

Major Factors Affecting Students' Academic Achievement in the Secondary Schools

The Case of Addis Ababa, Ethiopia

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Abstract

The purpose of this article is to examine the major factors affecting student's academic achievement in secondary schools of Addis Ababa, Ethiopia. Quantitative and qualitative approaches were used to investigate the research problem. For the quantitative part a survey questionnaire with four main parts dealing with factors i.e. self concept, class size, school size and teaching effectiveness were used as a parameter. Interview and focus group discussion (FGD) were used to collect qualitative data. The sample population of this study encompasses a total of 300 first cycle (9-10) secondary school students and 27 teachers from six secondary schools in six sub cities of Addis Ababa. The six secondary schools were chosen in view of the fact that they reflect the diverse school setting and personal characteristics of learners and teachers in the entire secondary schools of Addis Ababa spread in the 10 sub- cities. The findings showed that the formidable challenge, the class-size, is represented by higher level of discipline problem and the prevailing mode of instruction in their classrooms, which is lecture-centered method, where the students' role was reduced to note-taking and listening to instructor's explanation. Based on the findings, it is suggested that an awareness program on active learning approach should be given due considerations to help the teachers develop the characteristics that assist them achieve the expected goal.

Background

It seems highly likely, however, that the factors affecting performance of students in high schools are basically dependent upon the quality

of education accessible. For instance, how well students are taught and how much they learn, can have a vital impact on how long they stay in school and how regularly they attend.

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Furthermore, whether parents send their children to school at all is likely to depend on decision they make about the quality of teaching and learning provided at the high school level.

Arguably, the overriding importance of high school education lies in helping learners achieve their own economic, social and cultural objectives to become a good citizen. Concomitant to this, the supply of quality education at the high school level helps create a more egalitarian social fabric where its leaders are committed to a better service. Apart from augmenting the development of their creativity and emotional maturity, high school practice will acquaint them with the skills, knowledge, values and attitudes necessary for responsible, active and productive citizenship. Far more than others, the success or failure of achieving these educational outcomes is specifically important to those who practice it.

Accordingly, with respect to quality, the Ethiopian education and training policy MOE (2002) duly emphasised the need to improve the low quality of education through improving instructional resources, teachers' quality, educational management and financing.

On the other hand, the education sector development program envisaged the improvement of quality of instruction in secondary schools through a review of the curriculum aimed at incorporating relevant contents and better assessment practices to enhance student performance standards: rehabilitation of science laboratories; training and recruitment of qualified teachers; and expansion of

in-service training opportunities MOE (2005)

Currently, the Ethiopian secondary schools education is divided into four years of two cycles TGE, (1994 pp.14-15). The first cycle (grades 9-10) is designed to provide general education which prepares students for specific training and field work. Whereas, the second cycle (grades 11-12) is designed to prepare students for higher education. This study focuses on examining notable factors that affect students' academic achievement in the first cycle (9-10) secondary education in Addis Ababa. Therefore, this study attempts to sort out and analyse the many determinants of high school students' academic achievement in Addis Ababa focusing on the factors decisive for the students' school performance in the broader sense of attaining educational achievement as per his/her potential. Informed by their prevalence in many studies of academic achievement, the four major factors influencing students' academic achievement - level of self-concept, level of class size, level of school size and level of teacher's effectiveness in teaching have been examined in this research work.

In understanding the idea of self-concept, the growing consensus among the different authors is to consider it as an aspect of personality having a multi-dimensional nature. Among these scholars, Marshs Partker and Smith (1983) propose a hierarchical and multi-faceted model of self concept in which there exists one general factor and several specific ones, the latter including academic self-concept. For Sanchez (2000) academic self-concept

is at the base of future school success or failure, having been formed starting in early childhood education from peer contact and teacher attitude and expectations.

Self concept, as a component of personality development, has its own nature and peculiarity. Several researchers for instance Siavetson et.al, (1976) cited in Garma and Elexpurn, (1999) have tried to specify the nature of the term self-concept. To this end, they looked at its multidimensional nature characterised by a hierarchical organisation (a general self-concept and specific self-concept). As we go lower on the hierarchy, self concept becomes more specific and more susceptible to change; the different facets of self-concept become more differentiated among themselves with age and experience. Self-concept includes both descriptive as well as evaluative aspects.

In the majority of cases, the negative effects from class-size related academic achievement factors is attributed to large class atmosphere rather than to the smaller ones. Describing the extent of the limitation from large-class size Little and Thompson (1983) state that pupils can fall behind in the school work or experience academic failure where large classes do not permit the teacher to give personalised or individual attention to the pupils.

With regard to failure to cope with the school work, the atmosphere prevailing in large class learning often entails lack of clarity of purposes, lack of opportunity to discuss, inability to engage in independent study and get motivated.

By the same token, in large classes individualised instruction is believed to be very much hindered. Little and Thompson (1983) argue that the setting of large-classes compels teachers to resort to lecture centered instructional method manifested by limited teacher-student classroom interaction. The defining feature of such instructional method being little or no group discussion, oral communication between students and teachers is minimised, the assignment of written class-room exercise become less frequent and when assigned receives less attention.

As to the impact from school size, research studies consistently mentioned that positive effects of small school size are much bigger than large ones. Besides better academic performance, the benefit of small schools in general has been tied to other useful outcomes which help boost the overall academic achievement of students. In accordance with this, Barker and Gump (1964) stated that small schools have a role in increasing students' sense of belongingness and improved teacher attitude towards their work and relationship with staff.

This improved teacher attitude is often manifested through higher levels of cooperation between teachers, better relation with school administration and more positive attitudes towards teaching Stockyard and Mayberry (1992). By contrast, no research finds large schools superior to smaller schools in academic achievement Cotton (1996). On the other hand, the commonest forms of academic achievement limiting factors attached

to large schools are depersonalisation, negativism, alienation and ultimate truancy and dropouts Garbrino, (1997); discriminatory environment for minority students and those of low socio-economic status and those who are academically marginal Barker and Gump, (1964;) Fowler and Walberg, (1991)

With regard to teacher effectiveness, the teacher must have good knowledge over the substantive concept of the course to be taught and skilled in using appropriate instructional model as well as in classroom management.

Elliot (2003) saw teaching as a four-phase activity, namely, a curriculum planning phase, an instructing phase, a measuring phase, and an evaluating phase. To wisely generate a curriculum for teaching, the teacher must be considerate of the goals of teaching and clear formulation of more specific objectives. The teacher must also select subject matter suitable for achieving these goals. Actual instruction engages constructing, using and changing instructional plan and tactic to assist high school students perform well.

To measure learning outcomes, a teacher must select or create appropriate measurement strategy and then categorise and examine the resulting data. Finally, to make an appraisal of the whole teaching affair, or some selected part of it, a teacher must stand back with measurement data at hand and make balanced human judgments. These comprise judgments about the correctness of objectives, and subject matter, the usefulness of the actual instruction, and the validity and reliability of the

measurement strategy used to assess learning.

Research Objectives

In order to guide the research process, the researcher formulated the following research objectives

1. Identify the factors that affect the performance of students at secondary level.
2. Suggest a solution for the identified problems.

Research Design

Strauss and Corbin (1990:17) define the concept of research design as “the plan for the study, providing the overall framework for collecting the data, outlining the detailed steps in the study and providing guidelines for systematic data gathering”. Further, they made comparison between research design and an architectural blueprint which plans on organising and integrating results in a particular end-product. In line with the definitions, in this study the research design guided the researcher to follow a certain pattern in the research of the problem. This refers to all the decisions the researcher made in planning the study, not only what type of design to use, but also the sampling, sources and procedures for collecting and analysing the data. In this context, this study utilised a mixed method design.

Data Analysis and Interpretation

According to Yin (1994:102) data analysis consists of examining, categorising, tabulating, and recombining the evidence to address the initial research questions

of the study. The collected data were reviewed sentence by sentence to get a complete picture of the phenomenon and then coded.

The questionnaire items were tallied and tabulated in tables in accordance with the related issues and prepared for the analysis of data. The data were computed using percentage. On the other hand, the data collected through interviewee and focus group discussions were analysed qualitatively.

Ethical Consideration

For the purposes of this study, ethical issues relating to human participation and data collection were taken into account. Prior to the questionnaire and FGD, the participants were given explanatory statements which, amongst other things, outline the purpose of this study and the aims. Maintaining privacy is an important consideration in a study of this nature. Each participant was assured that no data or information from the questionnaire and FGD would be exposed as a particular individual's thoughts and feelings.

Population and Sample

The population of this study was grade 9-10 public high school students in Addis Ababa. The majority of high schools in the entire ten sub-cities share a more or less similar attributes in terms of management system and infrastructural facilities. Thus, in order to ensure that the samples reflect certain characteristic relevant to the study, 300 hundred students from six high schools and from the ten

sub-cities (i.e. Arada, Lafto, Kirikos, Ledeta, Yeka and Bole) were selected on purposive sampling method. Apart from this, the researcher has made prior assessment as to the availability of contact persons and willingness of approached students to fill out questionnaires. Three hundred questionnaires were dispatched. Except for the two, (two questioners were discarded because they are not properly managed by the respondents) all of the dispatched questioners were properly administered.

Table 1

Final Portrait of the Respondents

<i>High Schools And Sub- Cities</i>	<i>Grade 9</i>	<i>Grade 10</i>
Tikure Anbesa (Arada)	24	25
Ginbot -20 (Lafto)	25	25
Misrak Atekalay (Kirikos)	25	25
Baclha Abanefso (Ledeta)	25	25
Kokebe Tsibah (Yeka)	24	25
Dr. Adiss Alemayehu (Bole)	25	25
Total	148	150

Table 1 reveals the perception of respondents towards the influential factors determining their academic self-concept record. "Poor motivation in problem-solving" was perceived by majority of the respondents as the most important factor determining their academic achievement (see Table1). This is essentially related to the conspicuous absence of teaching-learning process accommodating reflective practice and critical thinking. Growing bodies of scholars agree that a teaching learning process focused on the critical thinking of students and conducted through the reflective

Discussion

Self concept

Table 2
Self Concept as Limiting Factor for School Achievement

		<i>Lower attitude in one's social acceptance</i>			<i>Less motivation in problem-solving</i>			<i>Believing that I am out casted by my class-mates</i>		
		N=153	N=95	N=99	N=104	N=91	N=150	N=194	N=102	N=143
		L	M	H	L	M	H	L	M	H
Achievement	Low	48 (68.57)	17 (24.29)	5 (7.14)	34 (48.57)	26 (37.14)	10 (14.29)	57 (81.43)	11 (15.71)	2 (2.86)
	Middle	93 (53.14)	54 (30.86)	28 (16.00)	64 (36.57)	70 (40.00)	41 (23.43)	119 (68.00)	42 (24.00)	14 (8.00)
	High	12 (22.64)	24 (45.28)	17 (32.08)	6 (11.32)	14 (26.42)	33 (62.26)	18 (33.96)	11 (20.75)	24 (45.28)

practice of the teachers is better suited for improved academic achievement Paul, (1993); Schon, (1983); Larrive (2000). As to critical thinking, Paul (1993) recommends the creation of a school environment where students maintain creative thinking through curiosity. According to him, creative thinking through curiosity can be realised within an intellectually rigorous teaching-learning atmosphere i.e. a classroom interaction where the teacher's mind could stimulate his/her students with questions and further questions and that students could see the teacher's mind is at work.

In teaching learning process, reflective practice refers to the process in which the teacher studies his or her own teaching methods and determines what works best for the students. It involves the consideration of ethical consequences of classroom measures on learners.

The appeal of the use of reflective practice for teachers is that as teaching and learning is complex, and there is no single right approach, reflecting

on different versions of teaching, and reshaping past and present experiences will lead to improvement in teaching practices. Schön's reflection-in-action assists teachers in making the professional knowledge that they will gain from their experience in the classroom an explicit part of their decision-making.

As Larrive (2000) argues, reflective practice moves teachers from their knowledge base of distinct skills to a stage in their career where they are able to modify their skills to suit specific contexts and situations, and eventually to invent new strategies. In implementing a process of reflective practice, teachers will be able to move themselves and their schools beyond existing theories in practice. Further, Larrive (2000:P.293) concludes that teachers should "resist establishing a classroom culture of control and become a reflective practitioner, continuously engaging in a critical reflection, consequently remaining fluid in the dynamic environment of the classroom"

Seen against the above discussed theories, the reality on the ground depicts the near-absence of reflective practice and critical thinking in most sessions of the concerned classrooms. Judging from the responses provided by students who participated in the FGD, the existing mode of teaching-learning process within the concerned classrooms has little to offer in terms of critical thinking and reflective practice. To this end, the students emphasised the virtual absence of a classroom atmosphere capable of promoting learning academic curiosity.

In this connection, it was stressed that the kind of questions in teacher-student exchange has overwhelmingly been centered on the rehearsal and explanation of already established theoretical facts. Whether in theoretical lessons or that involving quantitative concept, the questions put to students often expect answers providing mere restatement of what has been said by the instructor with regard to the issue.

Further explaining on what this means, the students stated that if their answer involves a reinterpretation of the issues concerned, the whole answer will not qualify as a valid response no matter how much it is sound. In particular, it was said that addressing mathematical problems through a formula having different set of calculations than that taught in the classrooms or contained in the textbook is considered by teachers as a wrong one. It was emphasised, despite the fact that the formula the student employed is sound and to come to the right solution and that he or she is ready to defend his approach through

tangible reasons and evidences, the teachers will give little consideration to the student's explanation.

On top of this, students in the FGD complained of teachers' reluctance to supply them with a reasoned analysis on how the evaluation of the arguments and rationales of the student in assignments and subjective type exams were weighted. On the other hand, while sharing the concerns raised by the students, teachers in the FGD blamed passiveness and language problem on the part of students. In line with this, the teachers contended that the teacher-centered teaching learning process experienced by the students in lower classes have enduring consequence of shaping learners' mind as mere receiver rather than critical thinker. Besides this, the very poor level of understanding of the English language (which is the medium of instruction) was taken as another challenge preventing students from having intellectual curiosity in reading and discussion.

In the mean time, veteran teachers who participated in interview contended that the challenge from poor teacher-effectiveness is actually ascribed to the problem of both students and teachers. According to them, the culture of teacher-centred teaching methods, which students have been exposed for years, has pushed them towards an academic mentality favouring authoritarian classroom setting over a vibrant, and student-centred one. At times, FGD participants claimed, the students took such instructional methods as group discussion and on the spot presentation as suspect classroom

mechanism where the teacher who is not prepared or is anyway bored to teach the session has crafted as a means of by-passing the classroom session.

In the same vein, the culture of teacher-centered method is claimed to have a significant share in reducing teacher commitment to invoke students' critical thinking and conduct reflective practice. Nonetheless, as to the lower level of reflective practice on the part of teachers, the FGD participant teachers, emphatically argued that the issue has to do with lack of teaching experience. As such, the teachers in the concerned classrooms, the majority of who are young and fresh university graduates have little to offer in terms of transmitting theoretical concepts with flavour of a real life experience.

As can be seen from Table 2, disciplinary problems are rated as the most influential limiting factor in academic achievement. Furthermore, teachers in FGD showed concerns with respondents' claim of putting disciplinary problems as the biggest challenge in working for improved level of academic achievement.

Further, the concerned students and teachers have also commented that the class size driven incidence of higher level classroom indiscipline is attributable to large number of student population. Both the students and teachers confirmed that the student population in the respective sections number anywhere 70-75. According to them, this number is large enough to ignite wide scale classroom indiscipline and severely limits student-student and student-teacher classroom interaction. In an attempt to verify the large class size claim of students and teachers, the researcher examined relevant materials dealing with the principles and trends of pupil-teacher ratio (PTR)

In this respect, the standard set for the pupil-teacher ratio for national secondary schools is 40 while the current PTR in first cycle secondary schools (9-12) is 51 students (Solomon Araya, (2008). Solomon also claimed that the target set for pupil-section ratio at secondary level was 60 students. Measured against this national standard, the average number

Class Size

Table 3
Class Size as a Limiting Factor for School Achievement

		<i>Lack of knowledge over subject matter</i>			<i>Lack of interest in teaching</i>			<i>Mode of Instruction</i>		
		N=163	N=75	N=60	N=82	N=73	N=143	N=30	N=39	N=229
Achievement		L	M	H	L	M	H	L	M	H
	Low	46 (65.71)	18 (25.71)	6 (8.57)	30 (42.86)	20 (28.57)	20 (28.57)	16 (22.86)	13 (18.57)	41 (58.57)
	Middle	101 (57.71)	46 (26.29)	28 (16.00)	21 (12.00)	43 (24.57)	95 (54.29)	11 (6.29)	21 (12.00)	143 (81.71)
	High	16 (30.19)	11 (20.75)	26 (49.06)	8 (15.09)	10 (18.87)	28 (52.83)	3 (5.66)	5 (9.43)	45 (84.91)

of 70-75 students in the concerned classes is large in terms of both pupil-section and pupil - teacher ratio. On the other hand, a study conducted on active learning approaches in some schools of Ethiopia identified that large classes of more than 70 students per section is one of the biggest challenges in the implementation of active learning approaches Birhanu Moges, (2010)

The impact from disciplinary problems during structured learning sessions, as a crucial factor affecting students' academic achievement, was addressed from two perspectives- student misbehavior and class-room management.

With regard to student misbehavior, most of focus group discussion (FGD) participants underlined that the overwhelming degree of challenge from learners' indiscipline, often got manifestations through teasing and other misbehaviors during classroom discussions and examinations.

In line with this, the majority of the students complained about scornful

or otherwise belittling attitudes which used to be thrown on their ideas. By way of illustration, it was claimed that most students laugh at or mock somebody, who asks or responds to a question with halting English language (which is the medium of instruction in the secondary schools of the nation).

Further, they recalled innumerable occasions where students were ridiculed after taking the floor and presenting the details of their assignment or moved to the black board for demonstrating a class work exercise. Similarly, the majority of teachers participating in teacher's focus group discussions held student misbehaviors and miss conduct as the number one reason for class room level indiscipline of the worst kind. According to them the problem usually surfaces when a misbehaving student remains defiant to respect teacher's request for his / her attentive follow up of a particular teaching - learning session.

Table 4
Level of School size as Limiting Factor for School Achievement

		<i>Creates boredom from too many student population</i>			<i>Gives room for discipline problem</i>			<i>Limits class room interaction</i>		
		N=106	N=93	N=99	N=57	N=91	N=150	N=53	N=102	N=143
Achievement		L	M	H	L	M	H	L	M	H
	Low	40 (57.14)	21 (30.00)	9 (12.86)	28 (40.00)	23 (32.86)	19 (27.14)	18 (25.71)	29 (41.43)	23 (32.86)
	Middle	59 (33.71)	64 (36.57)	52 (29.71)	21 (12.00)	57 (32.57)	97 (55.43)	30 (17.14)	55 (31.43)	90 (51.43)
	High	7 (13.21)	8 (15.09)	38 (71.70)	8 (15.09)	11 (20.75)	34 (64.15)	5 (9.43)	18 (33.96)	30 (56.60)

As to school size related factors, the item in Table 3 indicates that “encouraging higher discipline problem” was rated as the major challenge by most of the respondents (see Table 3). Furthermore, many of the respective secondary schools management personnel emphasised that the change from shift system to the whole day teaching has given rise to an increase in the population of students in the school. According to them, this scenario has created inhospitable school learning atmosphere through the encouragement, though inadvertently of more space for incidents of discipline problem.

Explaining on the manifestation from large school size driven indiscipline, focus group discussion (FGD) participating students and their counterpart from the teachers’ category stressed the odds from diverse set of learner behaviours. To this end, the large school population is said to have resulted in the emergence of highly heterogeneous student characteristics pretty difficult for proper management. On the other hand, Auduc (1994:51) pointed out that heterogeneity within the school student population can be evident from the following realities.

1. Widely differing levels of school performance.
2. Particular kinds of personal relations and know – how
3. Culturally and linguistically diverse life style
4. Different religions

As far as students are concerned particular kind of personal relation and

differing levels of school performance are considered as the notable features of student heterogeneity fuelling discipline problems. In the context of personal relationship traits, the majority of FGD female students, who claimed to be rather decent and passive recalled numerous instances where their attempt to study at the school library faced an enormous challenge from male students. Explaining the point, such category of FGD student participants recalled frequent cases where pieces of hard-core pornographic images were inserted into their belongings (books and hand bags) whenever they briefly left their seats, for example, when going to the circulation section. Yet male students having a somewhat strict religious morality reported frequent cases of teasing from other students known for their taste of fashionable class and freaky style.

Turning to heterogeneity related impact on academic performance, the FGD participating students who have high academic performance record expressed discomfort from frequent causes of student indiscipline. Generally, these categories of high performance students complained about the offensive treatment from the less performing students on account of their reluctance to consenting to exam copying (cheating).

In fact, it has already been established that the notions of youth culture, in most cases, actually punish those students who wanted to excel academically. Arends, (1997). Salvin (1984) in Arends noted that “students

often do not value their peers who do well academically, while they do value their peers who excel in sports..... this is so because sports (the team, the school, the town), while academic success benefits using grading on the curve or any competitive grading or incentive system, any individual's success reduces the chances that any other individual will succeed.

the same amount of material in the same way and at similar pace.

Accordingly, the basic elements of a lecture-centred approach characterised by "firm discipline, attention to order and procedure and lecture-centered curricula" Duffy and Kirkely (2004) have created a tight atmosphere where students' voice was highly suppressed by an all-rounded dominance of the

Teacher Effectiveness

Table 5
Level of Teacher Effectiveness as Limiting Factor for School Achievement

		<i>Lack of knowledge over subject matter</i>			<i>Lack of interest in teaching</i>			<i>Partiality in treatment of student</i>		
		N=163	N=75	N=60	N=82	N=73	N=143	N=30	N=39	N=229
		L	M	H	L	M	H	L	M	H
Achievement	Low	46 (65.71)	18 (25.71)	6 (8.57)	30 (42.86)	20 (28.57)	20 (28.57)	16 (22.86)	13 (18.57)	41 (58.57)
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	High	16 (30.19)	11 (20.75)	26 (49.06)	8 (15.09)	10 (18.87)	28 (52.83)	3 (5.66)	5 (9.43)	45 (84.91)

As can be seen in Table 4, poor teacher effectiveness is attributed to the mode of instruction being used. In relation to this, it was noted during class-room observation that the predominant mode of instruction used to be teacher- centred where as student- centered or active learning is minimal at best and nil at worst. Thus, it was learnt that invariably all class sessions were taught wholly through direct instruction by the teacher, the students for the larger part remaining passive and being expected to stick to

teacher. Moreover, there was a fairly large gap between the goal intended to be achieved by a lecture-centered approach of direct-instruction mode and the various instructional models of student-centred teaching approaches.

Along these lines, the lesson in direct instruction consists mainly of presenting information to students and modeling particular skills in a clear and efficient manner (classroom instruction and management)while direct instruction enables teachers to

promote student learning of procedural knowledge, straight forward declarative knowledge and study skills classroom instruction and management Arends, (1997). By contrast, the various aspects of active learning are meant to help students think, solve problems and to become autonomous learners.

Ethiopian education policies and implementation strategies encourage active learning or student-centred approach that include discussion methods, discovery learning, cooperative learning, inquiry learning, problem-based learning and the development of critical thinking MOE, (2002). In realising such policies, however, various scholars emphasised that lecturer's attitudes affect the effectiveness of the implementation of active learning / student-centred approach Zan and Martino, (2007:157-168); Lea et al, 2003:321)

In this study the majority of FGD members (teachers) on this pedagogical issue, generally agreed on the significance of active learning in promoting critical thinking and problem-solving ability of students far better than lecture-centered approaches.

Nonetheless, they also claimed that lack of a conducive atmosphere to implement active-learning (student centered approaches) has prevented them from translating their attitude regarding the importance of active learning in to practice. The major factors hindering the proper implementation of active learning were said to be constitutive of the compactness of classroom setting and large number of students, time limitations blocking

the active involvement of students in teaching among others.

Compactness of classroom setting was explained in terms of students' seating arrangement. Accordingly, teachers claimed that the classroom seating arrangements do not allow them to employ active learning approaches. In fact, classroom observations have also revealed that seating arrangements are "making students sit in rows facing the teacher and the blackboard" an arrangement which encourages only one-way communication and discourages students from talking to each other.

Besides this, most teachers indicated that whenever an attempt was made to involve students in group-discussions or any other form of cooperative learning, a lot of noise broke out which also disturbed the classroom session in adjacent rooms. Parallel to this, large class size was also blamed for curtailing problem-based teaching as it reduces the chance of individualised supervision from teachers—still another problem attributed to the class size. This caused a huge burden during the assessment and evaluation of student exams and assignments.

The other factor considered as a challenge for conducting problem-based and cooperative learning was the brevity of instructional sessions. In the light of this, it was argued that, more often than not, conducting group discussions and/or allowing students to demonstrate skills proved to be demanding in that it consumes the whole period without imparting basic theories and principles.

In addition, the deeply entrenched familiarity with the culture of lecture-centered teaching approaches on the part of teachers and students as well as the lack of special training (on active learning approaches) for the former has exacerbated the problem. The net effect of the said inconveniences, as the respondents reflected, was the high level of adverse impact from low problem solving capacity in their bid to attain better academic achievement.

Responses to questionnaire item for 'teacher effectiveness' revealed that the item "instructional practices" was considered by most respondents as a major academic achievement limiting factors. Further, FGD participating teachers agreed to the ratings of student respondents. Accordingly, FGD member teachers emphasized that failure to apply a variety of instructional practices represents a major challenge hindering effective teaching and or improved academic achievement.

As such, students in the FGD explained that invariably each and every classroom session was conducted through lecture-centered teaching method where the students' role was little more than listening and note taking. In this context, the students underscored that getting an opportunity for group discussions or a possibility where they experience other modes of active learning/student-centered instructional approach was negligible.

Findings

1. In Table 1, the data showed that students' constraint with regard

to academic self-concept was highly related with low level of problem solving ability. The results showed that the existing low level of problem solving ability was a consequence of classroom teaching learning atmosphere devoid of critical thinking and reflective practice. As to critical thinking, it was claimed that the inclination towards lecture-centered methods has given rise to authoritarian classroom environment where students' academic curiosity was severely curtailed. On the other hand, reflective teaching practice was said to have been hampered by abysmal level of relevant real life experience on the part of the teachers.

2. The data in Table 2 revealed that the most important challenge was higher level of discipline problem. In this regard, FGD participating students and interviewee teachers agreed that the large number of students have contributed towards an uncontrolled level of classroom misbehaviors. The respondents from both categories stressed that the large class size has hindered appropriate classroom management to control behaviors. On the other hand, while the impact from reduced interaction was considered as another serious problem from large class, responses from FGD participating students and teachers underscored its serious consequences in the scale of discipline problem and the adverse impact of large class size in limiting teacher-student interaction.

3. Considering school size, Table 3 indicates that huge number of student population was said to have been involved in elevated degree of discipline problems. The large sizes of the school, according to FGD participating students, have given room to diverse kinds of student misbehaviours which distracted their attention while reading in the libraries. Similarly, responses from school management personnel underlined that the large school size, both in terms of numerical increase and heterogeneous student background has negatively affected the chances of student academic achievement.
4. The data in Table 4 showed that teacher effectiveness has been highly affected by the mode of instruction being practiced. In this context, FGD participating students complained that the dominant mode of instruction in their classrooms was lecture-centered method where their role was reduced to note-taking and listening to instructor's explanation. On the other hand, teachers blamed large number of students and compact classroom setting as the biggest reasons for having little or no active learning or student centred classrooms.

Conclusions

From the findings of this study, one can draw varying degrees of implications on student academic achievement through the analysis of

the data received. Some school-related characteristics were highly rated by the students to indicate that these characteristics have the strongest effects on their academic achievement than the other characteristics not so highly rated.

In this regard, it is worth noting that these highly rated characteristics are related in that the effect of one leads to the other. Comparing the items contained in the four tables, those attributable to teacher effectiveness have been rated "High" by majority of the students pointing out that the quality of teaching is the factor with the greatest impact on students' academic achievement. Based on the insights from the discussion, it is reasonable to argue that the negative trends seen in other school-related and personal characteristics traced their roots from this characteristic of the school.

Thus, with regard to school-related characteristics, a teacher assigned to teach in large classroom and burdened with overload of teaching schedule is, arguably, less capable to give personalised attention to his/her pupils. His/her ability to undertake effective classroom management and ensure appropriate discipline is therefore undermined, again for the same reason. Similarly, the kind of teaching atmosphere mentioned greatly limits the teacher's opportunity to involve in problem-based teaching. This in turn, will result in a situation where the student lacks both the will and commitment to exercising problem-solving skills thereby forcing them to experience low levels of academic self concept.

Given this disappointing reality, the need to create a school and classroom atmosphere where teachers can undertake their tasks to the best of their ability cannot be overruled. In addition, of primary importance, at least in the short term, is that of promoting teachers' pedagogical competence. Accordingly, teachers should be well accustomed to appropriate and creative methods of classroom management via in-service training. Such trainings would possibly be focused on familiarising

teachers. The major features of active learning (student centred) and skills of classroom management will assist them to appropriately discipline their pupils, particularly towards accommodating student heterogeneity.

Finally, it can be said that, without prejudice to the need of reforming the academic setting, the inputs focusing on teachers' competence may serve as powerful weapons to improve the possibilities of academic achievement by the high school students concerned and their counter-parts across the nation.

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