement and recommended the inclusion of factors such as teaching effectiveness, curriculum quality and learning environments. Sisman (2011) and Gilbert (2007) have also identified specific teacher's role such as: teacher's ability in organising the efforts of different stakeholders and the availability of school resources. As a result, the role expected of teachers in enhancing students' academic achievement is viewed differently by different scholars and remains a debatable issue among

researchers. In this study, the roles expected of teachers in enhancing students achievement is equated with teachers ability in: setting high expectations for student achievement, using structured teaching, giving opportunities for learners, maintaining curriculum quality and strengthening their evaluative potential as measured by students' achievement in the national examination on core subjects (English and Mathematics subjects) on longitudinal bases (for at least three years).

Different efforts have been made and large amounts of budget were allocated in Ethiopian secondary schools in order to enhance students' academic achievement (MOE, 2009). For instance, the educational system was decentralized and school based management was established in order to increase the contributions of different stakeholders in education (Abebe, 2012). The country established Education Sector Development Program (ESDP-II and ESDP III) in order to enhance the quality of General Education through implementation of the General Education Quality Improvement Program (GEQIP), and made different stakeholders to take part in monitoring school resources. For instance, parent-teacher associations (PTAs) have been established at elementary schools and made to take part in the preparation of schools' annual plans (MOE, 2010).

Similarly, in order to enhance students' academic achievement in Ethiopian context, Ambo university (one of the universities located in Ethiopia) took an initiative to provide Ambo town secondary school teachers with different training to help them gain an opportunity, experiences, ideas and new practices in teaching methodology, classroom evaluations and undertake action research to enhance their effectiveness (MOE, 2015). Despite the effort, however, the initiative was not up to its premises in improving these teachers' practices to conduct action research and to use active learning methodology and continuous assessment so as to improve students' performance in national examination (MOE, 2015). As the result, this study was designed to identify the factor that hindered the improvement of students' academic achievement and motivated us to further investigate teacher's involvement in enhancing student's academic achievement in selected Ethiopia public secondary schools and tried to provide an answer to the following question: What are the roles of teachers in enhancing students' academic achievement in selected Ethiopian public secondary schools? Accordingly, the study focused only on teachers role in enhancing students' academic achievement in selected Ethiopian public secondary schools and it is beyond the scope of this study to examine input factors such as learner's motivation, family involvement, teacher's background and school management roles in enhancing student's academic achievement. More specifically, the study focused on teachers role related to: teachers' high expectation, maintaining curriculum quality, opportunity to learn, structured teaching, and evaluation of learning progress. The outcome obtained from this research aimed to help policy makers and curriculum designers to consider the teacher's important practices that enhance students' academic achievement in the Ethiopian secondary school.

## MATERIALS AND METHODS

## **Research design and participants**

This study followed a descriptive survey design. As the study deals with academic enhancing factors, ten each of top, middle and lower achiever secondary schools were the focus of the study. Accordingly, those Ethiopian regional states hosting the above mentioned leveled secondary schools (top, medium and lower achieving) were selected as the participant of the study, including 6 regional states and one chartered city. Thus, all teachers (431 English and Mathematics teachers) who were teaching in the Regional States of Oromia, Amhara, Sidama, South Nations and Nationalities, Gambella, Somali, and Addis Ababa City Administration were selected as the participant. They were selected in order to show the characteristics of teachers who were teaching from upper, medium and lower achieving secondary schools.

## Sample size determination and sampling procedure

Both non-probability and probability sampling methods were in order to choose a sample from public secondary schools. In non-probability sampling or in using the purposive sampling technique, first the average results of three consecutive years of secondary school students' achievement on the national examination in core subjects (English and Mathematics) were calculated and then secondary schools were ranked based on their average achievements from highest to lowest. Once the schools were ranked in this manner, they were named and selected as the first top ten or upper achieving, middle ten

or medium achieving and last ten or lower achieving public secondary schools and selected by using a purposive sampling technique. This was intentionally done in order to select equal proportions of secondary schools from all levels to obtain the necessary information from all levels. Accordingly, 30 secondary schools (10 from each of the upper, medium and lower achieving schools) were purposively selected. As mentioned above, the total number of teachers teaching in these 30 secondary schools comprises 431 teachers. Using these 431 teachers as a population of the study, the sample size was determined as follows (Yemane, 1967):

$$n = N/1 + N(e^2)$$

Where, N is the population size and e is the level of precision. Hence, taking, N = 431 and assuming 95% confidence level at p = 0.05, the sample size was calculated and found 208.

In order to increase the validity of the research, a total of 300 teachers were selected as the sample. Once the sample size was determined, stratified sampling technique was used in order to select the total number of teachers who took part in the research process from all levels (high, medium, less effective). The stratified sampling technique was used in order to select equal proportions of samples at all levels. As a result, 300 secondary school teachers (144 English and 156 Mathematics teachers) which comprised 104 secondary school teachers from upper achieving schools (52 English and 52 Mathematics teachers), 100 secondary school teachers (45 English and 55 Mathematics teachers) from the middle effective and 96 secondary school teachers (47 English and 49 Mathematics teachers) from less effective schools were selected (Table 1).

LEVELS	No. of English teachers	No. of Maths teachers	Total population	Sample of English teachers	Sample of maths teachers	total sample selected
Upper achieving schools	75	75	150	52	52	104
Medium achieving schools	65	80	145	45	55	100
Lower achieving schools	66	70	136	47	49	96
Total	206	225	431	144	156	300

Table 1: Distribution of secondary school English and Mathematics teachers selected for the study

**Upper achieving schools**: Students score in the top 20-25%; medium achieving schools: Students score within the 40–60% range; Lower achieving schools: Students score in the bottom 20-25% on assessments

Lastly, once the total numbers of teachers were determined, simple random sampling was used to select teachers from all three groups. Simple random sampling was used in order to give equal chances for all of the teachers from all levels. Accordingly, among 300 participants 90 participants were selected from Oromia region, 80 from the Addis Ababa administration city, 60 from the Amahara regional state, 25 from Sidama regional state, 28 from South Nations and Nationalities, 8 from Gambella regional states and 9 participants from Somali regional state (Fig. 1).

#### **Data Collection Instrument**

In order to identify, teachers' involvement in enhancing students' academic achievement at classroom level, closed ended questionnaire was used as a data collection instrument. More specifically, closed-ended questionnaire with rating scale consisting of five levels was prepared from the review of related literature and was administered to 300 secondary school teachers' in order to identify their perceptions.

#### **Data Analysis**

The collected date were edited, coded and analyzed using both descriptive and inferential data analysis method. In order to identify, teachers involvement in enhancing students' academic achievement at

classroom level, responses were collected from all the selected sample respondents (response rate 100%) and analysed quantitatively (mean and standard deviation) using Statistical Package for Social Sciences (SPSS) version 29. Once, the questionnaire were collected from the respondents, then mean score and standard deviation were calculated for all indicators of academic enhancing variables in all cases and compared to the mean score (M = 3.0).

In inferential statistics, t-test was used to identify the statistical significance level of the data. Accordingly, one-sample t-test results were used in order to indicate the difference between the normal distribution and the sample mean scores for all of the indicator items which were statistically significant at p < 0.05, (t = 0.000 at 2 tailed).



Fig. 1: Distribution of study participants among different regional states and city administration in Ethiopia

### RESULTS

In order to investigate teachers' involvement in enhancing students' academic achievement four variables namely standards and expectations, structured teaching, opportunity to learn, curriculum quality and evaluation potentials were analyzed and the deduction for each variables were presented as follows:

## Standards and expectations as a process factor

Results obtained from the analysed data (Table 2) showed that teachers' practice in setting standards and expectation play an important role in enhancing students' academic achievement (M = 3.44, SD = 1.01). When the six indicators of standards and expectations are compared to the mean score (M = 3.0) from a hypothetical normal distribution, the one-sample t-test results indicated that the differences between the normal distribution and sample mean scores for all the indicator items were statistically significant at (p < .05, t = 0.000).

	Items	Lower achiever		Medium Achiever		Upper Achiever		Average		Sig.(2- tailed)
S. No.		М	SD	М	SD	М	SD	М	SD	SD
1	In our school principal emphasis learners' mastery of basic subjects such as English and Mathematics.	3.5	1.08	3.41	1.21	3.16	1.14	3.35	1.14	.000
2	Our school highly expects a larger number of learners to pass in the	3.43	1.16	3.57	1.11	4.04	0.95	3.68	1.04	.000
3	All learners are expected to achieve high standards.	3.38	1.33	3.3	1.12	3.47	1.21	3.38	1.12	.000
4	Teachers do whatever it takes to help all learners meet high	3.48	1.23	3.94	0.91	3.88	1.05	3.76	1.25	.000
5	Teachers use effective strategies to help low performing learners to me at high academic standards	3.42	1.08	3.61	1.08	3.39	0.93	3.47	1.15	.000
6	I believe all learners can learn difficult concepts	3.02	1.2	3.15	1.11	2.74	1.2	2.97	0.9	000
	Total	3.36	1.17	3.49	1.08	3.48	1.07	3.44	1.1	

## Table 2: Standards and expectations

M = 3.0 \* p = < 0.05 N = 300, 1 =strongly disagree, 2 = disagree 3 = undecided 4 = agree, and 5 = strongly agree\*

# Teacher's perception towards structured teaching as teachers' role in enhancing students' academic achievement

The characteristics of teachers in using structured teaching found to enhance students' academic achievement is as indicated in Table 3. The calculated mean value for each element of structured teaching was found to be greater than the average mean value (3) indicating that teacher's ability to use structured teaching was found to enhance students' academic achievement in selected Ethiopian public secondary schools.

Clearly formulated learning objectives for every lesson (M = 3.98, SD = 0.98), clearly explaining and communicating the formulated instructional objectives for the student (M = 3.80, SD = 0.99), teaching the content of each subject in a prescribed proper sequence (M = 3.64, SD = 0.96) and regularly assessing learners to understand whether they understood the lesson contents (M = 3.80, SD = 0.99) as a component of structured teaching plays an important teachers role in enhancing students' academic achievement. In addition, giving ample time for learners to practise what they learned (M = 3.38, SD = 1.03), making learners accountable for their learning (M = 3.87, SD = 0.96), covering all the content prescribed (M = 3.41, SD = 1.00), evaluating the attainment of instructional objectives, preparing appropriate curriculum materials in terms of learners age (M = 3.19, SD = 1.20), preparing supplementary teaching (M = 3.60, SD = 1.02) and using a teacher-centred methodology at all levels (M = 3.59, SD = 1.06) plays an important role in enhancing students' academic achievement. When the eleven indicators of structured teaching were compared to the mean score (M = 3.0) from a hypothetical normal distribution, the one-sample t-test results indicated that the difference between the normal distribution and sample mean scores for all of the indicator items were statistically significant (p < .05, t = 0.000).

S/N	Activities	Lower achiever		Medium achiever		Upper achiever		Average		Sig. (2- tailed)
		M*	S.D	M*	S.D	M*	S.D	M*	S.D	
1	I clearly formulate learning objectives for every lesson I am presenting	3.84	0.97	4.01	1.06	4.1	0.9	3.98	0.98	.000
2	I explain learning goals to the learners So that they know what they will learn.	3.9	0.84	3.78	1.01	3.71	1.12	3.8	0.99	.000
3	The course contents to be taught is placed in order of proper sequence	3.8	0.9	3.51	1.1	3.62	0.88	3.64	0.96	.000
4	I regularly assess learners to understand whether they understood The lesson contents.	3.79	1.03	3.73	1.01	3.89	0.86	3.8	0.97	.000
5	Learners are given ample time to practice what they learned.	3.59	0.75	3.27	1.21	3.27	1.13	3.38	1.03	.000
6	In the teaching learning process, I make learners accountable for their learning	3.88	0.84	3.75	1.19	3.98	0.86	3.87	0.96	.000
7	I always cover all the contents presented in the Textbook.	3.29	0.81	3.38	1.08	3.55	1.11	3.41	1	.000
8	I always evaluate whether instructional objectives are achieved.	3.28	0.75	3.4	1.06	3.77	1.09	3.48	0.97	.000
9	I understand that the curriculum should be appropriate in terms of age,	3.47	1.11	3.08	1.22	3.01	1.27	3.19	1.2	.000
10	relevance, and integration I develop and use supplementary materials in order to improve student	3.35	0.75	3.6	1.29	3.82	1.01	3.6	1.02	.000
11	learning I use teacher- centered Methods	3.85	0.95	3.46	1.09	3.47	1.15	3.59	1.06	.000
	manous	3.76	0.88	3.52	1.12	3.55	1.03	3.61	1.01	

Table 3: Teachers Role towards structured teaching

M = 3.0 \* p = < 0.05 N = 300, 1 =strongly disagree, 2 = disagree 3 = undecided 4 = agree, and 5 = strongly agree\*

## Teachers Role towards Opportunity to Learn as a process factors

From the analysis (Table 4), it is evident that teacher respondents from all the three levels (upper, lower, and medium) showed a positive response towards the notion that providing learners with an opportunity to learn (M=3.15, SD=1.04) improves students' academic achievement.

Allocating adequate instructional time for each subject (M=3.45, SD=1.03), teachers usage of their time appropriately in teaching their learners(M=4.16, SD=0.90) manageability of teacher-student ratio (M=3.22, SD=1.27), availability of instructional materials (M=3.15, SD=1.11), preparing tests based on table of specification (M=3.75, SD=0.99), and provision of additional learning time for learners (M=3.44, SD=0.99) and evaluating the effectiveness of their teaching methodology after the completion of each lesson(M=3.79, SD=0.96) as a component of opportunity to learn plays a paramount role in enhancing students' academic achievement. Moreover, when the seven indicators of

structured teaching as compared to the mean score (M = 3.0) from a hypothetical normal distribution, one-sample t-test results indicated that the differences between the normal distribution and sample mean scores for all of the indicator items were statistically significant (p < .05, t=0.000).

Table 4: Teachers role towards opportunity to learn										
	Items	Lower Achiever		Medium Achiever		Upper Achiever		Average		Sig. (2- tailed)
		М	SD	М	SD	М		М	SD	
1	Instructional times allocated for each subject is adequate	3.91	0.97	3.15	1.03	3.31	1.08	3.45	1.03	.000
2	I am always on time for my lessons	4.13	0.84	4.16	0.88	4.19	0.99	4.16	0.9	.000
3	The teacher - student ratio is manageable for all subjects	3.03	1.11	2.94	1.32	3.68	1.4	3.22	1.27	.000
4	There are adequate instructional materials for all learners	3.68	1.04	2.77	1.11	3	1.19	3.15	1.11	.000
5	I prepare test items based on pre-defined objective.	3.58	0.86	3.79	1.09	3.89	1.02	3.75	0.99	.000
6	Learners are provided with additional learning time.	3.26	0.99	3.43	1.03	3.63	0.97	3.44	0.99	.000
7	I evaluate the effectiveness of my teaching methods at the end of each lesson	3.55	0.79	3.94	0.94	3.9	1.16	3.79	0.96	.000
	Total	3.82	0.94	3.45	1.05	3.41	1.11	3.57	1.04	

M = 3.0 \* p = < 0.05 N = 300, 1 =strongly disagree, 2 =disagree 3 =undecided 4 =agree, and 5 =strongly agree\*

## Teachers' role towards curriculum quality

Curriculum quality as teachers role to enhance students' academic achievement received an agreed response by teacher respondents (M = 3.58, SD = 1.19) (Table 5). Curriculum quality, were maintained in terms of such a situation as: The provision of subject matter is determined by the Ministry of Education, school board and the school team (M = 3.42, SD = 1.14), prepared, curriculum materials provides for depth and breadth of learning to ensure access for all (M = 3.32, SD = 1.11) Curricular priorities are set by clarifying each knowledge about the core objectives (M = 3.43, SD = 1.14), "Content presented in the text book is clear (M = 3.59, SD = 1.20), usage of variety of activities for the learners to learn (M = 3.94, SD = 1.31), alignment of teaching methods. With content to be taught plays an important role in enhancing students' academic achievement (M = 3.65, SD = 1.22).

In addition, the degree to which lessons in the subject matter are arousing learners imagination (M = 3.54, SD = 1.18), integration of contents with different subjects (M = 3.66, SD = 1.22), implementation of co-curricular activities (M = 3.14, SD = 1.05), sequencing content of the curriculum progressively (M = 3.61, SD = 1.20) teachers usage of teaching materials in their teaching (M = 3.66, SD = 1.22) and teachers motivation in in teaching (M = 3.46, SD = 0.89) are important in enhancing students achievement. When the twelve indicators of structured teaching are compared to the mean score (M = 3) from a hypothetical normal distribution, the one-sample t-test results indicated that the differences between the normal distribution and sample mean scores for all of the indicator items were statistically significant at p < .05, (at t = 0.000 at 2 tailed)

## **Table 5**: Teachers Role towards Curriculum Quality

S/ N	Items	Lower achiever		medium achiever		Upper		Average		Sig. (2-tailed)
		М	SD	М	SD	М	SD	М	SD	
1	The provision of subject matter is determined by the ministry of education, school board and the school team	3.77	0.93	3.3	1.11	3.22	1.17	3.43	1.14	.000
2	The curriculum provides for breadth and depth of learning with adjustment to ensure access for all	3.34	1.06	3.38	0.96	3.25	0.9	3.32	1.11	.000
3	Curricular priorities are set clarifying each knowledge about the core objectives	3.53	0.85	3.42	0.9	3.35	0.99	3.43	1.14	.000
4	Co-curricular activities for the school's effectiveness are emphasized	3.19	1.08	3.17	1.1	3.08	1.11	3.14	1.15	.000
5 6	Content presented in the textbook is clear. A step-by-step presentation of contents is followed for making the	3.63	0.95	3.67	1.08	3.47	1.01	3.59	1.2	.000 .000
	low achievers understood what is being taught	3.75	0.99	3.58	1.01	3.49	1.02	3.61	1.2	
7	There is variety of activities for the learners to learn.	4.11	0.96	3.81	1.05	3.9	1.01	3.94	1.31	.000
8	Teaching methods are aligned with content to be taught	3.8	0.97	3.55	0.95	3.59	0.99	3.65	1.22	.000
9 10 11	I use concrete materials to teach abstract concepts I enjoy teaching the subject that I am teaching Lessons in the subject matter arouses learners imagination	3.46 3.97 3.7	0.89 1.05 1	3.38 4.01 3.51	1.15 1.09 1.09	3.37 4.2 3.42	1.19 1.09 1.06	3.63 4.06 3.54	1.15 1.35 1.18	.000 .000 .000
12	The contents are effectively integrated with different subjects.	3.94	1.05	3.39	1.19	3.65	1.04	3.66	1.22	.000
	Total	3.7 0	0.9 8	3.5 1	1.0 6	3.5 0	1.0 5	3.5 8	1.1 9	.000

 $M = 3.0 * p = < 0.05 N = 300, 1 = \text{strongly disagree}, 2 = \text{disagree } 3 = \text{undecided } 4 = \text{agree}, \text{ and } 5 = \text{strongly agree}^*$ 

## Teacher's role towards evaluative potential as a factor to enhance student achievement

As it can be seen from Table 6, teacher participants portrayed a higher degree of agreement among teaching staff in relation to evaluation process (M=3.67, SD=1.07) as a basic factors in enhancing students achievement. The existences of evaluation polices at schools (M=3.58, SD=1.19), "moderation of exam papers is done to ensure that they are of high quality (M=3.57, SD=1.19), "revision with learners is done after marking" at an average mean value of (M=3.54, SD=1.18), discussing academic progress with individual learners with the mean value of (M=3.41, SD=1.13).

In addition, when the nine indicators of structured teaching are compared to the mean score (M = 3.0) from a hypothetical normal distribution, one-sample t-test results indicated that the differences between the normal distribution and sample mean scores for all of the indicator items were statistically significant (p < .05, t=0.000).

Table 6 Teachers	perception of evaluation	notential in enhancing learners'	academic achievement
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S/	S/ Items		Lower		Medium		Upper		Average	
Ν		М	SD	М	SD	М	SD	М	SD	- tailed)
1	Availability of agreements among teaching staff in relation to evaluation	3.78	1	3.35	1.24	3.9	0.99	3.67	1.07	.000
2	Assessment policy exists	3.52	1.11	3.26	1.32	3.97	0.89	3.58	1.19	.000
3	Moderation of exam papers is done to ensure that they are of high quality	3.54	1.08	3.41	1.14	3.77	0.89	3.57	1.19	.000
4	Revision with learners is done after marking	3.44	1.03	3.45	1.1	3.75	0.83	3.54	1.18	.000
5	I discuss academic progress with individual learners	3.26	1.15	3.32	1.33	3.66	0.9	3.41	1.13	.000
6	I hold meetings with teachers to discuss learners progress on specific subjects	3.22	1.18	3.25	1.32	3.78	0.94	3.41	1.13	.000
7	I identify learners with barriers to learning	3.63	0.99	3.37	1.12	3.96	0.92	3.65	1.21	.000
8	Evaluation of learners' progress takes place frequently by means of standardized progress tests	3.31	1.12	3.43	1.13	3.84	0.97	3.52	1.17	.000
9	I keep progress records on individual learner's	3.39	1.34	3.66	1.17	4.04	1.03	3.69	1.23	.000
	Total	3.5	1.1	3.41	1.21	3.9	0.9	3.6	1.05	

M = 3.0 \* p = < 0.05 N = 300, 1 =strongly disagree, 2 = disagree 3 = undecided 4 = agree, and 5 = strongly agree\*

## DISCUSSION

# Teacher's involvement in enhancing students' academic achievement in Ethiopia at the classroom level

The classroom level is the level at which all the key variables assumed to enhance students achievement interact with each other. The key variables proposed by Creemers in his model and the investigator of this research as students' academic achievement enhancing factors includes such variables as high expectations of student progress, structured teaching, opportunity to learn, curriculum quality and degree of evaluation and monitoring of student progress (Schreenes, 2016). As he main aim of this study was to identify teacher's involvement in enhancing students' academic achievement at classroom level at selected Ethiopian public secondary schools, the summary of each finding, in relation to above mentioned variables, are discussed below.

#### Teachers' high standards and expectations of student achievement

Standards and expectations as the main factor to enhance students' academic achievement involves not only strictly emphasising student academic achievement in core subjects and the ability to set high expectations for students, but it also involves the most appropriate usage of student records on their progress (Scheerens, 2016; Teddlie & Stringfield, 2006). Teachers, especially at the upper achieving public secondary schools, who set high expectations for student achievement in the matriculation examination, help their students to attain and maintain these high standards enhancing their students' academic achievement. This result directly aligns with report by Dobbie and Fryer (2011) which states that teachers' high expectations are the determinant factor for enhancing students' academic achievement.

## Teachers' use of structured teaching

Structured teaching was one of the major variables that teachers in selected Ethiopian public secondary schools used in order to enhance students' academic achievement. Teachers, especially those in the upper achieving public secondary schools indicated that clearly formulating learning objectives, explaining those formulated instructional objectives to their students, presenting the curriculum materials in logical order, conducting regular assessment of student progress and giving ample time for students to practise and apply the knowledge and skills gained in lessons, could enhance students' academic achievement. The assumption behind structured teaching is that instruction should be well-structured according to the importance of the content, the ways in which teachers prepare themselves for lesson delivery and the ability of teachers to use direct instruction (Creemers & Kyriakides, 2008). These findings well aligned with the views of Muijs and Reynolds (2011) in that when teachers teach their lessons in a logical order, from simple to complex, from what is known to unknown, concrete to abstract, they increase student understanding and thus achievement. In addition, Muijs and Reynolds (2011) noted that when teachers offer students ample time to practice and apply the content that they have learned in classroom to reinforce the learning, it plays a vital role in enhancing student achievement.

Furthermore, the results showed that making the students accountable for their learning, giving due attention to the importance of content coverage, conducting evaluation of the instructional objectives and preparation of supplementary instructional materials for their students are the best strategies to students' academic achievement. Ensuring these activities was reported by the upper achieving schools which enabled them to ensure student academic achievement.

In the Ethiopian context, the preparation of the secondary schools' curriculum is uniformly made at the ministry level and distributed for all schools. The prepared curriculum materials were not only appropriate in terms of learner's age, but also relevant and integrated so as to foster the academic performance of the learners. English and Mathematics teachers from lower achieving public secondary schools were in agreement about the appropriateness of the curriculum in terms of age and the relevance and integration of curriculum; Those teachers in upper achieving public secondary schools reported a desire for the curriculum materials to be more age-related, integrated and relevant in order to increase learners' depth of learning and knowledge.

### Teachers' provision of opportunity to learn

Opportunity to learn is defined as the total amount of time students are allocated to learn a given learning experience, including class work and homework (Creemers & Kyriakides, 2008). Teachers from all the three levels (upper, lower, and medium achieving schools) showed a positive response towards the notion that learners were given ample opportunity to assimilate the content they had learned in classroom which was a strategy to enhance learner academic achievement. In addition, the availability of adequate instructional materials, and the adequacy of instructional times allotted for each subject as strategies to enhance students' academic achievement was confirmed at all levels. Although the distribution of teaching materials and time allotment for each subject in Ethiopian context for all secondary schools is determined by the Ministry of Education, upper achieving public secondary schools felt that a range of teaching materials with depth and breadth should be available for all students and additional time should be allocated for each and every subject as it would offer the opportunity for the students to practise and apply the content (knowledge and skills) they learned increasing their academic achievement.

With regards to the student-teacher ratio, however, teachers in upper achieving public secondary schools reported that the situation was manageable in contrast to teachers in lower achieving public secondary schools who reported that the situation was challenging with a higher ratio of student to teacher. Teacher behaviour with regards to punctuality in arriving on time to teach the assigned subject was found to be better at the upper achieving schools and these tendencies seemed to have an effect on student achievement in the matriculation examination. Furthermore, when teachers prepare tests, they are guided by a table of specifications and pre-stated objectives. After the completion of each lesson, teachers evaluate the effectiveness of their teaching methodology as a strategy to enhance student achievement. In relation to these variables, upper achieving public secondary schools were found to be better performers which enabled them to achieve better standards in the matriculation examination.

## **Curriculum quality**

Curriculum can be defined as the content (knowledge and skills) teachers are required to teach in the classroom and what the students are expected to learn in the classroom (Ornstein & Hankins, 2017). Curriculum quality, as a student's academic achievement enhancing factor, is determined by the way in which objectives are formulated and the content, teaching methods and materials which are selected (Muijs *et al.*, 2013). Curricular priorities in different subjects were set by clarifying content knowledge and core objectives. The curriculum materials were prepared to maintain the balance between depth and breadth, content was sequenced in a clear step-by-step procedure so as so enable the learners in lower achieving schools to better understand the content. In addition, content was effectively integrated with different subjects and lessons in the subject matter to prompt student interest and motivate student achievement to enhance students' academic achievement. In terms of curriculum quality, it was also confirmed that the followings are the main roles expected of teachers to enhance students' academic achievement:

- Making an alignment between teaching methods and content taught,
- Using appropriate and diverse teaching materials in the teaching-learning process,
- Teachers need to be qualified, experienced and motivated to implement the subject matter to which they were assigned to teacher,
- Teachers needs to employ a variety of student-centred activities for the students to learn the content,
- The provision of curriculum material by the Ministry of Education, school board and the school team were in place,
- Teachers should make students should participate in co-curricular activities.

## Teachers' evaluation potential

The concept of 'evaluation potential' indicates teachers' capability to use assessment results to inform student learning with feedback in improving the existing learning difficulties (Teddlie & Stringfield, 2006). It involves the priority that teachers give to assessment and monitoring (Beare, 2007; Scheerens, 2016). The variables include evaluation practices, evaluation polices and moderation of exam papers. The degree of agreement towards these variables was reported to be higher among the

upper achieving public secondary schools and lower among the medium achieving public secondary schools and this better performance enabled upper achieving schools are to enhance learner's academic achievement to a better degree than the two levels.

## Summary of the main findings

In short the finding indicated that:

- Teachers, high expectations for student achievement in the matriculation examination and teachers use of structured teaching in such a case as: clearly formulating learning objectives and explaining those formulated instructional objectives to their students enhance students' academic achievement in selected Ethiopian public secondary schools.
- Teacher's provision of an opportunity for students to learn by providing adequate instructional materials and adequate instructional times for each subject was the best mechanism to enhance learner academic achievement.
- Teacher's evaluative potential and teacher's ability in maintaining curriculum quality by making: an alignment between teaching methods and content taught, teacher's qualification, teachers use of a variety of student-centred the best strategy to enhance student's accademic achievement.

## CONCLUSION

This article recommends that, Ethiopian curriculum designers and policy makers should improve secondary schools curriculum quality, and secondary school teachers should increases their effort in: setting high expectation of students achievement using structured teaching, giving opportunities for their students to practice their learning and increasing their evaluative potential to assess students learning. At policy level, a national educational policy as well as the national guidelines, time schedule for each subject, evaluation policies and learning materials is pivotal in guiding the teaching-learning process. This includes the role of a quality curriculum that prioritises different subjects and clarifies content knowledge and skills, taking into account core objectives and outcomes. The curriculum should ensure that content were sequenced in a clear step-by-step manner to ensure that learning moves from the concrete to the abstract to ensure the acquisition and development of critical thinking and depth of learning, supported by materials maintaining the balance between depth and breadth.

## Limitation of the study

Some limitations were experienced in conducting this research. Data from one secondary school in Tigray Regional State could not be collected due to security reason during data collection. To overcome this limitation, a secondary school with similar matriculation results was taken as the replacement.

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