Research Notes

Quest over Courses of Study: Deciding for Teacher Rating Scale

SUDESHNA LAHIRI*

Abstract

The focus is now shifting from improvement in the quantity of schools to improvement in the quality of teachers. Hence, reaffirming the role and performance of facilitators become significant in the pursuit of quality education. In this regard, policy makers and administrators have suggested that student evaluation of teachers (SET) should be integral part of the Teacher appraisal. Reviewing the recommendations by different committees for improvement in educational system in India, the question arises — whether questionnaires for rating teachers used to evaluate the teachers should be course specific? What is the status of teachers when they are rated on a uniform questionnaire used in spite of having different streams? Thus, the present study is conducted with a framed objective — to find out the effect of course on student evaluation of teachers. A sample of 1711 higher secondary school students is made to rate 93 teachers. It is found that course has an effect on student evaluation of teachers on more than one dimension of "teacher effectiveness".

Because, teacher plays a key role in carrying out the structuring of the society and nation, Education Commission (1966) has rightly said, "Of all different factors which influence the quality of education and its contribution to national development, the quality, competence and character of teachers are undoubtedly the most significant". Thus, the importance of a teacher in the educational processes is unquestionable as he/she is architect and designer of all classroom interaction. Further, UNESCO (1972) has also reported that new roles are expected from the teacher in Asian Schools. He has to become a democratic leader, a friend and guide to his pupils and their parents

^{*}Assistant Professor, Department of Education, University of Calcutta

in community. In view of the significance of the role in education played by teachers, due to the rapid and drastic developments in technology, economy, and politics, teachers would face more challenges and uncertainties in performing a wider range of duties and taking up more responsibilities in 21st Century. The plea is that let the teachers accept responsibility and be accountable for their part in the declining standards of education and cooperate to contribute positively in a constructive manner, as there has been a considerable increase in the amount of effort put into improving the teaching-learning process in schools in India and different parts of the world. To ensure quality education, policy makers have recommended implementation of regular evaluation of teacher performance and ensuring their accountability, with the introduction of pay scale revision. In 1971, S.R. Sen Committee while recommending the higher pay scales had added the need for code of conducts (Professional ethics) to be made part of it. Recommendation from National Policy of Education (NPE) (1986) has suggested "Annual Performance Appraisal" for the teachers of colleges and Universities observing a comprehensive open participatory database system of teacher evaluation with the inputs from self, peers, heads of institutions/departments, students and others. However, it has been realised that performance evaluation of teachers is an extremely delicate and solemn task, which requires a high degree of uprightness and integrity on the part of assessor. As in most academic institutions, the Principals/Heads always evaluate the teachers at the end of the academic year when the confidential report is prepared. A major flaw in the system is that the principal is so engaged in administration that he or she cannot devote time in monitoring, assessing and taking remedial measures for improving the quality of education being imparted. Moreover, the permanent staff in the institution finds it offensive that the all powerful Principal would intrude into their classroom without invitation. In this regard, policy makers and administrators suggest that students would not be the silent partners as students have front row seat to observe classroom processes and are the best judges of what they have learnt (Scriven, 1995). For the last three decades, committees appointed, in India, to discuss effective measures for the accountability of teachers recommend to implement 'Student Evaluation of Teachers' to ensure quality teaching. The Rastogi Pay Committee (1997) instituted by the University Grants Commission (UGC) has stressed that student appraisal of teachers should be an integral part of the package of recommendation on pay scale and service conditions. Mehrotra committee (1987) also agrees,

with NPE (1986), the need for compulsory annual submission of 'Performance Appraisal' and students should evaluate their performance. The National Assessment and Accreditation Council (NAAC) of India, established by the University Grants Commission in 1994 to initiate quality management procedure, has made the institution of higher education to introduce student evaluation of teachers as one of the criteria for assessing teaching quality. The guidelines given by NAAC for Internal Quality Assurance Cell (IQAC) consist of various questionnaires for collecting feedback from students in structured way. Similarly, Technical Education Quality Improvement Programme (TEQIP) of Government of India consequent to implementation of reforms derived from National Policy of Education (NPE-1986 as revised in 1992) by institutions. The reforms to be carried out, among others, may include establishing the practices of student evaluation of teachers' performance and teaching counseling. The committees that also recommend student evaluation of teachers (SET) as an integral part of appraisal system are Professor Amrik Singh Committee, Ashok Mitra Education commission during early 1990s and the current 'Perspective Plan' by Higher Education Commission of West Bengal. In recent decision, the Kendriya Vidyalaya Sangathan has decided to adopt a system of evaluation of teachers by the students. According to the new rule (i.e., 81-E), children from class V to XII would be given printed assessment forms in the month of October and they would have to put tick mark against the appropriate grading. Tracing the origin of the concept, Student Evaluation of Teachers (SET), the process is first used in 1920's in University of Washington for deciding tenure for teachers, although it is started as a measure in US campuses for administrative decisions since 1960's. A recommendation for SET tops the list among the six suggestions for improvement of teaching made by the Carnegie Commission (1972) for US campuses. The area, i.e., SET, has been the frequently visited by Educational Researchers in Euro-American academe since 1960; however, it is still unexplored in Indian scenario. Therefore, before making the process an integral part of Teacher Appraisal System, a deep probe research should be conducted in Indian campus to constitute it's layout. The first step towards it is to develop the instrument, which could suitably match the objectives, purposes and needs of the system (i.e., SET). Development of the format of Teacher Rating Form is an essential task for quality assurance as quality is the most important agenda in the eve of most awaited sixth pay commission because the appeal is to make teaching job more attractive in terms of pay packages and service conditions. Although, the process (SET) is struggling for its existence in Indian educational system, premier Institutions along with those managed by private bodies have enforced this system of teacher appraisal without evolving scientifically developed 'Rating Form' for teachers. This, in return, leads to the pertinent question: whether uniform format should be used for evaluating the teachers from different courses of study? Because, policy makers have not made any clarity in instruction for differential process\format for rating of teachers for different courses. Thus, the evaluation of teachers is carried out in campuses blindly following the hypothesis that there is no significant effect of courses on Student Evaluation of Teachers. Review of related literature gives a sharp edge for testing the hypothesis statistically. Because 'SET' has been frequently visited area for Euro-American researchers, the studies conducted suggest varied results over the effect of course on student ratings. Exploring the course variables, it is required/elective, day or evening, course level, academic major versus minor, prior subject interest are seen affecting students' ratings (Papalewis, 1990; Scherr & Scherr, 1990). Branes and Branes (1991) address in their study that although student evaluation data provide a reasonable basic for making decisions about instructors when generalisability across course and students. When the course is the object of measurement (OM), data are less generalising. Conclude that this finding may be due to the type of evaluation items used for academic discipline differences in the type of courses selected for the study. Marsh (1982c) points that weak tendency for higher ratings in humanities and lower ratings in science but too fewer studies to be clear. Researchers also suggest that humanities courses tend to be rated higher than those in science and engineering; upper level courses tend to be rated higher than lower level courses (Feldman, 1983; Marsh & Dunkin, 1992). Because each discipline may vary with respect to the type of teaching style used (Hudak & Anderson, 1984), students with engineering majors may evaluate humanities, social sciences and natural science professors more negatively because they may be less accustomed to their teaching styles or have less interest in those courses than other students (Basow & Silberg, 1987). Study conducted by Basow and Distenfeld (1985) finds that student major also has an effect on the evaluations of professors. Engineering majors give the least positive ratings on each factor, perhaps because no engineering professors are evaluated. Similarly, professors of humanities courses are always rated more than professors of social science, natural science courses, and engineering, a common pattern (Adams, 1997; Cashin, 1988; Marsh & Dunkin, 1992; McKeachie, 1996). Again, Schenkler and McKinnon (1994) suggest that course level appears to be a consistent variable that displays the greatest effect on student evaluation with students in more advanced courses indicating greater satisfaction with the instructor performance. Haskell (1997) points that required courses hold less interest and receive lower evaluations than elective courses. Ratings are generally higher for senior than for junior courses and for optional than for required courses (Feldman, 1978; Marsh, 1980, 1983; Murray et al., 1990). Cahn (1987) suggests that student evaluation of teachers measure attitudes toward instructor's course. Similarly, Evans (2004) finds that a link between a students' least popular teacher and the student's worst subject. Their favourite teacher is also the teacher of their best subject. Researchers also find effect of course taught on student ratings in interaction with gender. When the interaction of student gender is considered, Lucek, Endres and Caplan (1993) in Mass Communication show that male students rate male instructors higher and that female students rate female instructors higher. Similarly, because female faculty are most represent in the humanities, they are not viewed as very nontraditional by their students, although students may have samegender preferences in terms of teaching styles when teacher gender is also considered. In social sciences, however, which are composed primarily of business and economics and government and law-faculty, female professors are underrepresented and likely to be viewed as non-traditional (Sidanius & Crane, 1989; Tieman & Rankin-Ullock, 1985). Contradictory to the researches revealing the effect of course, Marsh and overall (1981) demonstrate that the instructor is the primary determinant of student ratings rather than the course he or she teaches. Gilmore et. al. (1978), applying generalisability theory to student ratings, also find that the influence of the instructor who teaches the course is much larger than that of course that is being taught. The conducted study suggests that ratings for a given instructor should be arranged across different courses to enhance generalisability. Reviewing the related literature, it has been observed there is a scarcity of research in India on the area "Student Evaluation of Teachers". The reported study on SET in Indian setup conducted by Balachandran (2000) in Madras University, finds that Economics teachers have improved slightly more than English language teachers as a result of feedback by student evaluation. English being foreign language, teachers may need more feedback of 'student evaluation' sessions before improvements can result in English Language teachers at par with teachers of other subjects. However, it does not study the effect of course/stream of studies on student evaluation of teachers. The review of literature left the question unanswered that whether course specific questionnaires should be used to evaluate the teachers. The present paper attempts to investigate the status of teachers having different streams when students are ratings teachers on same format of Rating Scale.

OBJECTIVE

- 1. To find out the status of Higher Secondary School Teachers of different courses of study in relation to student evaluation of teachers.
- 2. To find out the effect of courses of study on student evaluation of teachers.

METHODOLOGY

Sample: From randomly selected 17 schools from urban area of Varanasi (India), 1750 Higher Secondary level students are made to rate 105 teachers. Because 39 rating forms are eliminated due to incomplete responses, final sample consists of 889 male and 822 female students evaluating 57 male and 48 female teachers.

Tool: A Teacher Rating Form (modified and adapted from Basow & Silberg, 1987) is used to measure student evaluation of teachers. The Rating Form is composed of 30 items responded over 5-point Likert-scale ranging from *Very Poor* (1) to *Excellent* (5). The items are equally divided among six dimensions of teacher effectiveness: Scholarship, Organisation/Clarity, Teacher-Group Interaction, Teacher-Individual Student Interaction, Enthusiasm/Dynamism and Personal Qualities. Internal reliability is established through Cronbach alpha, which is 0.7518.

Procedure: All 17 schools are managed by private bodies and follow CBSE syllabus. Each of the 105 teachers are having Post-graduate degrees and teaching in Higher Secondary Classes. To investigate the effect of course, students evaluate 41 teachers from Science, 33 from Humanities and 31 from Commerce stream. Overall, each teacher is rated by an average of 16.29 students. For analysing the effect of courses, F-tests are computed among mean ratings of teachers

grouped according to streams (i.e., Science, Arts and Commerce). Post-hoc test is carried out to investigate the significance of difference among mean ratings of teachers using Student –Newman-Keuls test.

RESULT

Because the developmental problem of teacher evaluation programmes begins with the fundamental consideration: evaluation of what? If a student evaluation of teacher is the measure of "teacher effectiveness", then it should provide the measures of separate dimensions. By using the responses of 1711 students, intercorrelation among the dimensions is calculated. Inter-correlated matrix is given in Table 1.

TABLE 1
Inter-correlation matrix among various dimensions

	D1	D2	D3	D4	D5	D6
D1	1	0.879*	0.894*	0.758*	0.843*	0.688*
D2		1	0.904*	0.796*	0.845*	0.810*
D3			1	0.822*	0.837*	0.793*
D4				1	0.805*	0.731*
D5					1	0.741*
D6						1

^{*}Significant at 0.01 level of confidence

D1 = Scholarship

D2 = Organisation/Clarity

D3 = Teacher-Group Interaction

D4 = Teacher-Individual student Interaction

D5 = Enthusiasm/Dynamism

D6 = Personal Qualities

Correlation as given in Table 1 shows that six dimensions included in test are highly interrelated. The inter-correlation among the dimensions is established to show that although they are separate dimensions but overlaps to capture a common abstract that is 'teacher effectiveness'.

1. Status of Higher Secondary School Teachers of different courses of study in relation to student evaluation of teachers.

To find out the status of teachers of different courses of study when students rating the teachers, mean, S.D. and S.E. are computed.

Table 2 shows descriptive statistics giving the status of the teachers across six dimensions for each of three courses e.g., Science, Humanities and Commerce.

TABLE 2
Status of Student Evaluation of Teachers on
Different Courses of Study.

	VARIABLES	MEAN	S.D.	S.E.
1.	Scholarship			
	Science	15.9781	2.9017	0.4278
	Humanities	17.8267	2.5099	0.5477
	Commerce	17.9008	2.8409	0.5682
2.	Organisation/Clarity			
	Science	17.0188	3.2842	04842
	Humanities	17.8895	3.2196	0.7026
	Commerce	18.7590	2.9196	0.5839
3.	Teacher-Group Interaction			
	Science	15.1458	3.0799	0.4541
	Humanities	17.0990	2.8229	0.6160
	Commerce	17.32	3.1076	0.6215
4.	Teacher-Individual Student Interaction			
	Science	16.1276	3.3878	0.4995
	Humanities	16.5662	2.3157	0.5053
	Commerce	17.3546	2.8381	0.5676
5.	Enthusiasm/Dynamism			
	Science	17.2672	3.4950	0.5153
	Humanities	17.7505	2.6567	0.5773
	Commerce	18.7752	3.1377	0.5313
6.	Personal Qualities			
	Science	17.6030	2.9932	0.4462
	Humanities	17.8130	3.2430	0.7077
	Commerce	19.0456	2.5651	0.5130

Status of the teachers in relation to student evaluation of teachers can be determined and compared on the basis of mean rating (Table 2) obtained. It can be concluded from Table 2 that teachers from Commerce stream have been rated highest across each of six dimensions, i.e., Scholarship, Organisation/Clarity, Teacher-Group Interaction, Teacher-Individual Student Interaction, Enthusiasm/Dynamism and Personal Qualities. Similarly, Teachers from Science stream have received lowest rating across every dimension on administered Rating Form. The table 2 further suggests that when compared for six dimensions within each courses of study, Teachers from Commerce and Science stream are highly rated in 'Personal Qualities' whereas teachers from Humanities scored high in 'Organisation/Clarity'.

2. To find out the effect of courses of study on student evaluation of teachers.

To find out the effect of course, individual student ratings across the six dimensions are subjected to F-tests are given in Table 3.

TABLE 3
Effect of Courses of Study on Student Evaluation of Teachers

SIG 0.007
0.007
0.089
0.006
0.270
0.154
0.140

^{*} Significant at 0.01 level.

From Table 3, it can be concluded that there is a significant effect of courses on student evaluation of teachers over dimensions, namely, Scholarship and Teacher-Group Interaction at 0.01 level of confidence. Comparing the means obtained for three courses of studies over six dimensions, it has been found that teachers from science stream received lowest mean ratings. Teachers from Commerce stream received highest mean ratings among three courses on each of the six dimensions of 'teacher effectiveness'. Posthoc tests have been carried out to find out the significant differences among mean ratings of teachers belonging to three courses, i.e., science, arts and commerce, across six dimensions. Thus, data are

subjected to Student-Newman-Keuls tests to investigate the further significant differences. Results are shown in Table 4.

TABLE 4
Results of student-newman-keuls test for difference in mean ratings in relation to course.

	3		
	Variables Subset for Alpha = 0.01		
1.	Scholarship		
	Science	15.9781	17.8267
	Humanities		17.9008
	Commerce		
2.	Organisation/Clarity		
	Science	17.0188	
	Humanities	17.8895	
	Commerce	18.7590	
3.	Teacher-group Interaction		
	Science	15.1458	17.0990
	Humanities		17.3200
	Commerce		
4.	Teacher-individual Student Interaction		
	Science	16.1276	
	Humanities	16.5662	
	Commerce	17.3546	
5.	Enthusiasm/Dynamism		
	Science	17.2672	
	Humanities	17.7505	
	Commerce	18.7752	
6.	Personal Qualities		
	Science	17.6030	
	Humanities	17.8193	
	Commerce	19.0456	

Results from Table 4 confirm that mean rating of teachers from science stream is significantly different from mean ratings of teachers belonging to arts and commerce streams. For Organisation/clarity, Teacher-Individual Student Interaction, Enthusiasm/Dynamism and Personal Qualities, there are no significant differences in the mean ratings of the teachers belonging to Science, Arts and Commerce.

DISCUSSION

Gradually, a kind of critical but constructive observation by students is becoming the part of most teacher appraisal system in India. Before making the process (i.e., SET) mandatory in every educational institution, a pertinent question has to be addressed that whether it is required to develop a uniform format for the teachers of all courses available. It has been observed in many appraisal system,

it is not the students' opinion that have necessarily been solicited rather they are answering administrators' questions without giving the matter any thought when they are supposed to 'evaluate' teacher. Methodologically poor "evaluation" not only fail to measure professional competency of the teachers, but also practically result in alienating the relationship between teacher and the administrators, hardly leaving any scope for improvement of performance. Wherever an unscientifically developed Teacher Appraisal process is conducted, it gives hardly any scope for two-way dialogue and objective of giving opportunity to a teacher for self-improvement remains unfulfilled. Thus, the process has been imposed and fate of the teachers has been decided without realising the consequences. However, an effective administration one which gets results that does not criticise teachers but assumes supportive roles to teachers. Because the reported study attempts to find out the status of the teachers when the same format for Rating Form is administered over the teachers having different stream of studies, it has been found that students rate their teachers differentially with courses. Teachers belonging to Science stream are poorly rated than their counterparts. This amply raises a quest whether teachers from science stream fail to show their "effectiveness" or it is the differential expectation related to the stream that pulls their ratings down. Thus, the objective 2 of this study investigates upon the effect of courses on student evaluation of teachers (SET). The present study reveals that there is a significant effect of course on student evaluation of teachers on more than one dimension of "teacher effectiveness". When Post-hoc tests are applied. it has been found that mean ratings of Science teachers are significantly different from mean ratings of teachers from Commerce and Humanities for the dimensions: Scholarship and Teacher-Group Interaction. The result is supported by previous researches where Marsh (1981 b) argues that students' ratings primarily reflect the effectiveness of the instructors may be uniquely suited to teaching some specific courses. Marsh (1994) assumes that every teaching method is effective for every course objective and suggests that there is a single (correct) way to teach. Similarly, Instructional Development and Effective Assessment (IDEA) is based on the assumption, which is supported by IDEA's empirical data (Cashin & Perrin, 1978; Cashin & Sixbury, 1992; Hoyt & Cashin, 1977). The assumption is that different courses have different instructional objectives and therefore, various teaching methods will be differently related to achievement per cent or at least to student's reports of progress — one different

course objectives. Researchers also suggest that the classroom also provides the stage for interaction between students and teachers, its characteristics limits the choices of teaching strategies and mode of exchange between the two (Ting, 2000). Thus, student ratings may partly reflect the class-specific experience. Because class characteristics vary from one course to another, sometimes the same teacher may not get consistent ratings across different types of courses. Chang (2000) also finds that course difficulty is negatively correlated with all evaluation scores. Reviewing these studies and considering Indian socio-economic scenario, low ratings acquired by science teachers in present study (Table 3) may be due to the differential expectations with the course. Students belonging to science stream, face a threat of throat cut competitive examination in India just after the completion of their Higher secondary school. This may result for a quench of knowledge, more often, up to the level where they can meet the requirement of competitive examinations. Thus, a teacher from science stream has to regularly update its knowledge and should be equipped with skills and techniques to disseminate the knowledge effectively. Moreover, most of the study materials and content in science stream are available in English. Thus, a dual competency is required for being well versed with the language and conceptualising the course content, before disseminating the subject knowledge. The expectation is to have knowledge of a broad range of content in sufficient depth to convey the information in meaningful ways to the students. The low ratings for science teachers, especially for "Scholarship", may also be accounted by differences in method for teaching science. Similarly, science teaching may involve and require different method than Humanities and Commerce. The question arises—how legitimate it is to put the teachers forcibly into same frame of questionnaire when the method of teaching is course specific? When review of literature (1984 to 1991) has been undertaken by Finely and Crawely (1993) to examine the instrument available for use of science educators. very few instrument are found to evaluate science educators. In India, the UGC involving representatives of All India Federation of College and University Teacher's Association has prepared two different formats of performance appraisal, for assessing the teachers, one for the teachers of Arts and Science colleges and other for teachers of professional colleges. However, the committee does not suggest the specificity of the format of the questionnaire used for collecting student ratings of teachers. Thus, it is in practice to administer same questionnaire over the teachers belonging to different courses whenever the process (i.e., SET) is employed. This makes the entire process of SET a convenient matter of picking and choosing what serves to comply with the original hypothesis of the SET designer/administrator rather than engaging in an honest evaluation. This means the evaluation is like a shopping list of potentially conforming characteristics. For remedial measure, researchers reveal about the use of SET (Braskamp & Ory, 1994; Cashin, 1995): 1. To increase comparability across faculty and departments, evaluations should be administered with a standard set of institution-wide procedures 2. Due to differences in student ratings by discipline, administrators comparing ratings for personal decisions or awards across such discipline should be very cautious.

In sum, student evaluation of teachers should be used to help teachers for career development by securing feedback for reflection and self-scrutiny. It should also serve as a touchstone to effective teachers. Therefore, course specific format should be designed to evaluate teachers. It is necessary to identify and select items related to the nature of the course. An effective Teacher Rating Form will enable teachers to know when he performs well and when he does not and how he needs to develop to become more valuable to him, the school and the students. If a single format is used for all courses, rating obtained by teachers should only be compared within the stream to which they belong. Because teachers may feel inept and confused when they receive lower ratings affected by the course of studies, they may be forced to keep changing their styles, ultimately loosing interest from their profession. Thus, it is important not only to develop performance appraisal system but also imbibe a positive attitude towards it.

REFERENCES

- Acharya, D. 2004. Chhatroder Reporte Uttor Bongo Biswavidyalaya kaaj Gelo Paanch Shikhokher. *Anandabazar Patrika*. May 30, 2004.
- Adams, John V. 1997. Student Evaluations: The Ratings Game. *Inquiry*, Vol. 1, No. 2, 10-16.
- Balachandran, E.S. 2000. Student Evaluation for Effective Teaching. Rajammal Publications. Chennai, India.
- Barnes, Laura L.B., and Barnes, Michal. 1991. Effects of Academic Discipline on Generalisability of Student Evaluations of Instruction. In: *Annual Measurement in Education*. Chicago, IL, April 4-6, 1991.

- Basow, S. A. 1995. Student evaluations of college professors: when gender matters. *Educational Psychology*, 87, pp. 656-665.
- Basow, S.A. 1998. Student evaluations: the role of gender bias and teaching styles. In L.H. Collins, J.C. Chrisler, and K. Quina(EDS.). Career Strategies for Women in Academe: Arming Athena (pp. 135-156). (Thousands Oaks. CA: Sage).
- Basow, S.A., and Distenfeld, M.S. 1985. Teacher Expressiveness: more important for males than females? *Journal of Educational Psychology*, 77, pp. 45-52.
- Basow, S.A., and Silberg, N.T. 1987. Student evaluations of college professors: are female and male professors rated differently? *Educational Psychology*, 79, pp. 308-314.
- Braskamp, L.A., and Ory, J.C. 1994. Assessing faculty work. Jossy-Bass.
- Carnegie Commission on higher Education. 1972. Reform on Campus: Changing Students' Academic Programs. New York: McGraw-Hill.
- Cashin, W.E. 1988. Student Ratings of Teaching: A Summary of the Research. IDEA Paper No. 20. ERIC No: ED 302567.
- Cashin, W.E. 1995. Student ratings of teaching. The research revisited. Idea paper No. 32. *Center for faculty Evaluation and Development.* Kansas State University.
- Chang, Te-Sheng. 2000. What are teacher College students telling us about them? Paper presented at the Annual Meeting of the American Educational Research Association. New Orleans, L.A., April 24 -28, 2000.
- Evans, D.R. 2004 Student Evaluations of Teachers. *Journal of Nursing Studies*. NCNJ, Vol.3, No.1, 91-99.
- Express News Service. 1997. UGC Recommends: Massive Pay Hike. June 13, Friday.
- Feldman, K.A. 1978. Course characteristics and college students' ratings of their teachers and courses: What we know and what we don't. *Research in Higher Education*, 9, 199-242.
- Feldman, K.A. 1983. The seniority and instructional experience of college teachers as related to the evaluations they receive from students. *Research in Higher Education*, 10, 149-172.
- Finely, Sandra and Crawley, Frank E. 1993. Student Evaluation of Teacher Performance: A Review of Literature and Instruments for Science Educators. Paper Presented at the Annual Meeting of the National Association for Research in Science Teaching. Atlanta, GA, April 1993.
- GILMORE, G.M., KANE, M.T., and NACCARATO, R.W. 1978. The generalisability of student ratings of instruction: Estimates of teacher and course components. *Journal of Educational Measurement*, 15, 1-13.

- Haskell, Robert. 1997. Academic Freedom, Promotion Reappointment, Tenure and the Administrative Use of Students Evaluation of Faculty: (Part II) Views from the Court. *Education Policy Analysis Archives*, Vol. 5, No. 17.
- Marsh, H.W. 1980. The influence of student, course and instructor characteristics on evaluations of university teaching. *American Educational Research Journal*. 17, 219-237.
- Marsh, H.W. 1983. Multidimensional ratings of teaching effectiveness by students from different academic settings and their relation to student/course/instructor characteristics. *Journal of Educational Psychology*, 74, 264-279.
- Marsh, H.W. 1994. Weighting for right criteria in the instructional development and effectiveness assessment (IDEA) system: Global and specific ratings of teaching effectiveness and their relation to course objectives. *Journal of Educational Psychology*, vol.86, No. 4, 631-648.
- MARSH, H.W., and DUNKIN, M.J. 1992. Students' evaluations of university teaching: A multidimensional perspective. In J. Smart (Ed.), *Higher Education: Handbook of Theory and Research*. New York: Agathon.
- Mc Keachie, Wilbert J. 1997. Student Ratings: The Validity of Use. *American Psychologist*, 52(11) 1217-1225.
- MISHRA, R.C. 1999. Research on education in India. *Prospects.* Vol. XXIX, No. 3, 335-346.
- Murray, Harry and Others 1990. Teacher Personality traits and Student Instructional Ratings in Six Types of University Courses. *Journal of Educational Psychology*, Vol. No. 2, 250-261.
- Papalewis, Rosemary. 1990. Interpretation of Student Data: Contextual Variables and Cultural Implications. *Paper Presented at the National Conference of Professor of Educational Administration*, Los Angeles, CA.
- Scherr, Frederick and Scherr, Susan. 1999. Bias in Student Evaluations of Teacher Effectiveness. *Journal of Education for Business*, Vol. 65, No.8, 356-358.
- Scriven, M. 1981. Summative teacher evaluation. In J. Millman (Ed.), Handbook of Teacher Evaluation (pp. 244-271). Beverly hills, CA: Sage.
- Shyamasundar, M.S. and Stella, Antony. 2002. Transforming the Campus Experience of Students. In: Seventh Quality in Higher Education International Seminar, Transforming Quality, Melbourne, Australia. November 30-31, 2002.