

Examination Scheme at Secondary School Level in Pakistan:

Composite Vs Split

LE REGIME DE L'EXAMENS AU NIVEAU DE L'ÉCOLE SECONDAIRE AU PAKISTAN:

COMPOSE S VS SCISSION

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Abstract: Examination is one and the only instrument for the assessment of different features of teaching learning process. Major objectives of the study were: To compare the students' results; teachers instructional and assessment practices and administrative affairs of the school principals under composite and split scheme of examination at secondary school level. Stratified sampling technique was used to select 64 secondary schools in the Province of Punjab, Pakistan. All the principals (n=64) and secondary school teachers, with the experience of at least 10 years (n=340) in those selected schools were contacted for the purpose of data collection. Two questionnaires were constructed to collect data from the principals and teachers. Three years result of students studied in those selected schools under composite (2005, 2007 and 2008) and three years results under split scheme of examination (2006, 2009 and 2010) was compared. Data were analyzed with the help of SPSS version 15.0. The major conclusions of the study were: Teachers and students use traditional methods of pedagogy such as lecture method and rote memorization under both examination schemes; principals and teachers feel difficulty to manage the things and often claim time deficiency under split scheme; students' results under split scheme of examination were better as compared to composite scheme of examination.

Key words: Split; Composite; Examination; Secondary School Level; Pedagogy

Résumé: L'examen est le seul instrument pour évaluer les différentes caractéristiques des processus d'enseignement. Les principaux objectifs de l'étude étaient les suivants:

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*Received 12 December 2010; accepted 6 February 2011

Pour comparer les résultats des élèves, les professeurs d'enseignement et la pratique d'évaluation, et des affaires administratives des directeurs d'école sont sous le régime de split et compose au niveau du secondaire. La technique d'échantillonnage stratifié a été utilisée pour sélectionner 64 écoles secondaires dans la province de Punjab, au Pakistan. Dans ces écoles sélectionnées, Tous les directeurs d'école (n = 64) et les enseignants du secondaire, avec l'expérience d'au moins 10 ans (n = 340) ont été contactés dans le but de la collecte des données. Deux questionnaires ont été faites pour recueillir des données de l'école et les enseignants. On compare les études de 3 ans qui ont été faites par les étudiants dans des écoles sélectionnées sous le régime des composites (2005, 2007 et 2008) et et des écoles qui sont au régime de scission de l'examen (2006, 2009 et 2010). Les données ont été analysées à l'aide du logiciel SPSS version 15.0. Les principales conclusions de l'étude étaient: les enseignants et les élèves utilisent des méthodes traditionnelles de la pédagogie comme la méthode de lecture et de mémorisation sous les deux régimes d'examen; les directeurs et les enseignants se sentent mal à gérer les choses et prétendent souvent qu'ils n'ont pas assez de temps sous le régime de scission; les résultats des élèves sous le régime scission de l'examen sont meilleurs que ceux qui sont sous régime compose de l'examen.

Mots clés: Split; Compose; Examen de niveau secondaire; La pédagogie

1. INTRODUCTION

Educational institutions are a set up to educate people and enable them to contribute positively in the progress of society. Schools are such places where young generation is prepared to meet the challenges of future. All the nations have great hopes from these institutions. Every community and nation spends a lot on the establishment and running of these institutions. Schools are intended to provide general education. Schools are very much important for the national development of a country. Education in Pakistan is divided into three phases: Elementary Education (I-VIII), Secondary Education (IX-X) and Higher Education (Above Higher Secondary Level of Education). In Pakistan, Secondary education is under the jurisdiction of Boards of Intermediate and Secondary Education. In 2003, Boards of Intermediate and Secondary Education in Pakistan has replaced 'composite scheme' of metric examination with 'split scheme'. In 2008, split scheme of examination was reversed back to the composite scheme, and in 2009 composite scheme of examination was again replaced by split scheme of examination at secondary school level in Pakistan. In composite scheme, examination was offered after two years while in split scheme, the same examination is split into two parts, Part-I (Grade IX) after first year and Part-II (Grade X) after completion of second year. Under the composite scheme of examination the total marks were 850 and now in split system of examination the total marks are 1050.

Table 1: Marks Division under Composite Scheme of Examination at Secondary School Level

Examinations were held after the end of Grade X	Science	Arts
Total Marks	850	850

Table 2: Marks Division under Split Scheme of Examination at Secondary School Level

Group	Part 1	Part 2	Total
Science	480	480 + 90 = 570 (Written paper + Practical)	1050
Arts/Humanities	525	525	1050

Course design and its organization got immediately change with the change in examination pattern from composite to split. In this regard following objectives were made:

(1) To compare the students' results under composite and split methods of assessment at secondary school level

(2) To identify the changes taking place in the instructional practices of teachers as a result of shifting examination scheme from composite to split

(3) To study the changes in assessment practices of teachers after shifting from composite to split scheme of examination

(4) To know the experiences of school principals under both schemes of examination

Examination plays a crucial and a very significant role in order to judge and evaluate the capabilities of students. Gipps (1994) suggested that the major function of testing, assessment and evaluation is to sustain teaching and learning process. Spooncer (1983) wrote that the purpose or the why of testing is simply to provide feedback. No doubt that the testing provide us a detailed analysis of feed back for reporting and guidance of the students, to diagnose their problems in the process of teaching and learning and for the purpose of making comparison of their performance that can be normative or criterion referencing. Another major purpose of assessment is to help the students to evaluate their studies. Naeem (2007) wrote that experts of HSSC (Pakistani system) and experts of A-Level are of the view that examinations promote healthy competition among the students. Christie and Afzaal (2005) comment that examinations are premeditated to appraise the quality and excellence of the outcomes and upshot of an instructional programme. Crighton, Dar & Bethel (1995) draw attention to the shortcoming of the public examination system in Pakistan and said that examination system in Pakistan is defective due to following reasons: (a). There are not only a single body responsible for the assessment at secondary level, and examination at secondary level is the responsibility of many Boards working at division level, so that there is a lack of co-ordination among the working of these Boards. (b) Papers of different subjects at the same time and papers of the same subject with a time interval are not analogous. (c) Results are not reliable because students use deceitful and malpractices in the examination. (d) Deficiencies in marking takes place. Qureshi (2005) said that there is substantiation that the more regularly the evaluations take place, the more will be student achievement. *Composite and Split Scheme are two different types of examination.* Composite examination scheme is the pattern of evaluation in which the students are required to qualify an end term exam covering all unites of syllabus at the end of the session. In split pattern, the course is divided into two or more units and the students appear in final exams on the end of each term. Tehseen, Naila & Qureshi (2005) have conducted a research to compare the students performance under composite and split scheme of examination and the sample included the two groups of students of MBBS at Nishtar Medical College, Multan. The first group passed the MBBS examination under composite scheme and the second group had passed under split scheme. The results showed that students' performance in terms of passing rate and total obtained marks are significantly higher under split scheme of examination as compare to the composite scheme. More students obtained first divisions under split scheme of examination. Bijnan (2006) said for the long term and effective learning there should be flexibility in the examination pattern. He condemns the composite scheme of examination by saying that to conduct the examination after two years at secondary and higher secondary level is nothing but just for the administrative convenience. It put a burden on the students and there couldn't perform better. He has recommended that students should offered at least two courses at the end of each 9 and 11 grade and other courses should be examined at the end of 10 and 12 grade. He advocates the split scheme of examination at these levels and said that this scheme will reduce the stress of the composite final year examination and will lead towards much better and efficient learning. Tahseem (2006) recommended composite examination for grades 9 and 10. Christie & Afzaal (2005) said that main problem with the existing examination system is that it gives value to rote memorization of subject matter. Shah and Afzaal (2004) said that there has been amplified recurrence of questions and only chosen stuff is tested again and again in our pubic examination. This leads toward selective studies because the understanding of a little content helps the students to get good marks in the final exams and nobody taking the fact seriously. Public examination mainly focuses on easy, straight and very simple questions and ignores high level of cognition such as comprehension, analysis, synthesis and evaluation. In this situation, students keep focusing on retention and rote memorization as examination tact. Christie & Khushk (2004) said that in Pakistan only one text book is provided to the secondary school students that's why the quality of teachers is not satisfactory and the worth of our output at this level is disturbed. They also highlighted that to assess the learning outcome special skills are required.

This research was an attempt to find out the difference in students results, teachers instructional and assessment practices and difficulties in administrative affairs of the school principals under composite and

split scheme of examination at secondary school level. This study was delimited to the public secondary schools.

2. RESEARCH METHODOLOGY

The following methodology was used for the study:

2.1 Population

All the public schools' principals, teachers and students at secondary school level under the jurisdiction of Boards of Intermediate and Secondary Education in the province of Punjab, Pakistan were included as the target population in the study. There are eight Boards of Intermediate and Secondary Education are operating at division level in the Province of Punjab, Pakistan.

2.2 Sample

Table 3: Sampling Design for the Study

Name of the Boards of Intermediate and Secondary Education in Punjab	Male		Female		Total Schools
	Rural	Urban	Rural	Urban	
Lahore	2	2	2	2	8
Multan	2	2	2	2	8
Sargodha	2	2	2	2	8
Rawalpindi	2	2	2	2	8
Gujranwala	2	2	2	2	8
Faisalabad	2	2	2	2	8
D. G. Khan	2	2	2	2	8
Bahawalpur	2	2	2	2	8
Total Schools	16	16	16	16	64

School principals and all the teachers of secondary school level with the experience of at least 10 years were contacted for the purpose of data collection. Total sample of the study was included 64 principals and 340 teachers (123 science teachers, 217 Arts teachers) teaching in those 48 selected schools.

Comparison of students results of last six years (2005-2010), studied in those selected secondary schools was made: three years results under composite (2005, 2007 and 2008) and three years results under split scheme of examination (2006, 2009 and 2010). Results of the students under two schemes of examination, composite and split were comparable because:

(1) Criteria set by the schools for admission at secondary school level was same i.e., the marks obtained in the elementary examination and entry test etc.

(2) The faculty teaching these two batches of the students under two different examination schemes, composite and split were the same from 2005 to 2010 (Tehseen, Naila and Qureshi, 2005).

Result of Science and Art students was compared separately.

2.3 Tools of the Study

Two questionnaires were developed for the purpose of data collection. One for school principals and the other for teachers at secondary school level. For result comparison, results of the students were obtained from annual gazettes of Boards of Intermediate and Secondary Education in the province of Punjab, Pakistan 2005-2010.

2.4 Pilot Testing

Pilot testing was made to ensure the reliability and validity of the tools. The value of reliability for questionnaire of teachers was 0.74, and 0.72 for the questionnaire of principals was observed, which was determined with the formula Cronbach's Alpha on SPSS version 15.0. Ten experts and researchers were asked to give their valuable suggestions to ensure the validity of the questionnaires.

2.5 Data Analysis

A Statistical Package for Social Sciences (SPSS) version 15.0 was used for data analysis.

Table 4: Comparison the Science and Arts Students Results under Composite and Split Methods of Assessment at Secondary School Level

	Type	N	Mean	SD	t-value	p-value
Pass percentage of Science Students	Combine	169	68.71	24.40	6.73	.00001***
	Split	178	84.15	12.03		
Percentage of First Divisions in Science	Combine	169	42.89	28.34	4.27	.00001***
	Split	178	52.16	23.89		
Pass Percentage of Arts Students	Combine	175	50.62	26.53	6.85	.00001***
	Split	172	71.70	19.59		
Percentage of First Divisions in Arts	Combine	175	29.68	25.79	4.52	.012*
	Split	172	42.90	29.85		

***p<.001 *p<.05

Table 4 shows combined six years result of the students under two different examination schemes, composite and split. p-value shows significant difference between students results under two different examination schemes, composite and split. Students pass percentage and the percentage of the students got first division is higher under split scheme of examination (2006, 2009 and 2010) as compared to the results under composite scheme of examination (2005, 2007 and 2008).

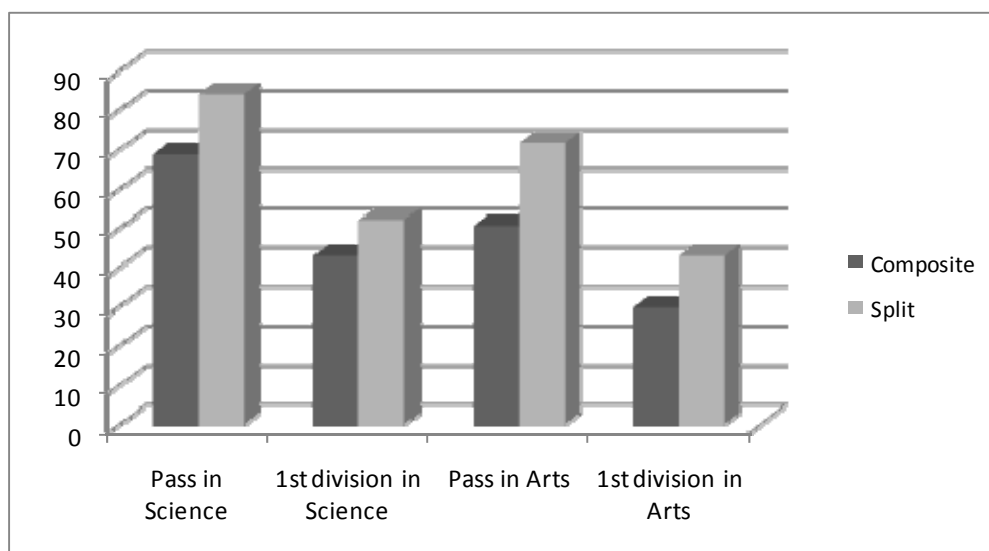


Figure 1: Comparison the Science and Arts Students Results under Composite and Split Methods of Assessment at Secondary School Level

Figure 1: Bar chart shows that the pass percentage and the percentage of the students got first division in both science and an arts group is higher under split scheme of examination is higher as compared to composite scheme of examination.

Table 5: Detail Analysis of Results

	Years	N	Mean	SD
Pass Percentage of Science Students	2005(Composite)	57	63.40	21.17
	2006 (Split)	57	83.50	12.14
	2007(Composite)	55	71.83	25.25
	2008(Composite)	57	74.26	23.76
	2009(Split)	59	82.75	15.03
	2010(Split)	62	87.78	9.14
Percentage of First Divisions in Science	2005(Composite)	57	20.65	23.23
	2006 (Split)	57	43.17	19.44
	2007(Composite)	55	50.23	18.26
	2008(Composite)	57	53.22	16.76
	2009(Split)	59	55.56	15.58
	2010(Split)	62	60.62	19.07
Pass Percentage of Arts Students	2005(Composite)	62	44.67	25.22
	2006 (Split)	57	82.53	14.14
	2007(Composite)	59	54.38	25.24
	2008(Composite)	54	55.11	23.49
	2009(Split)	55	62.27	21.19
	2010(Split)	60	74.83	15.73
Percentage of First Divisions in Arts	2005(Composite)	62	12.12	18.49
	2006 (Split)	57	15.69	22.18
	2007(Composite)	59	31.27	25.23
	2008(Composite)	54	35.43	21.97
	2009(Split)	55	30.30	25.36
	2010(Split)	60	57.31	27.66

Table 5 shows detailed year wise analysis of students result under composite scheme of examination (2005, 2007 and 2008) and split scheme of examination (2006, 2009 and 2010). In the above table, “n” shows the number of schools.

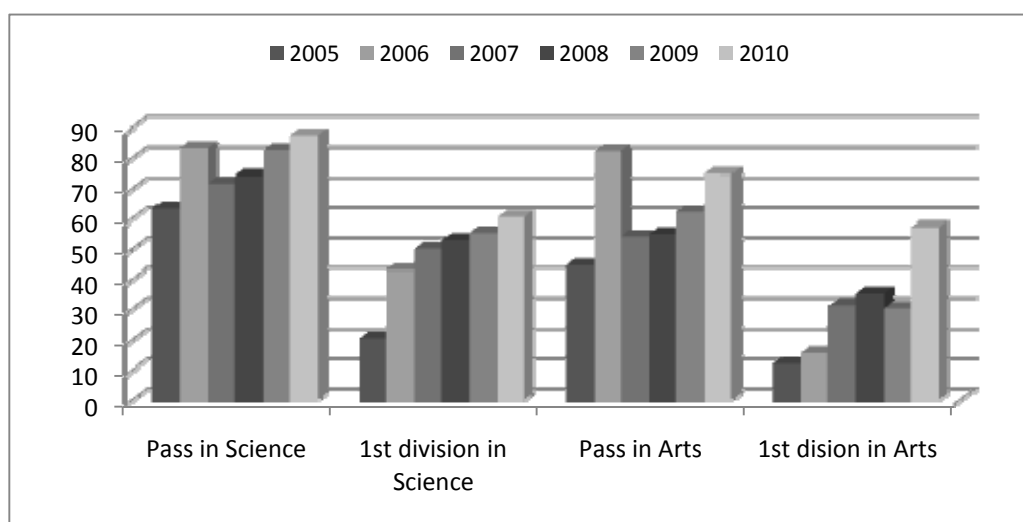


Figure 2: Detail Analysis of Results

Figure 2: Bar chart shows that students (Science and Arts) pass percentage and the percentage of the students got first division is higher under split scheme of examination (2006, 2009 and 2010) is higher under as compared to the results under composite scheme of examination (2005, 2007 and 2008).

Table 6: Instructional Practices of Teachers and Students Learning Style in Science Group

Statements	Composite N=123		Split N=123		t-value	p-value
	Mean	SD	Mean	SD		
Course division is supportive for your teaching	2.20	1.24	3.67	1.34	-5.30	0.0001***
Course organization is supportive for your teaching	2.34	1.27	3.60	1.40	-4.56	0.0001***
Lecture Method as an Instructional Method	3.64	1.13	3.66	1.11	-0.27	0.784
Full text comprehension	3.36	1.30	3.49	1.31	-0.83	0.411
Practice of Rote Memorization	3.52	1.31	3.70	1.48	-1.23	0.226
Combine studies	3.23	1.25	2.29	1.23	4.23	0.0001***
Homework to the students	3.36	1.30	3.49	1.31	-0.83	0.411
Use of Instructional Technology during teaching	3.57	1.34	3.57	1.34		

*p<.05, ***p<.001, N= Number of Teachers $\alpha=0.05$

In the table 6 Independent t-test was conducted to see the statistically significant difference between the teachers' instructional practices and students' learning style in science group under two different examination schemes, composite and split.

Table 7: Instruction Practices of Teachers and Students Learning Style in Arts Group

Statements	Composite N=217		Split N=217		t-value	p-value
	Mean	SD	Mean	SD		
Course division is supportive for your teaching	3.97	0.94	2.10	1.10	12.11	0.0001***
Course organization is supportive for your teaching	3.95	0.95	2.06	1.09	12.47	0.0001***
Lecture Method as an Instructional Method	3.51	1.27	3.58	1.23	-1.36	0.17
Full text comprehension	2.94	1.17	3.49	0.93	-6.99	0.0001***
Practice of Rote Memorization	3.61	1.31	3.60	1.40	-1.02	0.314
Combine studies	3.35	1.24	2.37	1.17	8.97	0.0001***
Homework to the students	3.52	1.31	3.70	1.48	-1.23	0.226
Use of Instructional Technology during teaching	3.56	1.22	2.31	1.13	14.80	0.0001***

*p<.05, ***p<.001, N= Number of Teachers $\alpha=0.05$

In the table 7 Independent t-test was conducted to see the statistically significant difference between the teachers' instructional practices and students' learning style in science group under two different examination schemes, composite and split.

Table 8: Time Management Issues of Science Teachers

Statements	Composite N=123		Split N=123		t-value	p-value
	Mean	SD	Mean	SD		
Sufficient time to plan classroom activities	3.54	1.43	1.94	1.23	7.12	0.0001***
Time for checking written work by the students (Home work or Class work)	4.18	1.22	2.00	1.08	9.08	0.0001***
Sufficient time to cover the syllabus	3.86	1.23	2.94	1.36	4.98	0.0001***
Time to make a revision of the whole syllabus after completion.	3.63	1.33	3.01	1.33	3.18	0.002**
Time to take Continuous tests after completing the syllabus and revision	3.63	1.33	1.58	0.91	3.82	0.0001***

***p<.001, N= Number of Teachers $\alpha=0.05$

Table 8 reveals that teachers of science group face less time management issues under composite scheme of examination as compared to split scheme of examination.

Table 9: Time Management Issues of Arts Teachers

Statements	Composite N=217		Split N=217		t-value	p-value
	Mean	SD	Mean	SD		
Sufficient time to plan classroom activities	3.341	1.40	2.088	1.28	12.72	0.0001***
Time for checking written work by the students (Home work or Class work)?	3.397	1.29	3.526	1.29	-3.85	0.0001***
Sufficient time to cover the syllabus	3.726	1.22	2.738	1.42	10.34	0.0001***
Time to make a revision of the whole syllabus after completion.	3.450	1.31	2.818	1.40	6.41	0.0001***
Time to take Continuous tests after completing the syllabus and revision	3.450	1.31	2.712	1.44	7.52	0.0001***

***p<.001, N= Number of Teachers $\alpha=0.05$

Table 9 reveals that teachers of arts group face less time management issues under composite scheme of examination as compared to split scheme of examination

Table 10: Assessment Practices of Science Teachers

Statements	Composite N=123		Split N=123		t-value	p-value
	Mean	SD	Mean	SD		
Daily verbal or oral test	2.61	1.40	4.02	1.02	-4.04	0.0001***
Weekly tests	2.409	1.36	3.535	1.30	-11.39	0.0001***
Monthly tests	3.54	1.30	3.58	1.40	0.36	0.720
Better Performance in formative assessment	3.074	1.45	3.526	1.29	-4.77	0.0001***

***p<.001, N= Number of Teachers $\alpha=0.05$

In the Table 10 the value of t-test shows significant difference between the assessment practices used by the science teachers under two different examination schemes, composite and split.

Table 11: Assessment Practices of Arts Teachers

Statements	Composite N=217		Split N=217		t-value	p-value
	Mean	SD	Mean	SD		
Daily verbal or oral test	2.55	1.48	4.70	0.91	-1.95	0.0001***
Weekly tests	2.26	1.35	3.53	1.41	-4.55	0.0001***
Monthly tests	3.53	1.41	4.02	1.02	1.99	0.052
Better Performance in formative assessment	3.02	1.45	3.60	1.31	-2.34	0.023*

***p<.001, N= Number of Teachers $\alpha=0.05$

In the Table 11 the value of t-test shows significant difference between the assessment practices used by the arts teachers under two different examination schemes, composite and split.

Table 12: Administrative Affairs of the School Principals

Statements	Composite N=64		Split N=64		t-value	p-value
	Mean	SD	Mean	SD		
Suitable Examination Scheme in terms of finance required	3.81	1.23	1.42	0.65	-0.64	0.02*
Problems in timetable management	2.21	1.32	2.98	1.47	-2.50	0.02*
Staff management	1.65	0.84	4.10	1.02	-10.09	0.0001***
Weekly meeting for getting feedback from the teachers	2.38	1.16	3.67	1.26	-5.56	0.0001***
Monthly meeting for getting feedback from the teachers	3.52	1.29	2.96	1.27	1.74	0.09

*p<.05, ***p<.001 $\alpha=0.05$

In the Table 2.10 the value of t-test shows significant difference between the administrative affairs of the school principals under two different examination schemes, composite and split.

3. DISCUSION AND CONCLUSIONS

The six year result comparison (2005-2010) under two different examination schemes, composite (2005, 2007, 2008) and split (2006, 2009, 2010) showed that Science and Arts students' pass percentage and the percentage of students got 1st divisions under split scheme of examination was higher as compared to composite scheme of examination. Science teachers claim that course division and its organization under split scheme of examination is supportive for their teaching as compared to composite scheme of examination whereas teachers of arts group has experienced course division and its organization under composite scheme of examination more supportive for their teaching as compared to split scheme of examination. Teachers of both the groups (science and arts) use lecture method as an instructional method under both of the examination schemes, composite and split. (Birkel 1973, Mirza, Nosheen & Masood 1999).

Students of science and arts group got memorize the text to pass the examination under both of the examination schemes, composite and split at secondary school level. (Christie & Afzaal 2005). Both science and arts teachers assign home work to the students under both of the examination schemes. Selective studies habits were prevailing among the students of arts group under composite examination scheme whereas under split scheme of examination they avoid to use this practice and study the text thoroughly (Shah & Afzaal 2004), whereas the students of science group avoid using this practice under both of the examination schemes. Both science and arts teachers find composite scheme of examination more flexible in terms of time management. They find more time under composite scheme of examination for various activities such as the planning of classroom activities, checking written work by the students, completion of syllabus on time, revision of the whole syllabus after completion and continuous tests after completing the syllabus and revision. Both science and arts teachers take monthly tests for getting feedback by the students under composite scheme of examination whereas they take daily verbal and oral tests, weekly tests along with monthly tests under split scheme of examination. They have experienced that students perform better under split scheme of examination as far as their formative assessment is concerned.

School principals have experienced the split scheme of examination more flexible in terms of time and staff management and claimed that less finance are required under split scheme of examination as compared to split scheme of examination. School principals arranged monthly meetings for getting feedback from the teachers whereas under split scheme of examination they arrange weekly meeting to get more quick feedback.

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