# A COMPARATIVE STUDY OF INTERNAL AND EXTERNAL ASSESSMENT IN SECONDARY LEVEL STUDENTS OF LAKHIMPUR DISTRICT OF ASSAM 

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#### Abstract

The present study investigates to measure the evaluation pattern (internal and external assessment) in secondary schools students in Lakhimpur district of Assam. The study conducted on a sample of 924 students comprised of Government and private; Rural and Urban; and Boys and Girls where each of the sample groups has 462 students. The descriptive survey method is use for the data collection. The importance of the study is to find the impact of internal and external assessments on the overall academic achievement of the secondary school students.


Keywords: assessment, internal, external etc.

## INTRODUCTION

A process of measurement of students' performance is in simple words known as evaluation. It means the systematic assessment of the merit of same object. Assessment means the process of documenting, generally in measurable terms, knowledge, skills, attitudes and beliefs. There have two type of assessment- internal and external. Internal assessment is a crucial part of the instruction process in art and aids teachers, students, and parents in evaluating student progress. Internal assessment illustrates aspects of student progress that are not typically evaluated in external assessment. Internal assessment also serves as a basis for professional development. Teachers who analyze the work of their students will see trends in student performance that may be related to instruction. Internal assessment is set and marked by the school (i.e. teachers). Students get the mark and feedback regarding the assessment. External assessment is set by the governing body, and is marked by non-biased personnel. There have already taken only five subjects for internally assessing pupil's performance, conducting by SEBA in Assam when the investigator surveyed. These haveenglish, general science, general mathematics, geography and social study.

## OBJECTIVES

The objectives of the study are
(1) To study the distribution of the scores awarded for the external and internal assessments.
(2) To make a comparative analysis of the external and internal performance of students of (i) government and private schools, (ii) Rural and Urban and (iii) Boys and Girls.

## HYPOTHESIS

1. There is no significant difference in the internal assessment of boys and girls
2. There is no significant difference in the external assessment of boys and girls
3. There is no significant difference in the overall academic achievement of (i) government and private schools, (ii) Rural and Urban and (iii) Boys and Girls.

Methodology of the study: The Descriptive approach is used in the study. The present study is a comparative study on internal and external assessment of Secondary School Students in Lakhimpur districts of Assam. Keeping in view the nature of study, the survey method is found to be more suitable.

Population of the study: The population of the present study constitutes all the secondary school students studying in class X of Lakhimpur district of Assam.

Sample of the Study: The sample is of small number of representative individuals from the population. This study is conducted on a sample of 924 Students, 462 students from government schools, 462 students from private schools, 462 students from rural and urban and 462 students from boys and girls selected randomly from 30 Government and Private secondary schools of Lakhimpur districts of Assam. The final sample is selected randomly.

Tools Used: internal and external marks taken from the school record book.
Statistical Techniques Used: In this study various statistical measures such as percentage, Mean, SD and t-test are used.

## RESULTS

Results is to be discussed according to the objectives-
(1)The distribution of the scores awarded by the external and internal marks.

Table-1- Distribution of percentage for internal and external assessment for major groups

| Groups | No of <br> Student | Subject | Internal |  |  | External |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | 20 | 19 | 18 |  |
| Government Boys | 231 | English | 94(41\%) | 64(28\%) | 46(20\%) | 48\% |
|  |  | G. Science | 98(42\%) | 76(34\%) | 47(20\%) | 43\% |
|  |  | G. <br> Mathematics | 99(43\%) | 82(36\%) | 42(18\%) | 42\% |
|  |  | Geography | 28(48\%) | 26(44\%) | 5(8\%) | 56\% |
|  |  | Social study | 15(40\%) | 15(40\%) | 7(18\%) | 48\% |
| Government Girls | 231 | English | 106(46\%) | 72(31\%) | 45(20\%) | 45\% |
|  |  | G. Science | 107(46\%) | 76(33\%) | 41(18\%) | 47\% |
|  |  | G. <br> Mathematics | 107(46\%) | 78(34\%) | 38(16\%) | 46\% |
|  |  | Geography | 20(48\%) | 12(28\%) | 8(19\%) | 55\% |
|  |  | Social study | 15(46\%) | 7(21\%) | 9(27\%) | 52\% |
| Private Boys | 231 | English | 94(41\%) | 59(25\%) | 45(19\%) | 50\% |
|  |  | G. Science | 98(42\%) | 62(27\%) | 47(20\%) | 47\% |
|  |  | G. <br> Mathematics | 99(43\%) | 65(28\%) | 37(16\%) | 47\% |
|  |  | Geography | 20(39\%) | 16(31\%) | 10(20\%) | 58\% |
|  |  | Social study | 22(38\%) | 13(23\%) | 16(28\%) | 60\% |
| Private Girls | 231 | English | 123(53\%) | 68(29\%) | 26(11\%) | 56\% |
|  |  | G. Science | 123(53\%) | 71(31\%) | 23(10\%) | 58\% |
|  |  | G. <br> Mathematics | 124(53\%) | 84(35\%) | 15(8\%) | 56\% |
|  |  | Geography | 55(63\%) | 22(25\%) | 9(10\%) | 66\% |
|  |  | Social study | 24(48\%) | 10(20\%) | 14(28\%) | 70\% |
| Rural | 462 | English | 219(48\%) | 127(27\%) | 83(17\%) | 50\% |
|  |  | G. Science | 225(48\%) | 144(31\%) | 79(17\%) | 48\% |
|  |  | G. <br> Mathematics | 228(49\%) | 151(31\%) | 71(15\%) | 46\% |
|  |  | Geography | 59(48\%) | 41(33\%) | 16(20\%) | 58\% |
|  |  | Social study | 32(43\%) | 25(33\%) | 15(18\%) | 53\% |
| Urban | 462 | English | 198(42\%) | 136(29\%) | 79(17\%) | 50\% |
|  |  | G. Science | 201(43\%) | 141(30\%) | 79(17\%) | 50\% |
|  |  | G. <br> Mathematics | 198(42\%) | 149(29\%) | 60(17\%) | 50\% |
|  |  | Geography | 64(54\%) | 35(29\%) | 16(13\%) | 63\% |
|  |  | Social study | 44(42\%) | 20(19\%) | 32(31\%) | 62\% |

From the Table- 09 the investigator tries to summarize the ratio of internal and external marks and also the impact of internal assessment marks in hiking the total marks in each subject. From the above analysis it has been proved that student got high supportive marks in internal assessment and it has a great impact for students in total marks in each subject.

## (2) Comparative analysis of the external and internal performance of students of government and private schools.

Table2- Table of CR (t) - value for English (Internal marks)

| Groups | N | Mean | SD | t- Value |
| :--- | :--- | :--- | :--- | :--- |
| Government | 462 | 19.04329 | 1.067296 | $1.37(\mathrm{~ns})$ |
| Private | 462 | 18.93506 | 1.593133 |  |
| Rural | 462 | 19.11039 | 1.065501 | $3.12^{*}$ |
| Urban | 462 | 18.86797 | 1.586922 |  |
| Boys | 462 | 18.80303 | 1.466233 | $4.62^{*}$ |
| Girls | 462 | 19.17532 | 1.209864 |  |

Significant at 0.05 level
In Table 2 it is found that, in case of internal marks of English, there is significant difference among rural and urban as well as Boys and Girls but there is not difference between government and private students. From Table-2, the Hypothesis-1 is rejected.

Table 3- Summary of CR ( t )-value for English (External marks)

| Groups | N | Mean | SD | t - Value |
| :--- | :--- | :--- | :--- | :--- |
| Government | 462 | 38.25054 | 13.7698 | $6.36^{*}$ |
| Private | 462 | 43.0919 | 14.37881 |  |
| Rural | 462 | 40.43913 | 13.67131 | $0.49(\mathrm{~ns})$ |
| Urban | 462 | 40.89474 | 14.87301 |  |
| Boys | 462 | 40.18083 | 14.1055 | $1.04(\mathrm{~ns})$ |
| Girls | 462 | 41.15317 | 14.44464 |  |

Significant at 0.05 level
From Table3 it is found that there is significant difference between Government and private students in external marks of English but there is no difference in between rural and urban as well as boys and girls.

Table 4- t value for General Science (Internal marks)

| Groups | N | Mean | SD | t t- Value |
| :---: | :---: | :---: | :---: | :---: |
| Government | 462 | 19.17749 | 0.87313 | $2.55^{*}$ |
| Private | 462 | 18.99566 | 1.543564 |  |
| Rural | 462 | 19.25325 | 0.852927 | $4.25^{*}$ |
| Urban | 462 | 18.91974 | 1.542183 |  |
| Boys | 462 | 18.96537 | 1.333244 | $3.00^{*}$ |
| Girls | 462 | 19.20824 | 1.162838 |  |

Significant at 0.05 level
From Table4 it has been found that there is significant difference between government and private; rural and urban and boys and girls secondary students for internal assessment in General Science.

Table 5- t- value for General Science (External)

| Groups | N | Mean | SD | $\mathrm{t}-$ Value |
| :---: | :---: | :---: | :---: | :---: |
| Government | 462 | 37.13636 | 13.91237 | $5.83^{*}$ |
| Private | 462 | 42.85249 | 16.06874 |  |
| Rural | 462 | 39.31602 | 14.63199 | $1.344(\mathrm{~ns})$ |
| Urban | 462 | 40.66811 | 15.90886 |  |
| Boys | 462 | 36.93506 | 14.23875 | $6.25^{*}$ |
| Girls | 462 | 43.05423 | 15.70362 |  |

Significant at 0.05 level
From Table 5 it has been found that in General Science and General mathematics, there is significant difference in external marks between Government and Private as well as boys and girls but there is no significant difference between private and rural students of secondary schools. From Table-5, the Hypothesis-2 is rejected.

Table 6- Summary of CR (t) value for General Mathematics (Internal marks)

| Groups | N | Mean | SD | t - Value |
| :---: | :---: | :---: | :---: | :---: |
| Government | 462 | 19.2013 | 0.854082 | $3.77^{*}$ |
| Private | 462 | 18.86551 | 1.939106 |  |
| Rural | 462 | 19.28788 | 0.818326 | $5.6^{*}$ |
| Urban | 462 | 18.77874 | 1.935611 |  |
| Boys | 462 | 18.92641 | 1.541542 | $2.44^{*}$ |
| Girls | 462 | 19.141 | 1.46394 |  |

Significant at 0.05 level

From Table6 it has been found that there is significant difference between government and private; rural and urban and boys and girls secondary students for internal assessment in General Mathematics.

Table-7- Summary of CR ( t ) - value for General Mathematics (External)

| Groups | N | Mean | SD | t - Value |
| :---: | :---: | :---: | :---: | :---: |
| Government | 462 | 36.18142 | 14.73168 | $5.36^{*}$ |
| Private | 462 | 41.81015 | 17.20617 |  |
| Rural | 462 | 37.21366 | 14.75378 | $1.27(\mathrm{~ns})$ |
| Urban | 462 | 40.79601 | 17.47069 |  |
| Boys | 462 | 36.5122 | 15.26118 | $4.71^{*}$ |
| Girls | 462 | 41.46916 | 16.84202 |  |

Significant at 0.05 level
From Table 7 it has been found that in General mathematics, there is significant difference in external marks between Government and Private as well as boys and girls but there is no significant difference between private and rural students of secondary schools.

Table- 8- Summary of CR (t) - value of internal assessment in Geography

| Groups | N | Mean | SD | $\mathrm{t}-$ Value |
| :---: | :---: | :---: | :---: | :---: |
| Government | 462 | 19.30693 | 0.771266 | $6.66^{*}$ |
| Private | 462 | 19.31884 | 0.871156 |  |
| Rural | 462 | 19.2541 | 0.867803 | $2.40^{*}$ |
| Urban | 462 | 19.37607 | 0.78484 |  |
| Boys | 462 | 19.20909 | 0.846964 | $4.00^{*}$ |
| Girls | 462 | 19.4031 | 0.805444 |  |

Significant at 0.05 level
From Table 8 it has been found that there is significant difference between government and private; rural and urban and boys and girls secondary students for internal assessment in Geography.

Table 9-Summary of CR (t) - value for Geography (External)

| Groups | N | Mean | SD | $\mathrm{t}-$ Value |
| :---: | :---: | :---: | :---: | :---: |
| Government | 462 | 45.06 | 11.96022 | $8.00^{*}$ |
| Private | 462 | 51.70745 | 13.46155 |  |
| Rural | 462 | 47.69942 | 12.99069 | $4.9^{*}$ |
| Urban | 462 | 51.95652 | 13.4604 |  |
| Boys | 462 | 46.7037 | 12.58709 | $5.07^{*}$ |
| Girls | 462 | 51.01667 | 13.52113 |  |

Significant at 0.05 level

From Table 9, it is found that there is significant difference in government and private, rural and urban as well as boys and girls students in Geography.

Table 10- Summary of CR (t) - value for internal assessment of Social studies

| Groups | N | Mean | SD | $\mathrm{t}-$ Value |
| :---: | :---: | :---: | :---: | :---: |
| Government | 462 | 19.11268 | 0.903158 | $3.16^{*}$ |
| Private | 462 | 18.92593 | 1.165739 |  |
| Rural | 462 | 19.16216 | 0.876278 | $4.66^{*}$ |
| Urban | 462 | 18.88571 | 1.179262 |  |
| Boys | 462 | 18.91667 | 1.148607 | $3.00^{*}$ |
| Girls | 462 | 19.09639 | 0.970472 |  |

Significant at 0.05 level
From Table10 it has been found that there is significant difference between government and private; rural and urban and boys and girls secondary students for internal assessment in social study.

Table 11- Summary of CR (t) - value of external assessment in Social studies.

| Groups | N | Mean | SD | t - Value |
| :---: | :---: | :---: | :---: | :---: |
| Government | 462 | 40.81429 | 13.29519 | $12.01^{* *}$ |
| Private | 462 | 52.10185 | 15.30557 |  |
| Rural | 462 | 43.67123 | 14.83338 | $6.82^{*}$ |
| Urban | 462 | 50.4381 | 15.46082 |  |
| Boys | 462 | 45.03125 | 15.87149 | $5.71^{*}$ |
| Girls | 462 | 50.7439 | 14.61423 |  |

Significant at 0.05 level
From Table 11, it is found that there is significant difference in government and private, rural and urban as well as boys and girls students in Social Study.

Table 12- t-value of Boys and Girls of internal assessment

| Subjects | Groups | Mean | SD | t-value |
| :---: | :---: | :---: | :---: | :---: |
| English | Boys | 18.80303 | 1.466233 | $4.62^{*}$ |
|  | Girls | 19.17532 | 1.209864 |  |
| Gen. science | Boys | 18.96537 | 1.333244 | $3.00^{*}$ |
|  | Girls | 19.20824 | 1.162838 |  |
| Gen. mathematics | Boys | 18.92641 | 1.541542 | $2.44^{*}$ |
|  | Girls | 19.141 | 1.46394 |  |
| Geography | Boys | 19.20909 | 0.846964 | $4.00^{*}$ |


|  | Girls | 19.4031 | 0.805444 |  |
| :--- | :---: | :---: | :---: | :---: |
| Social Study | Boys | 18.91667 | 1.148607 | $3.00^{*}$ |
|  | Girls | 19.09639 | 0.970472 |  |

Significant at 0.05 level
From the above table 12- in both groups are highly significant differences in various subjects. Therefore the hypothesis 1 - (There is no significant difference in the internal assessment of boys and girls) is not accepted.

Table 13- t-value 0f External Assessment

| Subjects | Groups | Mean | SD | t-value |
| :---: | :---: | :---: | :---: | :---: |
| English | Boys | 40.18083 | 14.1055 | $1.04(\mathrm{~ns})$ |
|  | Girls | 41.15317 | 14.44464 |  |
| Gen. science | Boys | 36.93506 | 14.23875 | $6.25^{*}$ |
|  | Girls | 43.05423 | 15.70362 |  |
| Gen. mathematics | Boys | 36.5122 | 15.26118 | $4.71^{*}$ |
|  | Girls | 41.46916 | 16.84202 |  |
| Geography | Boys | 46.7037 | 12.58709 | $5.07^{*}$ |
|  | Girls | 51.01667 | 13.52113 |  |
| Social Study | Boys | 45.03125 | 15.87149 | $5.71^{*}$ |
|  | Girls | 50.7439 | 14.61423 |  |

Significant at 0.05 level

Hypothesis 2-There is no significant difference in the external evaluation of boys and girls. From the above Table-13 it is evident that in English subjects, both groups are not significant but other subjects are highly significant in same group. So this hypothesis is $80 \%$ rejected.

Table-14
Summary table of mean and Critical Ratio ( t )-values of academic achievement for six major subgroups.

| Groups | Mean | SD | t- Value |
| :--- | :--- | :--- | :--- |
| Government | 344.5485 | 72.31652 | $6.53^{*}$ |
| Private | 378.8415 | 86.58337 |  |
| Rural | 356.6302 | 75.55007 | $1.87(\mathrm{~ns})$ |
| Urban | 366.6652 | 86.98883 |  |
| Boys | 345.8683 | 77.57864 | $5.92^{*}$ |
| Girls | 377.0859 | 82.39309 |  |

Hypothsis-3 There is no significant difference in the overall academic achievement of students of
(i)Government and Private,
(ii)Rural and Urban,
(iii) Boys and Girls.

From Table-14 it is evident that in case of (i) Government and Private and (iii) Boys and Girls groups of hypothesis 5 are rejected. But in the group of (ii) Rural and Urban is accepted.

## DISCUSSION

- The investigator discussed some of the major findings. These are-(1) In the whole sample of the students were getting on an average $93 \%$ and above marks in internal assessment where as they got only $52 \%$ marks against internal assessment. There is large gap between internal and external assessment.
(a) All the major groups of students that (i) Government and private, (ii) Rural and Urban (iii) Boys and Girls are found to have significant differences in all subjects except in English in internal assessment.
(b) Only in Geography and social study all the major groups have highly significant differences on external assessment but not in English, general science and general mathematics.
(c) As far as academic achievement is concerned, Boys and Girls as well as Government and Private Students have significant difference but not among Rural and Urban students.


## CONCLUSION

From the above investigation it is found that there have some differences between the internal and external assessment. When internal marks are very high then external marks. But most of the students are performed in very well; at least maximum groups of students are getting $60 \%$ marks in overall performance.

## REFERENCE

Agrawal, Mamta, (2004) Curricular reform in schools; the importance of evaluation, journal of curriculum studies, vol. 36, no 3, pp 361-379.
Baskaran, S.H.; Sadatcharavel, N. and Baskaran, D. (2005) - Effect of Committed Evaluation Techniques upon Academic Performance. - Indian Educational Abstracts Vol. 6 No.1.

Chauhan, C. P. S. "An Evaluation of Achievement in Algebra of class IX student in Delhi school with reference to categories of Guilfordsstructure of Intelelct model". Ph. D. Thesis, J M I, 1982 as quoted in third survey (research in education, 1978-1983).

Deo, P.,"Effects of Revaluation on the results of candidates appearing at the University Examination." Dept. of Education, Banaras University, 1980 as quoted in third survey (research in education, 1978-1983).

Earl, Lorna (2003). Assessment as Learning: Using Classroom Assessment to Maximise Student Learning. Thousand Oaks, CA, Corwin Press.ISBN 0-7619-4626-8. Available at [1], Accessed January 23, 2009.
Gunasekaran, K. and Jayanthi, P. "A study of the continuous Internal assessment and the university examination marks of the undergraduate semester courses (1976-77 Batch) examination reform unit." Madras University, 1980 as quoted in third survey (research in education, 1978-1983).

Natarajan, V., "Monograph on Internal Assessment for the Universities; Association of Indian Universities," New Delhi, 1979. Notification No. SEBA/AB/AB/ Syll/ 33/2004/2 dated $30^{\text {th }}$ January, 2012.

Rasool, G., Sarup, R and Sharma, N. R., "A comparative study of Internal and External Awards at the postgraduate level in Jammu University", Jammu University, 1981 as quoted in third survey (research in education, 1978-1983).

Venkubai, J., "Internal Assessment; use and misuse," Directorate of Higher Education, Hydarabad, 1965 as quoted in third survey (research in education. 1978-1983).

