

**RELATIONSHIP BETWEEN INTERNAL AND EXTERNAL ASSESSMENT  
SCORES IN BACHELOR OF EDUCATION PROGRAMME OF HIMACHAL  
PRADESH UNIVERSITY****Satish Chand Bhadwal,**

Department of Education, H.P. University, Shimla (HP)

**Vimal Kishor**

Research Scholar,

Department of Education, H.P. University, Shimla (HP)

**Received: 23 Oct 2012****Reviewed & Accepted: 28 Nov 2012****Abstract**

*The component of internal assessment was introduced in Bachelor of Education (B.Ed.) programme in Himachal Pradesh University initially in the year 2007. After three and half years of implementation of internal assessment scheme in B.Ed. course, the authors had certain reservations with respect to its operational part. Hence, the present piece of research was undertaken in order to study the relationship between marks obtained by students in theory papers and corresponding internal assessment for each college separately as well as for the total samples for the years 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 as well as external assessment for each of the eight courses were noted down from university records. The study revealed that: (a) the coefficients of correlation between internal and external assessment scores came out to be significant for fifty per cent cases (840 out of 1688) taken together for three years, (b) when all the colleges were taken together, the coefficient of correlation between internal and external assessment scores was significant for each of the eight courses for each of the three years, and (c) there was no definite trend or uniformity in the significant correlations between internal and external assessment scores for the eight courses from college to college for each of the three years.*

**Key Words:** Relationship, Internal, External, Assignments Score.

**Background**

This is an acknowledged fact that external examination system has more limitations and disadvantages than uses. Besides displaying poor reliability and validity, external examinations fail to account for abilities falling under affective and psychomotor domains.

One of the remedies to overcome the shortcomings of external system of examinations may be the introduction of internal assessment scheme at all levels of education. Internal assessment is a continuous, periodic and internal process. This is called as internal, because evaluation is done by the teacher in the institute and no external agency comes in.

The concept of internal assessment is not new and has been in operation for quite a long time in India in one form or the other, especially at school stage. However, the concept has been contentious one, particularly with respect to its operational part. The researchers have highlighted different issues pertaining to internal assessment system. Some of the researchers have focused on studying the relationship between internal and external assessment scores. A few representative studies are given below.

Kamat (1972) undertook a study "*Internal and External Assessment*" on a total sample of 2400 candidates, 400 candidates each drawn from arts and science streams for each of the three groups of the centres; Poona, Old Centres and New Centres, who appeared for the pre-degree examination of the Poona University in March 1962. Besides other findings, he also concluded that:

- The correlation coefficients between the internal scores and the examination marks give definite evidence of association between them. But they are not so high as to be of much predictive value.
- The correlation coefficients between the internal and external assessments in science subjects are higher than those for Arts subjects, suggesting a better (but not very great) predictive value for the internal assessment in science subjects.

Raina (1972) studied the relationship between external examination marks and internal assessment of 100 M.Ed. students who appeared in M.Ed. examination from 1959 to 1963 in two postgraduate institutions affiliated to University of Rajasthan. The main findings of the study largely substantiated the hypothesis that there is no significant relationship between external examination marks and the sessional work marks for the sampled students. The means of external marks in four papers differ significantly from the means of the sessional work marks in the said papers. The sessional work marks vary but very slightly. The weaker students in the external examinations benefit more with sessional work than the students who have better performance to their credit in the external examination. The average coefficient of correlation between external marks and sessional work marks, except in one paper, is not significant even at 5 per cent level. The average 'r' between the percentage totals of the two assessments is negligible, i.e. 0.14. The relationship between sessional work marks and dissertation marks with external marks held constant is somewhat marked, but the negligible relationship between external and sessional work marks disappears when dissertation marks are held constant. The addition of dissertation marks improves the prediction by 6 per cent only. The contribution made to the variance of external marks by the sessional work and dissertation marks is minus 1 per cent and 14 per cent respectively. The percentage of variance in the external examination marks which is unaccounted is as large as 87 per cent.

The investigation "*A Study of the Continuous Internal Assessment and the University Examination Marks of the Undergraduate Semester Courses (1976-77 Batch)*" by Gunasekaran and Jayanthi (1980) concluded that barring a few cases, the relationship between the marks of the internal assessment and the university examination was good.

Rasool, Sarup and Sharma (1981) conducted a comparative study of internal and external awards at postgraduate level in Jammu University. The study primarily aimed at making a statistical analysis of the marks awarded by the external examiners and the marks awarded against the sessional work, i.e. internal assessment. One of the conclusions of the study indicated that most of the coefficients of correlation appeared to be positive. This

tendency indicated that there was some conformity in the scoring pattern of internal and external examiners.

Rajendran, Mary, Christy and Mary (2012) studied the correlation between internal and external assessment of B.Ed. students. The study was conducted on 11 students at Servite College of Education for Women, Thogamalai, a rural area in Tamil Nadu. They came out with the result that the value of Pearson's product moment correlation coefficient between internal and external assessment was 0.46, which was only moderate. This positive correlation was not statistically significant. This indicated that the correlation between internal assessment and external assessment was positive but not substantial or high.

The results of the studies cited above with respect to relationship between internal and external assessment scores seem to be inconclusive.

The component of internal assessment was introduced at undergraduate and postgraduate levels in 2009-2010 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.

However, the component of internal assessment was introduced in Bachelor of Education (B.Ed.) programme in Himachal Pradesh University initially in the year 2007. After three and half years of implementation of internal assessment scheme in B.Ed. course, the authors had certain suspicions with respect to its operational part. Hence, the present piece of research was undertaken in order to place these doubts in the right perspective. The peculiarity of our research is the sample size.

### **Objective of the Study**

To study the relationship between marks obtained by students in theory papers and corresponding internal assessment for each college separately as well as for the total samples for the years 2008, 2009 and 2010.

### **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

### **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 at par and were considered as two subjects for the total sample.

### **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.

### **Analysis and Interpretation**

The objective of the present investigation was to study the relationship between marks obtained by students in theory papers and corresponding internal assessment for each college separately as well as for the total samples for the years 2008, 2009 and 2010. For this purpose, the technique of product moment correlation was applied. The correlations between marks obtained by students in theory papers and corresponding internal assessment marks for each college separately for the eight courses for the years 2008, 2009 and 2010 are given in Table 3.1.

**Table 3.1:  
Correlations between theory and internal assessment scores separately for different  
courses and different colleges**

COLLEGE	YEAR	N	COURSE							
			I	II	III	IV	V	VI	VII	VIII
1	2008	00	00	00	00	00	00	00	00	00
	2009	80	0.07	0.19	0.08	0.22*	0.34**	-0.08	-0.13	0.49**
	2010	83	-0.04	0.30**	0.04	-0.11	0.06	0.19	0.32**	0.11
2	2008	164	0.12	0.06	-0.10	-0.02	-0.02	-0.05	0.00	0.07
	2009	137	0.13	0.17*	0.17*	0.19*	0.28**	0.23**	0.20*	0.02
	2010	179	0.09	0.26**	0.03	0.11	0.05	-0.01	0.21**	0.16*
3	2008	89	0.25*	-0.00	-0.07	-0.02	0.17	0.04	0.09	-0.10
	2009	71	0.26*	0.28*	0.21	0.29*	0.10	0.23*	0.05	0.35**
	2010	98	0.12	0.21*	0.12	0.23*	0.20*	0.20*	0.16	0.17
4	2008	61	0.39**	0.23	0.29*	0.39**	0.30*	0.23	0.21	0.54**
	2009	63	0.39**	0.29*	0.05	0.30*	0.38**	0.10	0.27*	0.11
	2010	87	0.26**	0.17	0.21*	0.07	0.20*	0.13	0.10	0.04
5	2008	00	00	00	00	00	00	00	00	00
	2009	00	00	00	00	00	00	00	00	00
	2010	86	0.31**	0.43**	0.16	0.22*	0.24*	0.25*	0.21	0.25*
6	2008	89	0.14	0.30**	0.39**	0.16	0.13	0.27*	-0.17	0.31**
	2009	72	0.36**	0.27*	0.21	0.54**	0.13	0.50**	-0.15	0.34**
	2010	94	CNB	0.46**	CNB	0.19	0.17	0.25*	-0.00	-0.09
7	2008	94	-0.03	0.10	0.08	0.28**	-0.04	0.02	0.20*	0.02
	2009	70	0.24*	0.18	0.43**	0.40**	0.20	0.22	0.40**	0.26*
	2010	74	0.06	0.27*	0.16	0.20	0.32**	0.10	-0.08	0.07
8	2008	88	0.30**	0.19	0.09	0.45**	0.12	0.20*	0.00	0.36**
	2009	67	-0.14	0.04	0.02	0.16	0.08	0.07	-0.02	-0.03
	2010	93	0.33**	0.27**	0.12	0.24*	-0.06	0.04	0.24*	0.19
9	2008	83	0.42**	0.35**	0.29**	0.36**	0.24*	0.30**	0.39**	0.36**
	2009	67	0.18	0.25*	0.19	0.16	0.18	0.50**	-0.00	-0.17
	2010	78	0.52**	0.22*	0.23*	0.36**	0.28**	0.32**	0.20	0.42**
10	2008	89	0.27**	0.30**	0.24*	0.20*	0.09	0.43**	0.19	0.17
	2009	81	0.26*	0.22*	0.18	0.11	0.39**	0.10	0.35**	0.29**
	2010	88	0.36**	0.24*	0.41**	0.17	0.27**	0.56**	0.21*	0.07
11	2008	59	0.13	-0.05	0.14	0.26*	0.11	-0.10	0.03	0.09
	2009	55	0.30*	0.17	0.21	0.12	-0.03	0.09	0.09	-0.29*
	2010	58	-0.00	0.14	-0.04	0.21	-0.01	0.25*	0.25*	0.29*
12	2008	90	0.21*	0.29**	0.18	0.19	0.33**	0.29**	0.33**	0.48**
	2009	80	0.41**	0.23*	0.25*	0.29**	0.38**	0.45**	0.11	0.38**
	2010	100	0.39**	0.34**	0.18	0.16	0.05	0.40**	0.22*	0.41**
13	2008	87	0.20*	0.11	0.15	0.28**	0.22*	0.11	0.10	0.36**
	2009	80	0.19	0.05	0.33**	0.31**	0.25*	0.10	-0.08	0.59**
	2010	80	0.37**	0.06	0.27*	0.33**	0.32**	0.30**	0.18	0.43**
14	2008	85	0.40**	0.21*	0.04	0.20	-0.09	-0.07	-0.05	0.07
	2009	87	0.09	0.02	0.18	0.35**	0.21*	0.38**	-0.03	0.27**
	2010	98	0.33**	0.26**	0.22*	0.24*	0.06	0.30**	-0.03	0.05
15	2008	87	0.00	-0.05	-0.12	-0.29**	-0.05	0.01	-0.07	-0.04
	2009	62	-0.04	-0.11	0.19	0.04	0.08	-0.14	0.11	-0.16
	2010	63	-0.12	-0.01	-0.01	0.01	-0.07	-0.18	-0.02	0.08

COLLEGE	YEAR	N	COURSE							
			I	II	III	IV	V	VI	VII	VIII
16	2008	93	0.16	0.34**	0.24*	0.29**	0.17	0.14	-0.20*	0.06
	2009	163	0.33**	0.17*	-0.16*	0.26**	0.55**	0.49**	0.38**	0.32**
	2010	189	0.28**	0.33**	0.37**	0.42**	0.19**	0.42**	0.14*	0.51**
17	2008	92	0.19	0.23*	0.20*	-0.03	0.20*	0.08	0.04	0.22*
	2009	64	0.20	0.11	0.09	-0.03	0.18	-0.01	0.30*	0.32**
	2010	82	0.31**	0.31**	0.08	0.10	0.07	0.21*	0.04	0.15
18	2008	89	0.13	0.11	CNB	0.13	0.06	-0.02	-0.34**	0.18
	2009	86	0.06	0.21*	-0.08	0.34**	-0.01	0.24*	0.10	-0.07
	2010	87	-0.00	0.18	0.11	0.10	0.20*	0.23*	0.09	0.17
19	2008	236	-0.04	-0.13*	0.26**	-0.05	0.24**	0.25**	0.38**	0.10
	2009	210	0.25**	0.34**	0.20**	0.03	-0.08	0.07	0.32**	-0.05
	2010	197	0.33**	0.23**	0.38**	0.07	0.19**	0.12	0.30**	0.12
20	2008	85	0.14	0.17	0.30**	0.02	0.43**	0.20	0.12	0.33**
	2009	76	0.37**	0.32**	0.27*	0.45**	0.17	0.48**	0.26*	0.46**
	2010	73	0.41**	0.64**	0.49**	0.28*	0.33**	0.11	0.07	0.31**
21	2008	93	0.03	0.39**	0.05	0.31**	0.44**	0.45**	0.09	0.17
	2009	90	0.04	0.27**	0.25*	0.21*	0.21*	0.28**	-0.08	0.19
	2010	95	0.30**	0.58**	0.26*	0.10	0.35**	0.47**	0.14	-0.19
22	2008	78	0.20	0.09	0.05	0.40**	0.10	0.00	-0.08	-0.26*
	2009	65	0.26*	0.25*	-0.04	0.47**	0.36**	0.22	0.27*	0.42**
	2010	73	0.37**	0.41**	0.48**	0.38**	0.28*	0.21	0.27*	0.29*
23	2008	191	0.04	0.03	-0.00	0.34**	0.02	0.17*	0.17*	0.39**
	2009	148	0.22**	0.11*	0.01	0.19*	0.05	0.00	0.13	0.30**
	2010	183	0.22**	0.23**	0.10	0.09	0.22**	0.17*	0.11	0.25**
24	2008	85	-0.08	0.16	0.09	0.16	0.18	-0.32**	0.17	0.27*
	2009	53	0.20	0.34*	0.17	0.35**	0.08	0.13	-0.22	0.31*
	2010	75	0.50**	0.43**	0.50**	0.52**	0.55**	0.43**	0.32**	0.33**
25	2008	90	0.28**	0.46**	0.28**	0.40**	0.19	0.24*	0.22*	0.35**
	2009	68	0.29*	0.27*	0.30**	0.20	0.28*	0.20	0.38**	0.34**
	2010	87	0.29**	0.34**	0.42**	0.23**	0.19	0.38*	0.17	0.02
26	2008	83	-0.12	0.22*	0.18	0.26*	0.40**	0.14	0.14	-0.35**
	2009	78	0.24*	0.41**	-0.00	0.21*	0.07	0.10	0.38**	0.21*
	2010	88	0.13	0.10	0.17	0.09	0.20*	-0.05	-0.02	0.02
27	2008	172	0.14	0.24**	0.09	0.02	0.11	0.08	0.16*	0.21**
	2009	150	0.13	0.02	0.19*	0.17*	-0.05	-0.01	-0.08	0.10
	2010	177	0.11	0.13	0.22**	0.20**	0.22**	0.16*	0.38**	0.28**
28	2008	86	0.20*	0.65**	0.23*	0.42**	0.20*	0.06	0.25*	0.13
	2009	69	0.25*	0.40**	0.29*	0.34**	0.38**	0.29*	0.11	0.26*
	2010	88	0.42**	0.45**	0.21*	0.23*	0.11	0.19	0.19	0.08
29	2008	95	0.10	-0.06	-0.01	0.09	0.11	-0.18	-0.08	0.16
	2009	88	0.11	0.06	-0.00	0.47**	0.06	0.05	0.09	0.04
	2010	93	0.19	-0.00	0.09	0.16	0.06	0.04	-0.14	0.09
30	2008	00	00	00	00	00	00	00	00	00
	2009	86	0.39**	0.28**	0.31**	0.09	0.17	0.37**	-0.16	-0.06
	2010	100	0.39**	0.38**	0.23*	0.11	0.38**	0.41**	0.14	0.21*
31	2008	88	-0.10	-0.09	0.20	0.16	0.09	0.10	-0.01	-0.20*
	2009	134	0.03	-0.04	0.03	-0.11	-0.05	0.01	0.11	0.12
	2010	177	0.12	0.15*	0.04	-0.00	0.07	0.14	0.05	-0.03

COLLEGE	YEAR	N	COURSE							
			I	II	III	IV	V	VI	VII	VIII
32	2008	88	0.16	0.12	0.21*	0.49**	0.30**	0.31**	0.15	0.43**
	2009	88	0.18	0.07	0.07	0.16	0.04	0.02	0.27**	0.28**
	2010	88	-0.25*	0.00	0.15	0.00	-0.11	0.22*	-0.20*	0.19
33	2008	99	0.19*	0.21*	0.11	-0.03	0.22	0.44**	0.28**	0.29**
	2009	85	0.01	0.24*	0.15	0.09	-0.12	0.27*	0.19*	0.25**
	2010	98	0.03	0.10	0.15	0.12	0.04	0.14	0.24*	0.09
34	2008	96	0.29**	0.20*	0.29**	0.35**	0.27**	0.19	0.58**	0.47**
	2009	82	0.08	-0.09	0.12	0.24*	-0.18	0.02	-0.08	0.04
	2010	84	0.17	0.15	0.30**	0.06	0.25*	-0.09	-0.01	0.23*
35	2008	93	0.17	0.19	0.20*	0.33**	0.17	0.13	0.15	0.18
	2009	73	0.37**	0.40**	0.35**	0.33**	0.41**	0.20	0.11	0.38**
	2010	97	0.28**	-0.06	0.09	0.24*	0.20*	0.18	0.23*	0.14
36	2008	00	00	00	00	00	00	00	00	00
	2009	58	0.00	0.34**	0.08	0.10	0.21	0.27*	-0.11	0.30*
	2010	63	-0.12	0.10	0.14	-0.05	-0.03	0.35**	0.20	0.02
37	2008	75	0.30**	0.43**	0.13	0.42**	0.36**	0.19	0.15	0.36**
	2009	67	0.12	0.17	0.14	0.21	0.02	0.23*	0.11	0.18
	2010	93	0.26**	0.31**	-0.04	0.27**	0.14	0.05	-0.05	0.11
38	2008	88	0.13	0.18	0.19	0.25*	0.20*	0.15	0.02	0.37**
	2009	81	0.26*	0.28**	0.43**	0.27*	0.19	0.30**	0.24*	0.13
	2010	89	0.37**	0.51**	0.32**	0.46**	0.19	0.61**	0.35**	0.10
39	2008	85	0.03	0.19	-0.09	0.09	-0.03	0.05	-0.06	0.32**
	2009	85	0.35**	0.37**	0.05	0.27*	0.06	0.04	0.19	0.02
	2010	95	0.05	0.07	-0.01	0.07	0.00	0.09	0.27**	0.03
40	2008	00	00	00	00	00	00	00	00	00
	2009	65	0.18	0.42**	0.38**	0.39**	0.23*	0.38**	0.12	0.09
	2010	77	0.36**	0.34**	0.10	0.15	0.21*	0.38**	0.43**	0.31**
41	2008	85	0.10	0.18	0.19	0.15	0.05	0.16	0.11	0.31**
	2009	57	0.11	0.06	0.16	-0.04	0.33**	-0.19	0.21	0.20
	2010	98	0.30**	0.40**	0.30**	0.14	0.29**	0.17	0.17	-0.18
42	2008	103	0.10	0.33**	0.35**	0.07	0.36**	0.14	0.36**	0.54**
	2009	112	0.11	0.32**	0.20*	0.19*	0.29**	0.34**	0.25**	0.57**
	2010	104	0.08	0.09	0.20*	0.23*	0.12	0.13	0.20*	0.21*
43	2008	84	0.18	0.23*	0.19	0.25*	0.21*	0.28**	0.11	-0.14
	2009	88	0.40**	0.20*	0.37**	0.26**	0.16	0.25*	0.35**	0.38**
	2010	81	0.31**	0.45**	0.47**	0.30**	-0.10	0.55**	0.29**	0.22*
44	2008	89	0.04	0.13	0.07	0.20*	0.21*	0.26**	0.09	-0.01
	2009	78	0.00	0.23*	0.22*	0.09	0.06	0.31**	-0.00	-0.36**
	2010	76	-0.03	0.30**	0.09	0.09	-0.03	0.06	0.29**	0.23*
45	2008	82	0.14	0.12	0.11	0.13	0.03	0.13	0.16	0.43**
	2009	73	0.32**	0.45**	0.41**	0.13	0.35**	0.32**	0.24*	0.39**
	2010	81	0.39**	0.45**	0.38**	0.35**	0.39**	0.35**	0.35**	0.15
46	2008	86	0.27**	0.37**	0.28**	0.28**	0.31**	0.39**	0.21*	0.48**
	2009	71	0.19	0.14	0.14	0.32**	0.05	0.07	0.03	0.16
	2010	94	0.48**	0.47**	0.19	0.19	0.16	0.33**	0.40**	0.22*
47	2008	00	00	00	00	00	00	00	00	00
	2009	00	00	00	00	00	00	00	00	00
	2010	80	-0.09	-0.22*	-0.19	0.05	0.03	0.00	0.08	-0.02

COLLEGE	YEAR	N	COURSE							
			I	II	III	IV	V	VI	VII	VIII
48	2008	90	-0.05	0.18	0.26**	0.32**	0.17	0.20*	0.22*	0.59**
	2009	77	0.41**	0.50**	0.39**	0.21*	0.12	-0.00	0.17	0.53**
	2010	89	0.31**	0.47**	0.26**	0.38**	0.37**	0.16	0.08	0.22*
49	2008	86	0.31**	0.32**	0.23**	0.09	0.28**	0.30**	0.51**	0.38**
	2009	88	0.30**	0.05	0.54**	0.05	0.36**	0.27**	-0.00	0.22*
	2010	98	0.44**	0.30**	0.15	0.22*	0.32**	0.36**	0.28**	0.15
50	2008	74	0.23*	0.38**	0.21	0.23*	0.23*	0.10	0.23*	0.51**
	2009	61	-0.19	0.12	0.10	0.24	0.20	0.33**	0.06	0.18
	2010	66	0.11	0.31**	0.11	0.17	0.03	-0.00	0.07	0.20
51	2008	86	0.28**	0.28**	-0.12	0.11	0.27**	-0.02	0.14	0.20*
	2009	87	0.41**	0.10	-0.04	0.22*	0.16	0.31**	0.15	0.58**
	2010	84	0.09	-0.04	-0.14	-0.04	0.03	0.11	-0.21*	0.22*
52	2008	86	0.11	0.11	0.13	0.09	0.35**	0.13	0.04	0.32**
	2009	71	0.31**	0.28*	0.13	0.27*	0.20	0.39**	-0.18	0.38**
	2010	89	0.32**	0.22*	0.12	0.27**	0.19	0.44**	0.17	0.14
53	2008	144	0.15*	-0.14	0.07	0.19*	-0.11	0.18	0.15*	0.29**
	2009	109	0.11	0.12	0.08	0.41**	0.21*	0.11	-0.35**	0.58**
	2010	159	0.32**	0.28**	0.22**	0.10	0.30**	0.04	-0.64**	0.24**
54	2008	84	0.19	0.64**	0.24*	0.48**	0.27*	0.47**	0.11	0.53**
	2009	92	0.47**	0.41**	0.46**	0.45**	0.17	0.28**	0.16	0.45**
	2010	96	0.37**	0.38**	0.41**	0.23*	0.29**	0.37**	0.19*	0.41**
55	2008	95	0.23*	0.19*	0.36**	0.22*	0.09	0.22*	-0.02	0.21*
	2009	87	0.12	0.16	-0.08	0.20*	0.27**	0.02	-0.30**	0.30**
	2010	97	0.14	0.11	-0.03	0.04	-0.00	0.14	0.29**	0.17
56	2008	90	0.17	0.26**	0.01	0.16	-0.04	0.23*	0.12	0.34**
	2009	82	0.20	-0.06	0.34**	0.33**	0.15	0.19	0.12	0.40**
	2010	100	0.38**	0.46**	0.36**	0.22*	0.30**	0.45**	0.50**	0.32**
57	2008	89	0.00	0.04	-0.15	-0.06	-0.16	0.08	0.16	0.25*
	2009	87	0.20*	0.18	0.28**	0.26**	0.15	0.09	-0.11	0.30**
	2010	78	0.11	-0.14	0.34**	0.06	0.06	0.06	0.27*	0.16
58	2008	95	-0.14	0.22*	0.23*	-0.04	0.14	0.23*	0.09	0.13
	2009	91	0.24*	0.16	0.09	0.40**	0.05	0.19	0.08	0.14
	2010	98	0.23*	0.25**	0.08	0.12	0.18	0.33**	0.09	0.14
59	2008	88	0.17	0.23*	0.11	0.21*	0.11	0.40**	0.14	-0.00
	2009	82	0.23*	0.29**	0.21*	0.31**	0.12	0.29*	0.08	0.20
	2010	83	0.26*	0.43**	0.31**	0.07	-0.21*	0.36**	0.26*	-0.04
60	2008	70	0.13	-0.03	0.30*	-0.04	0.26*	0.02	-0.30**	0.14
	2009	73	-0.00	0.16	0.16	0.49**	0.16	0.10	0.18	0.31**
	2010	77	0.21*	0.35**	0.21*	0.00	0.11	0.28**	-0.00	0.35**
61	2008	88	0.32**	0.22**	0.13	0.23**	0.12	0.26**	-0.12	0.20*
	2009	130	0.23**	0.29**	0.21*	0.29**	0.29**	0.12	0.43**	0.41**
	2010	184	0.39**	0.10	0.31**	0.21**	0.24**	0.27**	0.02	0.06
62	2008	171	0.15*	0.21**	0.00	0.28**	0.17*	0.07	0.18*	0.06
	2009	140	0.06	0.21**	0.19*	0.28**	0.03	0.30**	0.36**	0.24**
	2010	181	0.19**	0.32**	0.20**	0.12	0.03	0.20**	0.14	0.13*
63	2008	171	0.12	0.21**	-0.06	0.09	-0.15*	0.09	0.09	0.05
	2009	169	-0.10	0.02	0.07	-0.01	0.03	0.08	0.15*	0.05
	2010	193	0.30**	0.15*	0.29**	0.25**	0.23**	0.22**	0.19**	0.27**



COLLEGE	YEAR	N	COURSE							
			I	II	III	IV	V	VI	VII	VIII
64	2008	97	0.31**	-0.02	-0.001	0.14	0.09	0.06	0.28**	-0.18
	2009	92	0.03	0.20*	-0.13	0.03	0.09	0.25*	0.07	-0.23*
	2010	99	0.26**	0.39**	0.18	0.26**	0.15	0.31**	0.03	0.23*
65	2008	89	-0.09	0.26**	0.18	0.23*	0.25*	0.21*	0.04	0.52**
	2009	147	-0.05	0.15*	0.21**	0.21**	0.31**	0.11	0.37**	0.29**
	2010	181	0.30**	0.20**	0.12	0.40**	0.20**	0.18**	0.16*	0.22**
66	2008	89	0.16	-0.05	0.04	0.24*	0.03	0.25*	0.18	-0.15
	2009	150	-0.03	0.03	0.32**	0.25**	0.02	0.49**	0.10	0.17*
	2010	189	0.29**	0.19**	0.12	0.33**	0.03	0.08	-0.21**	0.20**
67	2008	60	0.33**	0.32**	0.28*	0.39**	0.23	0.15	-0.10	0.41**
	2009	62	0.47**	0.19	0.06	0.24	0.32**	0.29*	0.09	0.40**
	2010	86	0.25*	0.32**	0.42**	0.35**	0.34**	0.26**	0.26**	0.17
68	2008	182	0.04	0.43**	0.13*	0.25**	0.28**	0.15*	0.00	0.21**
	2009	164	0.12	0.31**	0.02	0.22**	0.28**	0.17*	0.21**	0.09
	2010	159	0.09	0.09	0.07	0.19*	0.10	0.17*	0.07	-0.09
69	2008	87	0.26**	0.45**	0.13	0.62**	0.21*	0.25*	0.06	-0.43**
	2009	74	-0.03	0.13	0.08	0.31**	0.08	0.04	-0.20	0.13
	2010	84	0.26*	0.27*	0.04	0.21*	0.00	0.42**	0.12	0.06
70	2008	70	0.16	0.21	0.38**	0.22	0.46**	0.38**	0.16	0.31**
	2009	61	0.25*	0.31*	0.39**	0.26*	0.28*	0.17	0.16	0.30*
	2010	57	0.61**	0.36**	0.43**	0.42**	0.12	0.41**	0.32**	0.18
71	2008	91	0.27**	0.31**	0.10	0.21*	0.26**	0.31**	0.07	0.44**
	2009	145	0.08	0.14	-0.02	-0.01	0.06	0.28**	0.24**	0.08
	2010	186	0.09	0.19**	0.16*	0.18**	0.18**	0.09	-0.10	0.20**
72	2008	83	0.17	0.11	0.13	0.08	0.10	-0.12	0.15	-0.12
	2009	78	0.37**	0.13	0.20	0.38**	0.13	0.13	0.17	0.30**
	2010	84	0.24*	0.06	0.12	0.27*	-0.11	0.21*	-0.35**	0.26*
73	2008	95	0.26**	-0.01	0.07	0.24*	0.16	0.00	0.07	0.19*
	2009	78	-0.08	-0.02	0.29**	-0.21*	-0.20	0.30**	0.11	-0.29**
	2010	78	0.35**	0.18	-0.19	0.02	-0.18	0.28**	-0.17	0.13
Total Sample	2008	6524	0.09**	0.06**	0.20**	0.17**	0.06**	0.11**	0.08**	0.14**
	2009	6440	0.09**	0.10**	0.15**	0.09**	0.15**	0.13**	0.09**	0.06**
	2010	7596	0.14**	0.21**	0.18**	0.06**	0.10**	0.18**	0.07**	0.11**

\* Significant at 0.05 level, \*\* Significant at 0.01 level, 00 The B.Ed. Course did not exist for the year. CNB The correlation could not be calculated

### Interpretation

**Table 3.1 reveals that for the year 2008 (67 Colleges, 8 Courses):**

1. Out of possible 536 cases (67 colleges x 8 courses), the coefficients of correlation between internal and external assessment scores were significant for 247 cases (46.08%) at 0.05 level of confidence and were not significant for 289 (53.92%) cases for the year 2008.
2. When all the 67 colleges were taken together for the year 2008, the coefficient of correlation between internal and external assessment scores was significant for each of the eight courses.

3. The number of significant correlations between internal and external assessment scores differed from course to course for the year 2008. This is evident from consolidated data presented in Table 3.2.

**Table 3.2: The numbers of significant and not significant coefficients of correlation for each of the eight courses for the year 2008 for 67 Colleges**

Course	No. of Cases Out of 67 Significant at 0.05 Level	No. of Cases Out of 67 Not Significant at 0.05 Level
I	26 (38.80%)	41 (61.20%)
II	35 (52.24%)	32 (47.76%)
III	24 (35.82%)	43 (64.18%)
IV	38 (52.24%)	29 (47.76%)
V	31 (46.27%)	36 (53.73%)
VI	29 (43.28%)	38 (56.72%)
VII	21 (31.34%)	46 (68.66%)
VIII	43 (64.18%)	24 (35.82%)
	247 (46.08%)	289 (53.92%)

4. The number of significant correlations between internal and external assessment scores differed from college to college for the year 2008. This is evident from the following observation.

Number of Courses	Number of Colleges with significant Coefficient of Correlation
8	2
6 to 7	11
4 to 5	24
1 to 3	27
For three colleges the correlations were not significant for any of the eight courses	

There were only two colleges where the correlations were significant for all the eight courses and three colleges where the correlations were not significant for any of the eight courses. The coefficients of correlation were significant for six to seven courses in case of 11 colleges. The coefficients of correlation were significant for four to five courses in case of 24 colleges. Further, there were 27 colleges where the correlations were significant in case of three or less courses.

5. There was no definite trend or uniformity in the significant correlations between internal and external assessment scores for the eight courses from college to college for the year 2008. In other words, the courses with significant correlations between internal and external assessment scores differed from college to college.

**Table 3.1 further reveals that for the year 2009 (71 Colleges, 8 Courses):**

1. Out of possible 568 cases (71 colleges x 8 courses), the coefficients of correlation between internal and external assessment scores were significant for 280 cases (49.30%) at 0.05 level of confidence and were not significant for 288 (50.70%) cases for the year 2009.
2. When all the 71 colleges were taken together for the year 2009, the coefficient of correlation between internal and external assessment scores was significant for each of the eight courses.

3. The number of significant correlations between internal and external assessment scores differed from course to course for the year 2009. This is evident from consolidated data presented in Table 3.3.

**Table 3.3: The numbers of significant and not significant coefficients of correlation for each of the eight courses for the year 2009 for 71 Colleges**

Course	No. of Cases Out of 71 Significant at 0.05 Level	No. of Cases Out of 71 Not Significant at 0.05 Level
I	33 (46.47%)	38 (53.53%)
II	39 (54.93%)	32 (45.07%)
III	31 (43.66%)	40 (56.34%)
IV	48 (67.61%)	23 (32.39%)
V	25 (35.21%)	46 (64.79%)
VI	34 (47.89%)	37 (52.11%)
VII	25 (35.21%)	46 (64.79%)
VIII	45 (63.39%)	26 (36.61%)
	280 (49.30%)	288 (50.70%)

4. The number of significant correlations between internal and external assessment scores differed from college to college for the year 2009. This is evident from the following observation.

Number of Courses	Number of Colleges with significant Coefficient of Correlation
8	1
6 to 7	16
4 to 5	27
1 to 3	24
For three colleges the correlations were not significant for any of the eight courses	

There was only one college where the correlations were significant for all the eight courses and three colleges where the correlations were not significant for any of the eight courses. The coefficients of correlation were significant for six to seven courses in case of 16 colleges. The coefficients of correlation were significant for four to five courses in case of 27 colleges. Further, there were 24 colleges where the correlations were significant in case of three or less courses.

5. There was no definite trend or uniformity in the significant correlations between internal and external assessment scores for the eight courses from college to college for the year 2009. In other words, the courses with significant correlations between internal and external assessment scores differed from college to college.

**Table 3.1 further reveals that for the year 2010 (73 Colleges, 8 Courses):**

1. Out of possible 584 cases (73 colleges x 8 courses), the coefficients of correlation between internal and external assessment scores were significant for 313 cases (53.60%) at 0.05 level of confidence and were not significant for 271 (46.40%) cases for the year 2010.
2. When all the 73 colleges were taken together for the year 2010, the coefficient of correlation between internal and external assessment scores was significant for each of the eight courses.

3. The number of significant correlations between internal and external assessment scores differed from course to course for the year 2010. This is evident from consolidated data presented in Table 3.4.

**Table 3.4: The numbers of significant and not significant coefficients of correlation for each of the eight courses for the year 2010**

Course	No. of Cases Out of 73 Significant at 0.05 Level	No. of Cases Out of 73 Not Significant at 0.05 Level
I	48 (65.75%)	25 (34.25%)
II	51 (69.86%)	22 (30.14%)
III	34 (46.57%)	39 (53.43%)
IV	35 (47.95%)	38 (52.05%)
V	34 (46.57%)	39 (53.43%)
VI	43 (58.90%)	30 (41.10%)
VII	36 (49.31%)	37 (50.69%)
VIII	32 (43.83%)	41 (56.17%)
	313 (53.60%)	271 (46.40%)

4. The number of significant correlations between internal and external assessment scores differed from college to college for the year 2010. This is evident from the following observation.

Number of Courses	Number of Colleges with significant Coefficient of Correlation
8	5
6 to 7	19
4 to 5	22
1 to 3	25
For two colleges the correlations were not significant for any of the eight courses	

There were only five colleges where the correlations were significant for all the eight courses and two colleges where the correlations were not significant for any of the eight courses. The coefficients of correlation were significant for six to seven courses in case of 19 colleges. The coefficients of correlation were significant for four to five courses in case of 22 colleges. Further, there were 25 colleges where the correlations were significant in case of three or less courses.

5. There was no definite trend or uniformity in the significant correlations between internal and external assessment scores for the eight courses from college to college for the year 2010. In other words, the courses with significant correlations between internal and external assessment scores differed from college to college.

### **Collective Scenario for the Years 2008, 2009 and 2010**

1. The coefficients of correlation between internal and external assessment scores came out to be significant for fifty per cent cases (840 out of 1688) taken together for three years i.e. 2008, 2009 and 2010.
2. When all the colleges were taken together, the coefficient of correlation between internal and external assessment scores was significant for each of the eight courses for each of the three years i.e. 2008, 2009 and 2010.
3. The number of significant correlations between internal and external assessment scores differed from course to course for each of the three years i.e. 2008, 2009 and 2010.

4. The number of significant correlations between internal and external assessment scores differed from college to college for each of the three years i.e. 2008, 2009 and 2010.
5. There was no definite trend or uniformity in the significant correlations between internal and external assessment scores for the eight courses from college to college for each of the three years i.e. 2008, 2009 and 2010. In other words, the courses with significant correlations between internal and external assessment scores differed from college to college for each of the three years i.e. 2008, 2009 and 2010.

#### **Comparative View for the Years 2008, 2009 and 2010**

Except that the number of correlations for all the eight courses taken together slightly increased from 46.08 per cent in 2008 to 49.30 per cent in 2009 and to 53.60 per cent in 2010; there was no perceptible trend or change in the nature of relationship between marks obtained by students in theory papers and corresponding internal assessment marks awarded by each college during the years 2008, 2009 and 2010.

As stated before, the results of the studies investigating relationship between internal and external assessment scores conducted earlier do not indicate a definite trend in the relationship between internal and external assessment scores (Kamat, 1972; Raina, 1972; Gunasekaran and Jayanthi, 1980; Rasool, Sarup and Sharma, 1981; Rajendran, Mary, Christy and Mary, 2012). The results of the present study are more or less in conformity with these findings.

The reason for such a trend may be attributed to inconsistency in awarding internal assessment scores. The lack of (a) adequate guidelines, (b) moderation system, (c) accountability, together with non-serious attitude of teachers, tendency to inflate scores for showing over all better results, ego of the teacher and individual differences are some of the factors giving rise to this inconsistency.

Due to this inconsistency, the authors feel that computation of correlations in case of internal and external assessment scores do not provide an adequate picture of the relationship between the two variables, rather it is misleading.

Let us take an example from one college.

The correlation between internal and external scores for Course I for this college for the year 2008 came out to be 0.42 which is significant at 0.01 level. The relevant statistics for Course I for the selected college for the year 2008 are as under:

Variable	N	Mean	SD	Minimum Score	Maximum Score
Internal Assessment	83	18.47	1.29	12	20
Theory	83	47.48	3.91	38	58

Frequency distribution for internal assessment scores for Course I for the selected college for the year 2008 is as under.

Internal Assessment Score Awarded	Frequency
12	1
16	3
17	11
18	23
19	28
20	17
Total	83

In the absence of data of the college, one may conclude that internal assessment is spread over a range of 8. But removing just one score reduces the range to 4 and further removal of only three more scores brings down the range to 3. This means that 79 out of 83 students have been awarded 17 to 20 marks. The mean for 79 students shoots to 18.65 and SD comes down to 0.97. Let us take another example of another college.

The correlation between internal and external scores for Course VI for this college for the year 2010 came out to be 0.35 which is significant at 0.01 level. The relevant statistics for Course VI for the selected college for the year 2010 are as under:

Variable	N	Mean	SD	Minimum Score	Maximum Score
Internal Assessment	63	19.70	0.46	19	20
Theory	63	40.38	5.56	32	59

Frequency distribution for internal assessment scores for Course VI for the selected college for the year 2010 is as under.

Internal Assessment Score Awarded	Frequency
19	19
20	44
Total	63

The above two cases are not isolated ones. The trend appears to be the same almost in all the cases. In this scenario, what do the significant correlations indicate? In our opinion, they fail to present the true picture of the relationship between internal and external assessment scores and mislead the analyst. Hence, we may conclude that the researchers should either refrain from using the technique of correlation while studying the variables of internal and external assessment or take extreme caution while interpreting the relationship.

## References

- Gunasekaran, K. and Jayanthi, P. (1980). A Study of the Continuous Internal Assessment and the University Examination Marks of the Undergraduate Semester Courses (1976-77 Batch). Examination Reform Unit, Madras U. In *Third Survey of Research in Education (1978-1983)*, Ed., M.B. Buch (1987). New Delhi: National Council for Educational Research and Training, Sri Aurobindo Marg, pp. 733-734, Study No. 1048.
- Kamat, A.R. (1972). Internal and External Assessment. In R.H. Dave and P.M. Patel (Ed.), *Educational Evaluation and Assessment*. New Delhi: National Council of Educational Research and Training, pp. 1-69.
- Raina, T.N. (1972). Relationship between External Examination Marks and Internal Assessment of M.Ed. Students. In R.H. Dave and P.M. Patel (Ed.), *Educational Evaluation and Assessment*. New Delhi: National Council of Educational Research and Training, pp. 70-80.
- Rajendran, S., Mary, J. Sahaya, Christy, D. and Mary, A. Rosaly Therese (2012). Correlation between Internal Assessment and External Assessment of B.Ed. Students". *Edutracks*, January 2012, Vol. 11, No. 5, pp. 32-36.
- Rasool, G., Sarup, R. and Sharma, N.R. (1981). A Comparative Study of Internal and External Awards at the Postgraduate Level in Jammu University. Ph.D. Edu., Jammu U. In *Third Survey of Research in Education (1978-1983)*, Ed., M.B. Buch (1987). New Delhi: National Council for Educational Research and Training, Sri Aurobindo Marg, pp. 739-740, Study No. 1062.
- UGC (2009). *Action Plan for Academic and Administrative Reforms*. Prof. Sukhadeo Thorat, Chairman, D.O.No. F.1-2/2008(XI Plan). New Delhi: Bhahadur Shah Zafar Marg. Retrieved from:<http://oldwebsite.ugc.ac.in/policy/cmlette2303r09.pdf>