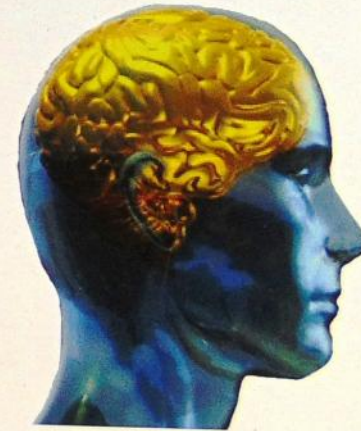


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## COMPARISON OF COLLECTIVE MEANS OF INTERNAL ASSESSMENT MARKS AWARDED BY DIFFERENT TEACHER-TRAINING INSTITUTIONS IN EIGHT BACHELOR OF EDUCATION COURSES OVER A PERIOD OF THREE YEARS

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### Abstract:

*The component of internal assessment was introduced formally in Bachelor of Education (B.Ed.) programme in Himachal Pradesh University, India, initially in the year 2007. The present study aimed at comparing the combined mean scores for eight courses on 'component of internal assessment' for each of the three years i.e. 2008, 2009 and 2010. The sample for the study included all the candidates who were enrolled in different teacher-training institutions and passed their B.Ed. examination during the years 2007-08, 2008-09 and 2009-10. As such, 6524, 6440 and 7596 students were included in the sample for the years 2008, 2009 and 2010 respectively. The scores of the students for internal assessment for each of the eight courses were noted down from university records. The study revealed that: (a) almost equal number of mean differences (14, 17 and 15) emerged significant at 0.05 or 0.01 levels of confidence in 2008, 2009 and 2010 respectively, (b) there emerged no particular trend as far as the level of significance or no significance between means is concerned for any of the three years, (c) due to very low standard deviations even very small mean differences emerged as significant. Even a mean difference as low as 0.04 also emerged significant, and (d) the trend of significant means for 2008, 2009 and 2010 was not uniform for the three years.*

### KEYWORDS:

Internal Assessment, Collective Means, Bachelor of Education.

### 1. INTRODUCTION

The website 'Assessment Online' of Ministry of Education, New Zealand comprehensively describes the concept of assessment in the context of education as under:

Assessment, in general, is the process of gathering, analysing, interpreting and using information about students' progress and achievement to improve teaching and learning. The primary purpose of assessment is to improve students' learning and teachers' teaching as both respond to the information it provides. Assessment for learning is an ongoing process that arises out of the interaction between teaching and learning. Assessment for learning is best described as a process by which assessment information is

used by teachers to adjust their teaching strategies, and by students to adjust their learning strategies. Assessment, teaching and learning are inextricably linked, as each informs the others. Assessment is a powerful process that can either optimise or inhibit learning, depending on how it is applied. Assessment for learning helps teachers gather information to (a) plan and modify teaching and learning programmes for individual students, groups of students and the class as a whole; (b) pinpoint students' strengths so that both teachers and students can build on them; (c) identify students' learning needs in a clear and constructive way so they can be addressed; and (d) involve parents, families and whānau in their children's learning. Also, the assessment for learning provides students with information and guidance so they can plan and manage the next steps in their learning. Hence, assessment for learning uses information to lead from what has been learned to what needs to be learned next.

If the above mentioned objective of assessment in the context of education is to be realized optimally, the assessment has to be continuous and internal -- assessment is internal when it is done by the concerned teachers themselves and not by any external agency. This statement may seem strange to those belonging to the systems where the scheme of internal assessment is in operation since long. But the scenario in India is different. Here the system of examination, especially at higher education stage, till recently had been predominantly external. Under this system it often happens that the subject is taught by one person in an institution, the question paper is set by another from another institution and the students' answer scripts are valued by a third person belonging to a still other institution/university. Secondly, the assessment in such a system is not continuous and students are evaluated generally only once i.e. at the end of semester or year.

It is worth mentioning that in India the system of internal assessment system has been in vogue in schools, some professional courses, engineering and medical colleges, agricultural universities, IITs, IIMs and autonomous colleges etc. in one form or the other for quite some time. However, internal assessment here is understood to mean administering some tests periodically to students and assigning certain weight age of the performance in these tests to the summative evaluation. The real purpose of continuous assessment for learning is hardly served by this type of system.

The opinion has continuously been expressed almost in every forum that external examinations have more limitations and disadvantages than uses. Besides displaying poor reliability and validity, they fail to account for abilities falling under affective and psychomotor domains. The introduction of internal assessment system has been advocated by all concerned in order to overcome the limitations of external one time examinations. In this context, it is relevant to quote recommendations of two important Indian Education Commissions made about fifty years ago.

Firstly, The Report of the University Education Commission (1948-49) in Chapter X stated that;

No credit is, at present, given for class work in courses except sometimes in the case of practical work. It was strongly urged by a host of witnesses including teachers, students and outsiders that such credit should be given. We feel that it will be conducive to efficiency both in teaching and learning. It will make it possible to spread the work uniformly during the academic year and the very common practice of working at high pressure in the last few months immediately preceding the examination, which is notoriously responsible for undermining student health and causing severe nervous strain, will be effectively discouraged.

We recommend, therefore, that one-third of the marks allotted to each subject be reserved for work done during the course of instruction and that this be adopted forthwith in the teaching universities for the B.A. and B.Sc., M.A. and M.Sc. examinations. The affiliating universities should also take immediate steps to evolve a method of more or less uniform marking for this internal award at the affiliated colleges. An effective machinery for the supervision and inspection of affiliated colleges to ensure uniformity of standards should be devised. In post-graduate courses, term papers could be required as a part of this course credit. The progress tests which we have recommended above will be of great use in this connection.

#### IN CHAPTER XIII, THE REPORT FURTHER OBSERVED:

No college should be affiliated unless it is able to undertake the internal assessment of its own students' work during their degree courses, in the way suggested in our chapter on Examinations.

Second, Education and National Development: Report of the Education Commission, 1964-66, Volume I, with reference to Teacher Education commented:

4.24 The examination system also needs considerable reform. At present, the system of external examinations adopted for training institutions is very similar to that used in the schools and suffers from all the well-known defects. Unless this examination is reformed and the teachers are initiated into the

new techniques of evaluation as a part of their training programme, the reform of examinations, in schools will not be successful. A systematic effort has to be made, therefore, on a high priority basis, to improve the nature of the examinations in training institutions. Internal assessment, which evaluates all the work of a student under training, should also be introduced and emphasized as a regular feature. This has already been done on a small scale. Although it has raised the problem of uniformity of assessment of different institutions affiliated to the same university, it has also had a salutary effect on the training programme as a whole and encouraged work directly related to the responsibilities of a teacher. Early steps should, therefore, be taken to expand the use of internal assessment and to give it a more significant place in the final evaluation. In addition, teacher educators should maintain cumulative records of student-teachers in consultation with them. In this way, trainees will learn by doing how the cumulative records of their own pupils should be maintained.

The Report further in Volume III with reference to Higher Education observed:

11.52 Examination Reform. In the present system, when the future of the students is totally decided by one external examination at the end of the year, they pay minimum attention to the teachers, do little independent study throughout most of the academic year and cram desperately for the final examination. The crippling effect of external examinations on the quality of work in higher education is so great that examination reform has become crucial to all progress and has to go hand in hand with improvements in teaching.

11.53 We make below a few recommendations that might make a welcome breakthrough in the situation. One line of attack would be to abolish set syllabuses and the external examinations based on them altogether and to replace them by a system of internal and continuous evaluation by the teachers themselves. This is already being done in some institutions like the IITs or the agricultural universities and it could be increasingly extended to others as soon as the necessary facilities and conditions can be provided. We hope that, at no distant date, it will be adopted by all teaching universities and that the major universities would give a lead in this matter.

In spite of the above and many other recommendations made later, the component of internal assessment could be introduced partially at undergraduate and postgraduate levels in 2009-2010 only in nearly all colleges and universities in India when with the aim of revamping the examination systems in various universities and educational institutions, the University Grants Commission (UGC) on March 2009 urged the universities to take steps to assess the performance of students through internal and external evaluation. In most of the cases, the weight age for internal assessment was fixed as 20 per cent in each theory paper.

#### 2. STATEMENT OF THE PROBLEM

The component of internal assessment was introduced in Bachelor of Education (B.Ed.) programme in Himachal Pradesh University initially in the year 2007. Bachelor of Education is a one year teacher-training programme after graduation i.e. Bachelor of Science (B.Sc.), Bachelor of Arts (B.A.) or Bachelor of Commerce (B.Com). If pursued through Distance Education mode, the duration for completing B.Ed. course has been fixed as two years by National Council of Teacher Education (NCTE). After three and half years of implementation of internal assessment scheme, the authors undertook a study to evaluate the effectiveness of internal assessment component in terms of the following research question:

Do the collective means of internal assessment marks awarded by different teacher-training institutions of Himachal Pradesh (India) in eight courses to students pursuing Bachelor of Education course differ in each of the three years i.e. 2008, 2009 and 2010?

#### 3. REVIEW OF LITERATURE

Bhadwal and Kishor (2012) reviewed the researches conducted in India in the context of internal assessment and concluded that:

1. Internal assessment scores excel the external assessment scores. Internal assessment scores are independent of external assessment scores and that there is wide disparity between the marks in theory and practical examinations.
2. Students bear a mistrustful attitude towards teachers' role in awarding internal assessment and suspect subjectivity in internal assessment. Internal assessment suffers from various drawbacks such as: a) assessment is based upon teachers' impression/perception of the child and not by the merit of the students;

b) to abuse the children in the name of internal assessment; c) the teacher's bias; d) the halo effect and error due to central tendency, etc.

3. There is a tendency towards over-marking in internal assessment. Mostly the internal assessment scores fall in the higher end of the scale. There are instances of students in private colleges scoring as high as 90 per cent to 99 per cent marks in the internal assessment. Students score excellent marks in the internal assessment whereas their performance in the University Examination is not excellent. In other words, the average internal assessment is generally very high than the average external assessment.

4. The university teachers, students and parents feel that the system of internal assessment should be introduced and are not in favour of the discontinuation of the internal evaluation system.

5. The existing pattern of evaluation system is not at all reliable and valid. The entire programme seems to be directionless. Neither uniform pattern is followed in the evaluation process nor has a comprehensive scheme of internal assessment been worked out. One factor which makes the present teacher training programme ineffective is the poor and corrupt evaluation system.

6. The researches focused on studying the relationship between internal and external assessments yield varied results.

7. The researchers/authors have forwarded following suggestions in order to improve the system of evaluation in general and internal assessment in particular:

- To develop the objectivity of internal assessment the role of external examiners cannot be ignored.
- Common format and tools need be developed for assessment of activities under student-teaching and other practical work for all Universities in the country.
- Students' performance in theory subjects should be evaluated through written tests and in practical work performance-test need be conducted.
- Theory and internal assessment marks should be reported separately. Theory should decide the merit and the internal assessment be taken as a grade.
- The Examining Agency should appoint a Moderation Board to oversee the maintenance of internal assessment records in different institutions and to undertake necessary measures to ensure inter-institution comparability.
- Internal assessment system can be checked through the process of rationalization and scaling of the marks/grades obtained in internal assessment with that of public examinations.
- Internal assessment system need be authenticated by external evaluation process.

The authors remarked that the results of studies on the component of internal assessment were inconclusive on different aspects, especially with respect to its operational part. The stakeholders differ in their attitude towards internal assessment. Teachers vary in awarding internal assessment. Institutions and departments differ in their methods and procedures for internally assessing the students. The tools and techniques are not uniform even in the same institution.

In view of the inconclusive nature of the studies conducted earlier, the present study was envisaged. Moreover, the assessment procedures carried out earlier especially in the context of teacher-education could not be treated as internal in the strict sense. They could at best be called as one-time internal evaluation.

#### 4. OBJECTIVE OF THE STUDY

To compare collective means of internal assessment marks awarded by different teacher-training institutions of Himachal Pradesh (India) in eight courses to students pursuing Bachelor of Education course in each of the three years i.e. 2008, 2009 and 2010.

#### 5. HYPOTHESIS OF THE STUDY

The collective means of internal assessment marks awarded by different teacher-training institutions of Himachal Pradesh (India) in eight courses to students pursuing Bachelor of Education course will not differ significantly for any of the three years i.e. 2008, 2009 and 2010.

#### 6. METHODOLOGY

##### 6.1 Sample

The sample for the study included all the candidates who were enrolled in different teacher-

training institutions affiliated to Himachal Pradesh University and passed their B.Ed. examination during the years 2007-08, 2008-09 and 2009-10. The details of the candidates taken for the study are given as under:

Year/Session	Number of institutions affiliated to H.P. University	Total number of students appeared in examination	Compartment and failure cases	Number of students finally included in the sample
2007-2008	67	6700	176	6524
2008-2009	70	6537	97	6440
2009-2010	73	7826	230	7596

#### 6.2 Selection of Courses

According to the curriculum prescribed for B.Ed. programme by Himachal Pradesh University every student has to pass the following courses:

1. Six compulsory course viz., Education in Emerging Indian Society, Development of Learner and Teaching-Learning Process, Development of Educational System in India, Essentials of Educational Technology, Education for Values, Environment and Human Rights and School Management
2. Any two of the teaching methodology course viz., Teaching of -- Physical Sciences, Life Sciences, Mathematics, Social Sciences, English, Hindi, Sanskrit, Home Science and Commerce.
3. Work Education and Work Experience (Theory)
4. Work Education and Work Experience (Practicum – Grade is to be awarded after internal evaluation)
5. Skill in Teaching (Two Subjects per Student – to be evaluated by external examiner)

For the present study, only eight courses – six compulsory and two teaching subjects – which had both theory as well as internal assessment component were taken. All the teaching subjects were treated as par and were considered as two subjects for the total sample.

#### 6.3 Data Collection

The scores of the students for internal as well as external assessment for each of the eight courses were noted down from university records. It may be noted that internal and external assessment scores fixed for each course were 20 and 80 respectively.

#### 7. RESULTS

The significance of differences among collective means of internal assessment marks awarded by different teacher-training institutions of Himachal Pradesh (India) in eight courses to students pursuing Bachelor of Education course in each of the three years i.e. 2008, 2009 and 2010 were computed using one-way analysis of variance followed by t-test. The results of ANOVA along with t-tests for each year are given in the following tables.

7.1 Comparison of collective means of internal assessment marks awarded by 67 teacher-training institutions of Himachal Pradesh (India) in eight courses to students pursuing Bachelor of Education course for the year 2008

The results of ANOVA along with t-tests for the year 2008 are given in Table 1.

**Table 1: The results of one-way ANOVA for collective means for internal assessment marks awarded by 67 teacher-training institutions in eight courses for the year 2008 (N= 6524)**

Source	df	Sum of squares	Mean squares	F-value
Between groups	7	80.42	11.49	6.20**
Within groups	52184	96709.58	1.85	

Table 1 reveals that the F-value for collective means for internal assessment marks awarded by 67 teacher-training institutions in eight courses for the year 2008 came out to be 6.20 which is significant at 0.01 level of confidence. This indicated that at least one of the 28 combinations of mean differences was significant. In order to find out which of the combinations of mean differences were significant, t-test was applied. The results of the t-test are presented in Table 2.

**Table 2: The results of t-test for collective means for internal assessment marks awarded by 67 teacher-training institutions in eight courses for the year 2008 (N= 6524)**

Course	Means	I	II	III	IV	V	VI	VII	VIII
		17.58	17.49	17.55	17.49	17.54	17.57	17.59	17.58
I	17.58	----							
II	17.49	3.84**	----						
III	17.55	1.46	2.33*	----					
IV	17.49	4.02**	0.22	2.52*	----				
V	17.54	1.83	2.01*	0.35	2.21*	----			
VI	17.57	0.43	3.47**	1.06	3.66**	1.43	----		
VII	17.59	0.54	4.50**	2.04*	4.67**	2.42*	1.00	----	
VIII	17.58	0.06	3.74**	1.46	3.91**	1.81	0.48	0.46	----

\* Significant at 0.05 level  
 \*\* Significant at 0.01 level

Table 2 shows that 14 out of 28 mean differences emerged significant at 0.05 or 0.01 levels of confidence. However, there emerged no particular trend as far as the level of significance or no significance between means was concerned.

Hence, the hypothesis that "The collective means of internal assessment marks awarded by different teacher-training institutions of Himachal Pradesh (India) in eight courses to students pursuing Bachelor of Education course will not differ significantly for the year 2008" was partially accepted.

It is worth noting that due to very low standard deviations even very small mean differences emerged significant. For example, the highest mean score was 17.59 and the minimum being 17.49 with a mean difference equal to 0.10. Table 2 reveals that even the mean difference equal to 0.05 also emerged significant.

**7.2 Comparison of collective means of internal assessment marks awarded by 71 teacher-training institutions of Himachal Pradesh (India) in eight courses to students pursuing Bachelor of Education course for the year 2009**

The results of ANOVA along with t-tests for the year 2009 are given in Table 3.

**Table 3: The results of one-way ANOVA for collective means for internal assessment marks awarded by 71 teacher-training institutions in eight courses for the year 2009 (N= 6440)**

Source	df	Sum of squares	Mean squares	F-value
Between groups	7	153.52	21.93	11.79**
Within groups	51512	95821.22	1.86	

\* Significant at 0.05 level  
 \*\* Significant at 0.01 level

Table 3 reveals that the F-value for collective means for internal assessment marks awarded by 71 teacher-training institutions in eight courses for the year 2009 came out to be 11.79 which is significant at 0.01 level of confidence. This indicated that at least one of the 28 combinations of mean differences was significant. In order to find out which of the combinations of mean differences were significant, t-test was applied. The results of the t-test are presented in Table 4.

**Table 4: The results of t-test for collective means for internal assessment marks awarded by 71 teacher-training institutions in eight courses for the year 2009 (N= 6440)**

Course	Means	I	II	III	IV	V	VI	VII	VIII
		17.68	17.67	17.75	17.67	17.70	17.72	17.84	17.76
I	17.68	----							
II	17.67	0.53	----						
III	17.75	3.03**	3.53**	----					
IV	17.67	0.55	0.03	3.49**	----				
V	17.70	0.82	1.35	2.21*	1.35	----			
VI	17.72	1.48	2.00*	1.56	1.99*	0.66	----		
VII	17.84	6.70**	7.17**	3.67**	7.06**	5.89**	5.24**	----	
VIII	17.76	3.31**	3.79**	0.46	3.75**	2.54*	1.93	2.98**	----

Table 4 shows that 17 out of 28 mean differences emerged significant at 0.05 or 0.01 levels of confidence. However, there emerged no particular trend as far as the level of significance or no significance between means was concerned.

Hence, the hypothesis that "The collective means of internal assessment marks awarded by different teacher-training institutions of Himachal Pradesh (India) in eight courses to students pursuing Bachelor of Education course will not differ significantly for the year 2009" was partially accepted.

It is worth noting that due to very low standard deviations even very small mean differences emerged significant. For example, the highest mean score was 17.84 and the minimum being 17.67 with a mean difference equal to 0.17. Table 4 reveals that even the mean difference equal to 0.05 also emerged significant.

**7.3 Comparison of collective means of internal assessment marks awarded by 73 teacher-training institutions of Himachal Pradesh (India) in eight courses to students pursuing Bachelor of Education course for the year 2010**

The results of ANOVA along with t-tests for the year 2010 are given in Table 5.

**Table 5: The results of one-way ANOVA for combined means for internal assessment marks awarded by different teacher-training institutions in each of the eight courses for the year 2010 (N= 7596)**

Source	df	Sum of squares	Mean squares	F-value
Between groups	7	110.10	15.73	7.58**
Within groups	60760	126155.33	2.08	

Table 5 reveals that the F-value for combined means for internal assessment marks awarded by different teacher-training institutions in each of the eight courses for the year 2010 came out be 7.58 which is significant at 0.01 level of confidence. This indicated that at least one of the 28 combinations of mean differences was significant. In order to find out which of the combinations of mean differences were significant, t-test was applied. The results of the t-test are presented in Table 6.

**Table 6: The results of t-test for combined means for internal assessment marks awarded by different teacher-training institutions in eight B.Ed. courses for the year 2010 (N= 7596)**

Course		I	II	III	IV	V	VI	VII	VIII
	Means	17.79	17.71	17.70	17.70	17.71	17.74	17.80	17.81
I	17.79	—							
II	17.71	3.30**	—						
III	17.70	3.57**	0.20	—					
IV	17.70	3.90**	0.57	0.38	—				
V	17.71	3.11**	0.21	0.41	0.78	—			
VI	17.74	1.89	1.45	1.68	2.04*	1.25	—		
VII	17.80	0.51	3.76**	4.03**	4.35**	3.57**	2.38*	—	
VIII	17.81	0.87	4.03**	4.29**	4.61**	3.85**	2.68**	0.37 <sup>†</sup>	—

Table 6 shows that 15 out of 28 mean differences emerged significant at 0.05 or 0.01 levels of confidence. However, there emerged no particular trend as far as the level of significance or no significance between means was concerned.

Hence, the hypothesis that "The collective means of internal assessment marks awarded by different teacher-training institutions of Himachal Pradesh (India) in eight courses to students pursuing Bachelor of Education course will not differ significantly for the year 2010" was partially accepted.

It is worth noting that due to very low standard deviations even very small mean differences emerged significant. For example, the highest mean score was 17.81 and the minimum being 17.70 with a mean difference equal to 0.11. Table 6 reveals that even the mean difference equal to 0.04 also emerged significant.

**8. DISCUSSION**

The results in respect of comparison of collective means for internal assessment marks awarded by different teacher-training institutions in eight courses for the years 2008, 2009 and 2010 are summarized as under.

1. Almost equal number of mean differences (14, 17 and 15) emerged significant at 0.05 or 0.01 levels of confidence in 2008, 2009 and 2010 respectively.
2. There emerged no particular trend as far as the level of significance or no significance between means is concerned for any of the three years.

3. Due to very low standard deviations even very small mean differences emerged as significant. Even a mean difference as low as 0.04 also emerged significant.
4. The trend of significant means for 2008, 2009 and 2010 was not uniform for the three years.

The above trend of results reflects liberal attitude of teachers towards awarding internal assessment marks to students. The personal experience of the researchers as well as the nature of distribution of scores and means point out to the fact that this is not merely liberal attitude of teachers rather this is irrational, irresponsible and unethical use of a pious concept by some and a casual use by others.

In the present study, the researchers compared collective means of internal assessment marks awarded by different teacher-training institutions in eight courses for the years 2008, 2009 and 2010. About 50 percent of the mean differences in three years came out to be significant. From this one may be tempted to infer that internal assessment scores were significantly higher in certain courses as compared to others. However, closer scrutiny of mean scores for different courses over three years breaks the myth. The maximum difference between two means for two courses in three years was 0.17 and even a mean difference as small as 0.04 emerged significant. Practically speaking, this result simply will mislead the readers. In fact, these results occurred due to very low and more or less similar standard deviations. Hence, it may be said that when mean scores are too close for internal assessment, the use of t-test is not a good option. In some cases, it may be useful but at least it is not in cases like the present ones.

As per Himachal Pradesh University notification with regard to introduction of internal assessment component, the internal and external assessment scores are added to show a cumulative score for a course. This practice conceals the true nature of internal assessment scores awarded by teacher-training institutions to students. Bhadwal and Kishor (2013) in their study indicated that there was a tendency towards over-marking in internal assessment and also that the internal assessment scores mostly fell towards the higher end of the scale in Bachelor of Education Programme run by Himachal Pradesh University. In such a scenario, it is recommended that internal and external assessment scores should be shown separately for a course in the final certificate.

**REFERENCES**

- I. The Report of the University Education Commission (December 1948 – August 1949) [Chapter X: Examinations -- IV. Recommendations -- 12. Recommendations for the Correction of Evils now Existing in the Examination System] and [Chapter XIII: Constitution and Control – IV: Classification of Colleges – 33. Conditions for Affiliation]. New Delhi: Ministry of Education, Government of India, Publication No. 606, First Edition 1950, First Reprint 1962.
- II. Education and National Development: Report of the Education Commission (1964-66) [Volume I: General Problems, Chapter IV: Teacher Education -- Improving the Quality of Teacher Education] and Volume III: Higher Education, Chapter XI: Higher Education: Objectives And Improvement -- Improvement of Teaching and Evaluation]. New Delhi: Ministry of Education, Government of India. First Edition 1966, Reprint Edition May 1970 by National Council of Educational Research and Training, New Delhi, Sri Aurobindo Marg, New Delhi -110016.
- III. Satish Chand Bhadwal and Vimal Kishor (2012). Research in the Component of Internal Assessment. Asian Journal of Human Development and Livelihood, 02 (04). In Press.
- IV. Satish Chand Bhadwal and Vimal Kishor (2013). Relevance of Internal Assessment in Bachelor of Education Programme. Research Journal of Humanities and Social Sciences, 4 (1). In Press.