

Effects of Over-Crowded Classes on Teaching Learning Process at Secondary Level in District Nankana Sahib

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Abstract *The researcher aimed at investigating the effects of overcrowded classes on the teaching learning process at secondary level. By nature, this research study was descriptive so survey research design was employed and a closed ended questionnaire having twenty items related to the research problem were developed on five point Likert's scale for the teachers (Senior Science Teachers) and the 10th grade students of government high schools from three tehsils of district Nankana Sahib. Pilot study was conducted to achieve the reasonable face and content validity and reliability, expert opinions and test-retest techniques were used and 0.891 Pearson's product moment was assured. One hundred (100) questionnaires for SSTs both males and female and 120 questionnaires for students both boys and girls were administered personally and with the help of some friends, six principals both of male and female were interviewed using structured interview schedule data collection technique and data was collected. On the basis of analysis and interpretation of data, indiscipline classes due to overcrowdings affect the teaching learning process badly; the performance of the students is not easily assessed in overcrowded classes and teachers are unable to interact with students easily in overcrowded classes were the conclusions of this research study. The researcher suggested that the government must make it possible to implement the law of recommended class size and reduce the problem by building more classrooms for the students at secondary level. Policy makers may formulate the policies for the effective assessment and evaluation process.*

Key Words:

Overcrowded
classes,
Teaching
Learning
Process,
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Level

Introduction

School is a place where the teachers and the students live in secure closeness. The teachers and the students live under the umbrella of the process of teaching and learning. It is a place where an individual gets formal education. The school

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provides facilities the more real learning will be taken place. It is the classroom where students from diverse sections of society come in close contact with one another. Individual as well as group studies take place in a classroom. Well planned and controlled classroom is the indication of the effective learning. Teachers must build up the capability to generate helpful learning opportunities for effective teaching in the classrooms (Eilam & Poyas, 2006). Kersting, Givvin, Sotelo, & Stigler, (2010) opined that professional vision is a significant requirement for effective teaching.

An overcrowded classroom is that having the number of students exceeding the optimum level such that the teaching learning process is hindered. Khan and Iqbal (2012) concluded that effective teaching was impossible in overcrowded classes and greater part of teachers was facing a number of problem such that instructional, discipline, physical and evaluation problems for the delivery of effective instruction. Around the world, teachers are facing the problems regarding delivery of instruction, administration, and judgment in overcrowded classrooms (Benbow & Moshiro, 2007). Amarat (2011) is of the view that the teachers faced the most serious problem, in public schools, is overcrowded classrooms. The students show negative attitudes in overcrowded classrooms due to frustration as they are despondent and discouraged as well (Oliver, 2006). Shah and Inamullah (2012) revealed that overcrowded classes directly affect the process of teaching and learning. Overcrowded classrooms are not only the cause of the bad performance of the students but also put huge stress on teachers. According to Fin (2003), teacher morale and enjoyment of their profession are negatively affected in overcrowded classrooms. In overcrowded classrooms, teachers face many challenges in the classroom. According to Lannoy and Hall (2010), the number of students in a class is directly related to the quality of education. An overcrowded class has a lot of effects on teachers as the quality of teaching and learning diminishes in an environment that is overcrowded. In the larger the class, it is difficult for the teachers to know the circumstances of each student. Mtika (2010) say that smaller classes allow teachers to interact more with the students and provide individual attention to the students. According to Emmer and Stough (2010), teachers find it difficult to monitor behaviors and teaching and learning activities in overcrowded classrooms. Overcrowded classrooms affect classroom management. Onwu and Stoffels (2005) revealed that the following problems in an overcrowded classroom which impacts on the performance of teachers.

- Lack of physical space.
- Diminished opportunities for learners for the active participation in the learning process.
- The impersonalizing of teaching.
- Excessive workload for teachers.
- Limited opportunities to meet individual needs of the learner.

According to Norris (2003), teachers used class time to resolve problems and relieve approach in overcrowded classrooms in America. This is the cause of loss of time from learning and affects the teaching and learning process. Norris (2003) suggests that the environment of the classroom negatively affects the learning process. According to Akinsolu and Fadokun (2003), an overcrowded classroom in Nigeria is an immense factor for the decisive educational goals and objectives. Kolo and Ojo (2006) revealed that teachers perceived that much time is consumed doing during teaching large classes in Nigeria. According to Akinsolu and Fadokun (2003), Overcrowded classes in Nigeria are an admirable calamity. According to Herzallah (2011), in Northern Gaza, teachers face the problem of the professional development in overcrowded classrooms. Herzallah (2011) and Nesane (2008) proposed a strong argument that it is very difficult for a teacher to develop discipline, attainment of educational goals and quality teaching in a classroom that is overcrowded. According to Crute (2004) concluded that one third of newly recruited teachers depart the teaching profession after the first five years because of the stressful challenge of overcrowded classrooms. It is commonly recognized that the “impact of class size on pupil learning is different than when the upper limit is as high as 100, as in many developing countries” (UNESCO 2004). U.S. Agency for International Development proposed that there exists an inverse relationship between size of the class and outcomes of teaching learning process; the lower the learning outcome will be lower in the result of the larger the class (UNESCO 2009). Many researchers had their points of view that, in overcrowded classes, the teachers are unable to employ quality teaching and learning environment for learners (Blatchford et al., 2002; Hattie, 2005; Pedder, 2006 Zhang, 2002).

Statement of the Problem

“Effects of overcrowded classes on teaching learning process at secondary level in District Nankana Sahib”

Objectives of the Study

The objective of the study was:

- To investigate the effects of overcrowded classes on teaching learning process at secondary level in District Nankana Sahib.

Research Questions

1. What is the effect of indiscipline classes due to overcrowdings on the teaching learning process at secondary level?

2. How evaluation and assessment system is affected in overcrowded classes for the effective teaching learning process?
3. What is the effect of overcrowded classes on teacher- students' interactions in teaching and learning process?
4. Are overcrowded classes causes of poor delivery of instruction at secondary level?
5. What is the relationship between overcrowded classes and teaching learning process?

Delimitations of the Study

The study was delimited to:

- District Nankana Sahib
- Government Boys and Girls High Schools
- Principals / Head Teachers (Male & Female)
- Secondary School Teachers SSTs (Male & female)
- Only the students of 10th grade

Research Methodology

Research Design

The study was descriptive in nature and survey research design was used to gather relevant information and data regarding the problems of overcrowded classes to investigate the effects of overcrowded classes on the teaching learning process at secondary level.

Population

The population for this research study was all the principals/ head teachers, secondary school teachers and the students of the public high schools in the district Nankana Sahib. There are 97 both male and female high schools in the district Nankana Sahib. Six hundred and twenty three (623) secondary school teachers both male and female (SSTs) have been appointed for the teaching at secondary level in the district Nankana Sahib and 9164 students are enrolled in both male and female public high schools at secondary level in District Nankana Sahib.

The detail of the population for this research study was as:

Name of Tehsil	No. of Schools			Principals			Secondary School Teachers (SSTs)			Students		
	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total
Nankana	27	16	43	19	12	31	173	103	276	2550	1511	4061
Shahkot	18	14	32	14	11	25	116	90	206	1701	1323	3024
Sangla Hill	13	9	22	11	06	17	83	58	141	1228	851	2079
Total	58	39	97	44	29	73	372	251	623	5479	3684	9164

Sampling

Three types of sampling methods were chosen for this study. The sampling techniques that were chosen are purposive sampling, convenience and simple random sampling. Twenty (20) public high schools (M=10, F= 10) from the three tehsils of district Nankana Sahib having the overcrowded classes were selected for the sampling. Five teachers (SSTs), three classes and 20 students from each class from one of the school were selected. One hundred (100) teachers (SSTs) both male and female (M=50, F=50), five from each school, were taken as sample by using purposive and convenience sampling techniques and 120 students both of boys and girls (B=60, G=60) from all the three tehsils of the district Nankana Sahib were taken as sample using simple random sampling technique. Six principals / head teachers both of male and female (M=3, F=3), two both of male and female (M=1, F=1) from each tehsil were taken as sample using purposive and convenience sampling techniques.

The detail of the sample for this research study was as:

Name of Tehsil	No. of Schools			Secondary School Teachers (SSTs)			Students		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
Nankana	4	4	8	20	20	40	20	20	40
Shahkot	3	3	6	15	15	30	20	20	40
Sangla Hill	3	3	6	15	15	30	20	20	40
Total	10	10	20	50	50	100	60	60	120

Instrumentation

The researcher developed a closed ended questionnaire, having 20 items related to the research problem, for SSTs and students on five points Likert scale ranging from strongly agree to strongly disagree to get responses about the effects of overcrowded classroom on teaching learning process. The questionnaire for the students was also translated in National language (Urdu). The items of the questionnaires were arranged properly to investigate the effects of overcrowded classroom on the teaching learning process at secondary level in District Nankana Sahib. A structured interview schedule was developed by the researcher for the principals / head teachers having five questions related to the research problem.

Validity and Reliability of Instruments

Content and face validity technique was used to assess the validity of the research instruments. In this study, the expert opinions from three experts regarding the field were obtained and the validity of the instrument was assured that all aspects of the research problem were captured in the questionnaires. A test-retest reliability technique was used to determine the reliability of the research instrument. The questionnaires were first personally administered to three Head teachers / Principals and five SSTs from the population not included in the sample were selected for pilot testing. The questionnaires were personally administered, the data was collected and scores were recorded. After two weeks, the same

questionnaires were again administered personally to the same respondents and the scores were recorded again. Pearson's product moment formula was used to calculate the coefficient of correlation between the first and second scores. The calculated Pearson's product moment was 0.891 and the reliability of the instruments was thus assured. After being assured of reliability of the instrument, questionnaires were administered.

Data Collection

The lists of the names of the head teachers / principals and the lists of Government male and female High Schools in the district Nankana Sahib were obtained from the office of the worthy DEO (SE) Nankana Sahib. The researcher also obtained telephone numbers, Mobile numbers and e-mail addresses of the head teachers / Principals of the Government Boys and Girls High schools of Nankana Sahib from the office of the worthy DEO (SE) Nankana Sahib. The researcher requested the principals telephonically and by e-mail to obtain the mobile numbers of the SSTs and thus contacts numbers were obtained. Principals and teachers were telephonically informed and requested to help the researcher to collect data.

The respondents were informed about the research study and they were provided confidence. The respondents were also told that opinions and information provided by them will be kept confidential and only be used for research purpose. The students were helped by guiding them on how to respond the questionnaire, for them, the questionnaire was also translated in Urdu. One hundred (100) questionnaires for SSTs and one hundred twenty (120) questionnaires for students were administered personally by the researcher and with the help of some of the friends among the respondents. The researcher remained intact with the respondents telephonically and visited the schools many times to receive the questionnaires until the researcher received all the questionnaires from the respondents and thus data was collected. The researcher interviewed the six principals both of male and female (M=3, F=3) on the scheduled dates and time, responses were written personally by the researcher and data was collected.

Analysis and Interpretation of Data

The data on the "The effects of overcrowded classes on teaching learning process at secondary level in District Nankana Sahib" was collected through three questionnaires. One hundred (100) questionnaires for SSTs and one hundred twenty (120) questionnaires for students were administered for the collection of data regarding the research problem. All the respondents (100%) responded the instruments. Six principals both of male and female (M=3, F=3) were interviewed for the collection of data regarding the research problem. The data collected was tabulated and analyzed by using percentage, Mean, chi square test and standard

deviation statistics with SPSS (Statistical Package for Social Sciences) updated version. Chi square value was calculated at the degree of freedom 1 having table value 3.841 at the level of significance 0.05

Research Question 1: What is the effect of indiscipline classes due to overcrowdings on the teaching learning process at secondary level?

Table 1. Analysis of Effect of Indisciplined Overcrowded Classes on Teaching Learning Process

Statement		Respondents	Degree of Responses					Mean	Chi Sq Value	Sd. Dev.
			SA %	A %	UNC %	DA %	SDA %			
Indiscipline classes due to overcrowdings affect the teaching learning process badly.	100	SSTs	30	45	7	11	7	3.8	3.4081	16.9
			30	45	7	11	7			
	120	Students	37	49	6	19	9	4.4	5.5664	18.4
			30.8	40.8	5	15.8	7.5			

Table 1 reveals that majority of the both of the respondents SSTs and students 75% and 71.6% respectively were in the favor of the statement that overcrowded classes disturb the discipline of the classes which affect the teaching learning process badly. Mean values show that indiscipline overcrowded classes the teaching learning process badly. Chi square value for the responses of SSTs is below the table value (3.841) which results that the statement is accepted by the respondents. Standard deviation values also represent that minority of the respondents were not in the favor of the statement. The standard deviation values were 16.9 and 18.4 respectively for the responses of the SSTs and students and the result is that indiscipline classes due to overcrowdings badly affect the teaching learning process.

Research Question 2: How evaluation and assessment system is affected in overcrowded classes for the effective teaching learning process?

Table 2. Analysis of Effect of Evaluation and Assessment System in Overcrowded Classes on Teaching Learning Process

Statement	N	Respondents	Degree of Responses					Mean	Chi Sq Value	Sd. Dev.
			SA %	A %	UNC %	DA %	SDA %			
The performance of the students is easily assessed in overcrowded classes.	100	SSTs	6 6	9 9	3 3	15 15	67 67	1.72	1.0259E-11	26.6
	120	Students	11 9.2	9 7.5	11 9.2	31 25.8	58 48.3	2.03	3.8692E-11	21.0

It is evident from the table 2 that 15% SSTs were of the view that the performance of the students is easily assessed and evaluated while 82% SSTs opinioned that the performance of the students is not easily assessed and evaluated in overcrowded classes at secondary level. Only three percent SSTs were uncertain about the statement. Mean value 1.72 for the responses responded by SSTs represents that majority of the respondents did not favor the statement. Table No.2 clears that 74.1% students were disagreed with the statement while 16.7% students were agreed with the statement. Mean value is 2.03 and chi square value is 3.869 which is above the table value shows that the statement is not true. The result is that it is difficult to evaluate the performance of the students in overcrowded classes.

Research Question 3: What is the effect of overcrowded classes on teacher-students’ interactions in teaching learning process?

Table 3. Analysis of Effect of Teacher Students’ Interactions on Teaching Learning Process in Overcrowded Classes

Statement	N	Respondents	Degree of Responses					Mean	Chi Sq Value	Sd. Dev.
			SA %	A %	UNC %	DA %	SDA %			
Teachers interact with students easily in overcrowded classes.	100	SSTs	6 6	9 9	5 5	47 47	33 33	2.08	2.578E-11	16.9
	120	Students	13 10.8	16 13.3	12 10	51 42.5	28 23.3	1.39	1.4999E-06	18.4

It is revealed from the table 3 that 15% SSTs were of the view that teachers interact with students easily in overcrowded classes while 88% SSTs opined that the teachers are unable to interact with students easily in overcrowded classes at secondary level. Mean value 2.08 for the responses responded by SSTs represents that majority of the respondents did not favor the statement. Table No.3 shows that 65.8% students were disagreed with the statement while 24.1% students were agreed with the statement. Mean value is 2.08 shows that the statement is not true. The result is that it is difficult for the teachers to have interaction with all the students in overcrowded classes to make the teaching learning process effective. The statistics show that the overcrowded classes effects the teaching learning process negatively and teaching learning process inversely related with the overcrowded classes. It means teaching learning process will not be effective in overcrowded classes.

Research Question 4: Are overcrowded classes cause of poor delivery of instruction at secondary level?

Table 4. Analysis of Effect of Overcrowded Classes on Poor Delivery of Instruction in Teaching Learning Process

Statement	N	Respondents	Degree of Responses					Mean	Chi Sq Value	Sd. Dev.
			SA %	A %	UNC %	DA %	SDA %			
An overcrowded class causes poor delivery of instruction.	100	SSTs	23	49	4	15	9	3.62	9.6336E-07	17.6
			23	49	4	15	9			
	120	Students	26	63	11	13	7	3.73	3.8692E-11	22.9
			21.6	52.5	9.2	10.8	5.8			

It is evident from the table 4 that 72% SSTs were of the view that an overcrowded class is the cause of poor delivery of instruction while 24 % SSTs responded that an overcrowded class is not the cause of poor delivery of instruction at secondary level. Only four percent SSTs were uncertain about the statement. Mean value 3.62

for the responses responded by SSTs shows that majority of the respondents favor the statement. Table No.4 reveals that 74.1 % students were agreed with the statement while 16.6 % students were disagreed with the statement. Only 9.2 % students were uncertain about the statement. Mean value is 3.73 shows that the statement is true. The result is that it is difficult for the teachers to make the delivery of instruction effective in overcrowded classes to make the teaching learning process effective. The statistics show that the overcrowded classes effects the teaching learning process negatively and teaching learning process inversely related with the overcrowded classes. It means teaching learning process will not be effective in overcrowded classes.

Research Question 5: What is the relationship between overcrowded classes and teaching learning process?

Table 5. Analysis of the Relationship between Overcrowded Classes and Teaching- Learning Process

Statement	N	Respondents	Degree of Responses					Mean	Chi Sq value	Sd. Dev.
			SA %	A %	UNC %	DA %	SDA %			
Overcrowded classes negatively relates with the teaching learning process.	100	SSTs	27	53	4	13	3	3.88	6.49	20.8
			27	53	4	13	3			
	120	Students	33	69	11	5	2	4.05	9.08	27.9
			27.7	57.6	9.2	4.3	1.2			

Table 5 that majority of the SSTs (80 %) were of the view that overcrowded classes negatively relates with the teaching learning process while 16 % SSTs responded that overcrowded classes do not negatively relate with the teaching learning process at secondary level. Only four percent SSTs were uncertain about the statement. Mean value 3.88 for the responses responded by SSTs shows that majority of the respondents favour the statement. Table No.4 reveals that 75.3 % students were agreed with the statement while 5.5 % students were disagreed with

the statement. Only 9.2 % students were uncertain about the statement. Mean value is 4.05 shows that the statement is true. The statistics show that the overcrowded classes effects the teaching learning process negatively and teaching learning process inversely related with the overcrowded classes. It means that teaching learning process will not be effective in overcrowded classes and vice versa.

Analysis of the Interview Schedule for Principals/ Head Teachers

Table 6. Opinions about the Effects of Overcrowded Classes on Teaching Learning Process

S.N	Opinions	Frequency	Percentage
1	• Indiscipline classes due to overcrowdings affect the teaching learning process badly	4	66.6
	• Indiscipline overcrowded classes do not affect the teaching learning process badly	1	16.66
	• Indiscipline overcrowded classes affect the teaching learning process much badly	1	16.66
2	• The performance of the students is not easily assessed in overcrowded classes	5	83.33
	• The performance of the students is easily assessed in overcrowded classes	1	16.66
3	• Teachers cannot interact with students easily in overcrowded classes	3	50
	• Teachers interact with students easily in overcrowded classes	1	16.66
	• Teachers can interact with students easily in overcrowded classes if they wish	2	33.33
4	• An overcrowded class causes poor delivery of instruction	2	33.33
	• An overcrowded class does not causes poor delivery of instruction	2	33.33
	• Delivery of instruction depends upon the expertise of the teacher	1	16.66
	• An overcrowded class does not affect the delivery of instruction	1	16.66
5	• Overcrowded classes negatively relates with the teaching learning process	5	83.33
	• No comments about the relation of teaching learning process with overcrowded classes	1	16.66

Table 6 shows that 66.6 % respondents were of the view that indiscipline classes due to overcrowdings affect the teaching learning process badly while one respondent (16.6 %) responded that overcrowded classes do not affect the teaching learning process and one respondent (16.6 %) answered that overcrowded classes affect the teaching learning process much badly. Five respondents (83.3 %) respondents were agreed that the performance of the students is not easily assessed and evaluated and one (16.66 %) respondent were not agreed with the question. Three respondents (50%) replied that teachers, in overcrowded classes, are unable to interact the students easily while one respondent answered that teachers can easily interact with the students and one respondent responded that it depends upon the teacher to have an interact with the students in overcrowded classes. Two of the respondents (33.3 %) revealed that overcrowded classes cause poor delivery of instruction while 33.3 % respondents replied that overcrowded classes have no effect on delivery of instruction and one respondent (16.66 %) responded that the delivery of instruction in overcrowded classes depends upon the expertise of the teacher. Five respondents (83.33 %) answered that teaching learning process relates negatively with the overcrowded classes and one respondent (16.66%) did not comment on the relationship between overcrowded classes and teaching learning process.

Conclusions and Discussion

After the analysis and interpretation of data, it was concluded that indiscipline classes due to overcrowdings badly affect the teaching learning process which is resembled with the research studies of Khan and Iqbal (2012) and Mtika (2010). It was resulted from the analysis and interpretation of data that the academic performance of the students is not assessed and evaluated in overcrowded classes easily as academic performance is strongly related with the teaching learning process so teaching learning process is affected in overcrowded classes. This result supports the results of the studies of Benbow, Mizrachi, Oliver & Moshiro (2007) & Amarat (2011). Analysis and interpretation of data show that teachers are unable to have interaction with all the students easily in overcrowded classes. Emmer and Stough (2010) supported this result in his research study carried having the title the problems faced by the students and teachers in overcrowded classes at primary level. It was concluded that overcrowded classes is the cause of poor delivery of instruction as poor delivery of instruction affect the teaching learning process in the reverse order so it results that overcrowded classes have negative effects on teaching learning process. This result was acknowledged by Herzallah (2011) and Nesane (2008). It was also resulted from the analysis and interpretation of data that overcrowded classes affect the teaching learning process negatively in many ways for achieving objectives of teaching learning process. Akinsolu and Fadokun

(2003), Kolo and Ojo (2006) and Crute (2004) have favoured the result that overcrowded classes affect the teaching learning process negatively.

Recommendations

The researcher, after the analysis and interpretation of data, suggested the following recommendations:

1. The government may make it possible to implement the law of recommended class size to establish discipline in the classes for the effectiveness of teaching learning process.
2. The government may reduce the problem by building more classrooms for the students at secondary level to increase the performance of both teachers and students.
3. Policy makers may formulate the policies for the effective assessment and evaluation process to reduce the negative effects of overcrowded classes on teaching learning process.
4. The principals / head teachers may play their role for the implementation of the law of a reasonable class for the proper interaction of teachers with the students for the effectiveness of teaching learning process.
5. Teachers may make delivery of instruction effective in the overcrowded classes by finding out the ways to teach the class of more number of students than the required number to make the teaching learning process more effective.

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