DECISION MAKING PRACTICES OF PRINCIPALS AND FACULTY PERCEPTIONS TOWARDS THEIR BEHAVIOR AROUND PARTICIPATIVE DECISION-MAKING IN TECHNICAL EDUCATION INSTITUTIONS

[1]**Rajbir Gulia**, [2]**Pardeep Ahlawat**
[1]Director, [2]Professor
[1]Delhi Technical Campus, Bahadurgarh, Haryana, India.

Abstracts: An attempt is made to describe the decision making phenomenon in this study primarily by analyzing the principal's practice and investigating the same from the faculty point of view in technical education institutions. An effort was made to develop an idea of participative decision-making as a set construct which understands various dimensions of decision making. It examined the practices of the principal in inciting and strengthening teacher participation. Principal reported themselves as to avoid a show of surprise when amazing ideas come forward from the group and to always encourage group development and teacher expression. Though Principals support the teaching faculty politically, but they set a clear limit to teachers. On the other hand, increased learning opportunities have been accepted by the teachers in participative environment. Empowerment to increase authority in their positions, shared governance, increased autonomy, job security have been not accepted by the teaching faculty in terms of principals' decision making practices rather reported increased accountability.

Index Terms - **Phenomenon, analyzing, participative, construct, expression, empowerment, autonomy, accountability.**

1. INTRODUCTION

Decision making is not a simple, singular event, but the product of a complex social process extended over a considerable period of time (Simon, 1965). The decision making process can be looked at as a set of actions and courageous factors that begin with the identification of a catalyst for action, and end with the specific commitment to action (Mintzberg et al., 1976). According to Henry, Mintzberg, Duru, Raisinghani, and Theoret (1976), the decision process includes recognition, improvement, and choosing phases. A good decision maximizes the well-being of those affected by it (Dietz, 2003). Adair (2000) thinks, decision process involves determining the problems, gathering data, creating suitable alternatives, making decisions, practicing in the decisions and evaluating the results.

The decisions of principals can effect positively or negatively on all components of an organization and the decision-making styles (DMS) of administrators are important. Principals can make decisions rationally or intuitively, or they can try to avoid them however, their decisions ultimately affect the quality of teaching in an institute of technical education. This study presents a preliminary examination regarding decision making practices of principals and perceptions of teaching faculty about participative decision-making. Because principal is the key figure in participative management (Reitzug, 1994). Research findings have been uncertain about the positive outcome of the teacher participation, and it suggested that lack of shared understanding among researchers regarding what teacher participation actually looks like is perhaps the reason for the lack of precise evidence of its effects (Bacharach et al., 1990; Somech, 2002). More research is required regarding implementation of participative decision-making by principals.

This part of the study highlights the findings of comprehensive review of literature regarding participative decision-making practices by the principals and investigates the differences between principals and teaching faculty perception about the practices of the principals in participative decision-making, and considers principals' aspect in addition to their current practices. Specifically, researches looked at how principals make decisions, why principals make certain decisions, and what decisions principals are making. However, there have been very few studies that attempt to relate a principal's decision making practices to faculty participation for quality management in technical education institutions.

2. REVIEW OF LITERATURE

This part of the study extracted from the extant literature is to primarily focus on the concept of "decision-making" and "participative decision-making" by understanding the similarities among various conceptions of the term and then to review related work about the decision making practices of Principals and faculty perceptions towards their behavior around participative decision-making.

2.1. Understanding participative decision-making

To guide research many scholars have tried developing thought regarding participative decision-making. Participative decision-making is assumed as only one angle of shared leadership, and idea of involving teachers in decision-making, and is called by many names like teacher leadership, teacher empowerment, and shared governance. Participative decision-making is a practice, teacher empowerment represents an internal apprehension of teachers about having more authority in their positions. According to Rinehart et al. (1998), "Primarily, empowerment has been defined as a process whereby participants develop the competence to take charge of their own growth and resolve their own problems". Another closely related concept of teacher leadership includes teacher participation in decision-making as part of a generous leadership role both within and outside the classroom. Crowther et al. 2002), Duke, (1994), Leithwood and Jantzi (2000), Silva (2000), Smylie and Denny (1990)

found that teacher leadership is about full participation of teachers about having a shared vision of planning and implementing improved instructions, participating in community working and professional development in addition to participation in decision-making Participative decision making can be further defined as a concept of shared governance of principals sharing their governing roles with their teachers.

2.2. Practices of the principals around participative decision-making

There has been a less investigation of the practices of principals about participative decision making. To examine principals' attitudes toward participative management, more research is required (Somech, 2002). One of the study found that accepted attitudes of principals were always consistent about participative decision-making always. Blase and Blase (1999) viewed 18 principals involved with Professional institutions where the colleges developed shared governance practices. The principals were of firm belief that there is a benefit of increasing teacher participation. Many of the principals were undecided, when to maintain authority and when to give up.

Some other studies have underscored the need for principals to be supportive facilitators of teacher participation. According to Somech (2002), "Leaders must be willing to let go of traditional authority roles, not only allowing teachers to have a greater voice but helping to prepare them, providing support and establishing an environment of trust". Regarding participatory work environment, the researchers argued that principals communicated a genuine concern and empathy for the welfare of their faculties and supported for teachers' work. The findings suggested that the interpersonal skills of a principal are more important in promoting teachers participation in educational institutions.

Barth (2001) described leadership characteristics that promote teacher acceptance, recognition, firmness, respect and support to participative decision making. These characteristics influence the relationships among the Principal and teachers. It is necessary for principals to acquaint with two modes of participation i.e. domination and authority, and to be mindful of which approach for involving teachers is most appropriate in each decision domain. Kahrs (1996) suggests appropriate structures for principals to empower teachers that consist of a leadership team, a staff development committee, teachers on hiring and peer evaluation teams, a formally established inclusive budgeting process, traditions of teacher understanding and celebrations.

Keith (1996), argues in her critical review of teacher participation that to ensure participation of all stakeholders particularly those marginalized in the past is the job of leadership. Lawler According to Lawler power can be shared by allowing workers with the liberty to participate in decision making that have direct effect on their work. Apart from financial rewards the managers must award them in the form of confirmation, appreciation of performance, friendship and other social rewards.

The interesting aspect of principals' practices of participative decision-making is the deliberation of how their opinions and approach on the concept are influenced. Blase and Blase (2000) investigated the civilization factors that had contributed to the principals' present attitudes. They found that many of the principals had acquired both their opinions and their relevant skills prior to becoming principals.

2.3. Effects of faculty participation

The researcher found massive improvements in the efficiency, absenteeism, productivity and grievance redressals due to faculty participation in decision making (Coch and French, 1948). Alutto and Belasco (1972, 1973), Black and Gregersen (1997), Cotton et al., (1988), Mohrman et al. (1978) found participative decision making as increased job satisfaction and improved performance.
Brown (1993) found huge difference in work situations of educational institutions established by private and public sectors. First, the input and output relationship in public sector educational institutes is more vague than in the private sector, which makes it difficult to evaluate the effects of employee involvement. Second, teachers are different from non-professional workers (Brown, 1993). Next the objective of education is highly difficult to define than in a private sector organization.

Some scholars found teacher participation in decision-making having positive effects but others found many challenges inherent to participative decision-making. Weiss, Cambone and Wyeth (1992) found conflicts in teachers involved in shared decision-making. Marks and Louis (1997) found in several studies on participative decision making that shared decision-making can reduce teachers' energy and derogate instructions. Taylor and Bogotch (1994) in a study found teachers' participation not having any significant differences on teachers and students outcome. Hence, conforming to the reviewed 'robust' theories and findings around participative decision making; the researcher formulates the following hypotheses:

H.1: There is a difference in perception about practices in technical education institutes around participative decision making between principals and teaching faculty.
H.2: There is a difference in perception about practices in technical education institutes around participative decision making in different job positional groupings.

3. RESEARCH DESIGN AND METHODOLOGY
3.1. Research design -
The study was explorative cum descriptive in nature. Survey was the predominant research methodology used in this work. To proceed on right track and to do justice with the study, the primary sources of information were browsed. Technical expectations as well as social expectations and obligations were delineated in consultation with the Research Supervisor and the stakeholders of technical education *viz.* students, alumni, parents, recruiters, faculties, supporting staff, government, society and administrators, before finalizing the line of action. Thus the thrust areas were marked for the target audience, the stakeholders.

3.2. Sample design -

Examining whole universe in research studies is quite difficult and the only alternate left is sampling. The same is true with the present study. A judgment and convenient sampling technique was used to retain its representativeness and manageability because it commensurate with quantitative research studies.The present study limits itself to the survey conducted over the subjects of Haryana and Punjab State. Both the states are having a number of technical institutions, which are different in size and type. The courses, which are known as 'technical' in India and therefore come under the purview of All India Council of Technical Education are degree and diploma courses in Engineering, Master degree Courses in Engineering, Master of Computer Application (MCA), Master of Business Administration (MBA), Pharmacy Courses, Courses in Architecture and Applied Arts and Hotel Management and Catering Technology Courses. Keeping in view the time and money involved it is logical that the sample size should be neither too small nor too big. It was also found that different types of technical institutions have different orientation in their workings and inclusion of all types of technical institutions in the sample population may deform the results as expected from the study. Hence after discussions with the guide, the researcher thought it proper to pursue only with a single type of institutions for further analysis. The researcher opted to investigate the viewpoint of Principals and faculty members working on regular/permanent posts in engineering colleges situated in these states to serve the objectives of the study undertaken. Overall, a convenient sample size of 1000 participants comprising of Principals, Professors, Associate Professors and Lecturers by selecting randomly at institution level from 40 engineering colleges having faculty strength of not less than 20 each was considered for the study undertaken.

3.3. Research instrument -

The constructs employed in the study were measured using multi-item scales. A self-administered questionnaire was developed to include all the items used for this research. The items were written in the form of statements and presented to the subjects to respond on a 5-point Likert scale. Newly developed as well as translated and back translated items taken from previous studies formed the questionnaire for quantitative analysis of the study.

A pilot study was conducted to validate the instrument regarding construct validity and reliability. After pilot testing, the questionnaire was reworded to improve its readability and reliability. In particular, decision making practices of principals were introduced into the original questionnaire to improve its relevance to this research.

Overall this self administered questionnaire comprised of seven sections: Section-1 consists of two parts: Part-A included only the Heads of the Institutions/Principals to respond six questions about their institute's demographics and Part-B: for all the participants to respond six questions on their individuals demographic profile. Section-2 targeted the decision making practices of principals around participative decision making in technical education institutions.

3.4. Theoretical validation of the research instrument –

Development of a measure should closely relate to the test of the underlying theoretical relationship among related constructs, (Bagozzi, 1989). This study basically followed the recommended comprehensive interpretational approach for linking theory construction, measure development and theory testing. The measure development process employed, included an explicit model to test.

3.5. Content validity -

Content validity defines, how representative and comprehensive the items were in presenting the hypothesis. It is assessed by examining the process used in generating scale items (Straub, 1989). In this research, definitions of various factors contributing to the study were developed based on the review of theory and research on decision making practices of principals and faculty perceptions towards their behavior around participative decision-making.

This study follows Straub's (1989) process of validating instruments to test established validity in terms of discriminant validity. Discriminant validity is the degree to which measures of different concepts are specific. The discriminant validity of constructs was assessed by principal component factor analysis with VARIMAX rotation wherever required.

The internal consistency of the variables was tested by using a reliability test. Internal consistency reliability is a statement about stability of individual measurement items across replications from the same source of information. The Cronbach alpha coefficient was used to assess reliability of the measures (Straub, 1989).

3.6. Hypothesis design-

1	H2.1: There is a difference in perception about practices in technical education institutes around participative decision making between principals and teaching faculty.
2	H2.2: There is a difference in perception about practices in technical education institutes around participative decision making in different job positional groupings.

3.7. Data collection method-

A self-administered questionnaire was made available to all the respondents at their door steps. Participation was voluntary. For reasons of confidentiality and security, the detailed profile of surveyed institutions or the respondents were not revealed anywhere in the study. English was the medium of instruction at the respondents involved in data collections. As such language did not appear to be a problem for the respondents.

Relatively high response rate of study attributed mainly to three factors, a clear and simple design questionnaire, respondents briefed about the content and purpose of the survey and were guaranteed strictest confidence. Lastly, the high response rate also attributed to the respondents' enthusiasm and willingness to participate obviously considering the subject as an interesting.

3.8. Participants-

Out of 1000 respondents including Principals, Professors, Associate Professors and Lecturers selected from 40 engineering colleges, only 647 entries were found valid cases, reason being either the respondents have not shown interest in filling and returning back or they filled invalid entries as per the specifications of our subject which yielded 64.7 per cent response rate. In cases where respondents did not answer every question, those questionnaires were also discarded. Out of these 647 questionnaires, 564 questionnaires were deemed good to be analyzed. Overall, the 564 responses represented a response rate of 56.4 per cent which allowed the researcher to build a richer picture of the phenomena under study. However, if any of the questions was not answered, the average point for that person could not be calculated. For this reason, different numbers of respondents can be seen when a statistic related to the points in different groups is made.

Demographic Features of the Participants:- The demographic profile of the 564 participants from the 24 engineering colleges is presented in below Tables. The following tables give the distribution of respondents along various demographic variables included in the sample. Demographic characteristics of the participants:-

N = 564

Sr. No.	Variables		Frequency	Percentage
1	Gender	Male	330	58.51
		Female	234	41.49
2	Age (In Years)	Less than 30	115	20.39
		31- 45	340	60.28
		46 and above	109	19.33
3	Job Position	Principal	24	4.26
		Professor	40	7.09
		Associate Prof.	84	14.89
		Lecturer	416	73.76
4	Marital Status	Single	85	15.07
		Married	479	84.93
5	Education	Graduate	85	15.07
		PG	399	70.75
		Ph. D	80	14.18
		Professional*	485	85.99
6	Teaching Experience (In Years)	< 5	170	30.14
		06-10	180	31.91
		11-15	135	23.94
		> 15	79	14.01

*Professionals are having UG, PG or both degrees in technical courses

Most of the lecturers and all the principals of the engineering colleges participated in the survey. There were more male faculty members than female participants. Table below shows the profile of the respondents.

Table: Number of respondents according to gender, age, job position, educational status and teaching experience

N = 564

Sr. No.	Variables		Frequency
1	Gender	Male	330
		Female	234
2	Age (In Years)	Less than 30	115
		31- 45	340
		46 and above	109
3	Job Position	Principal	24
		Professor	40
		Associate Professor	84
		Lecturer	416
4	Education	Graduate	85
		PG	399
		Ph. D	80
		Professional*	485
5	Teaching Experience (In Years)	< 5	170
		06-10	180
		11-15	135
		> 15	79

*Professionals are having either UG, PG or both degrees in technical courses

4. DATA ANALYSIS

As regards to the data analysis tools, it may be mentioned that Likert 5-point scale was used throughout the questionnaire. The quantitative data were fed into computer and the acquired data using the software package SPSS 10.0 version was analyzed. Frequency percentiles and cross tabulation were employed as preliminary statistical procedures for data analysis. Scores were calculated and analysis made with the help of t-test, ANOVA, correlation, regression and factor analysis. Descriptive statistics, i.e. percentage, mean, standard deviation and variance of the respondents' scores to all the statements in each of the sections of the questionnaire, were also computed. These tests were used to test the entire research hypotheses. One or the other statistical techniques was applied to the data relating to particular set of questionnaire keeping in view the purpose(s) of the study.

Table: Number of respondents according to gender, age, job position, educational status and teaching experience

N = 540

Sr. No.	Variables		Frequency
1	Gender	Male	308
		Female	232
2	Job Position	Professor	40
		Associate Professor	84
		Lecturer	416

Given the number of subjects, who responded in this study, it was decided to use, Professors as a separate group and group all other respondents i.e. teaching faculty in the second group. The reason for this was job status of respondents in each group to be investigated. The other grouping was three job positional groups, resulting professors, associate professors and lecturers as shown in Table

Number of respondents based on job status and job positional groupings

Job Positional Groupings	Job Status (%)		Total (%)
	Principals	Teaching Faculty	
Professors		7.09	
Associate Professors	4.26	14.89	100
Lecturers		73.76	
Total	4.26	95.74	

To study the practices of decision making around faculty participation, a comparison of the differences between the opinions of principals and teaching faculty has been made on 19 different statements covering such aspects as teacher empowerment, teacher leadership, shared governance, trust and relationship building, teacher autonomy, teacher accountability and organizational learning opportunities, using a five-point Likert scale (1 = strongly disagree, 5 = strongly agree). Conducting t-tests on the responses from the principals and teaching faculty, significant differences were detected for most of the statements (Table 4.7). One of the most striking differences between the two groups was that principals opined more empowerment to teachers. Principal also viewed more autonomy to teachers and held the opinion that they were supporting the faculty politically to face fewer problems at institution level. Regarding increased job security as a reward, both the principals and teaching faculty were not confident. Group development and risk taking ability were also encouraged as main concerns by the principals. Furthermore, principals were not aware of whether accountability of the teachers would increase or decrease because of faculty participation in decision making.   Table: Perception around participative decision making – job positional difference

Sr. No.	Statements	Principal	Faculty	Significance
		Mean Score	Mean Score	(2-tailed)
1	Teachers are involved in decision-making process	3.40	3.21	0.241*
2	Teachers are empowered to increase authority in their positions	3.80	2.85	0.000*
3	Teachers participate in decision-making as part of a broader leadership role both within and outside of the classroom	3.92	3.02	0.362*
4	Principal shares governing roles with teachers in making decisions	3.12	2.98	0.233*
5	Teachers' autonomy has increased	3.83	2.44	0.000*
6	Principal supports teachers politically	4.42	3.49	0.000*
7	Teachers are rewarded with increased job security	2.54	2.46	0.000*
8	Principal hires only teachers who support shared governance	1.92	2.46	0.000*
9	Principal encourages teacher expression	4.28	3.43	0.000*
10	Principal encourages group development	4.32	3.74	0.000*
11	Principal sets clear limits to teachers	4.27	4.39	0.442*
12	Teachers' organizational learning opportunities have increased	3.72	4.06	0.211*
13	Teachers' accountability has increased	2.51	2.83	0.148*
14	Principal encourages risk-taking and involvement by withholding evaluation and criticism of proposals	3.11	2.93	0.000*
15	Principal ensures participation by all stakeholders	3.87	3.46	0.263*

16	Principal provides adequate, relevant information	3.27	3.11	0.167*
17	Principal builds trust among teachers	3.87	3.46	0.263*
18	Principal avoids a show of surprise when unusual ideas come forth from the group	4.41	4.38	0.879*
19	Principal develops and facilitates strong relationships with the teachers	3.21	3.19	0.134*

Annotation: $*p \le .05$

Teaching faculty, on the other hand, indicated that they avail more learning opportunities and principals were not discouraging even for their unusual ideas and develop strong relationships with the teachers. As opposed to principals, they believed that shared governance by the principals have increased their authority to make decisions at institution level. They also thought that clear limits have been set by the principals in their working. Reinforcing the findings of previous researchers that faculty participation has increased, the present research demonstrates that principals are concerned with involvement of teachers in decision-making as part of a immense leadership role both within and outside the classrooms.

Job status and positional groupings influence on the participative decision-making -

Further, in this study a two stage analytical approach was used. First, the fifty nine items measuring behavior of principals around participative decision making drawn from the relevant literature were subjected to a factor analysis. The results suggested a five-factor solution with items loading highly on their hypothesized and theoretically meaningful factors and had relatively small cross-loadings (see Table 4.8). Together these five factors explained 72 per cent of the total variance.

Clearly two dimensions found to have somewhat less than the desirable level of reliability ($\alpha \ge .70$) indicating that more work for developing the scale is needed. However, these dimensions correspond to meaningful and illustrable factors and showed significant reliable variance given the number of items per dimension.

The five factors were used to test the hypothesis. More specifically, Job Status i.e. Principal and Teaching Faculty and job positional groupings i.e. Professor, Associate Professor and Lecturer served as categorical independent variables with the five factors being used as dependent variables. Given that all cells in the design contained responses, and that the factors resulted from the factor analysis were independent, it was decided to use ANOVA to test the hypothesis. The results of the analysis of variance appear on Table 4.8. For all analysis a significance level of $\alpha \le .01$ was assumed.

5. SUMMARY OF FINDINGS

This part of the study attempted to describe the decision making phenomenon primarily by analyzing the practices of principals and investigating the same from the faculty point of view in technical education institutions. An effort was made to gestate participative decision-making as an agreed-upon design that indicates various dimensions of the practice. It explored the practices of the principal in inciting and assisting teacher participation. Principal reported themselves as to avoid a show of surprise when unusual ideas come out from the group and to always encourage group development and teacher expression. Though Principals support the teaching faculty politically, but they set a clear limit to teachers. On the other hand, increased learning opportunities have been accepted by the teachers in participative environment. Empowerment to increase authority in their positions, shared governance, increased autonomy, job security have been not accepted by the teaching faculty in terms of principals' decision making practices rather reported increased accountability.

This study does not support the theory that institute based management governance structures automatically enhance teacher participation in decision-making. Principals should engage teachers in all the decision domains. Teachers prefer to concentrate on teacher-related concerns; it is through this preference that teachers may be committed to participating in a decision-making process.

Perception and behavioral characteristics of Principals and teaching faculty were also investigated. The analysis provided evidence that there were significant differences between the two groups with respect to decision making practices and participative decision making in their institutes. The study also examined the influence of job status and job positional groupings on participative decision making components derived through factor analysis (Setting Directions, Building Relationships and Developing People, Developing the Organization, Leading the Instructional Program and Securing Accountability). The main findings were that no differences were found between job status (principal and teaching faculty) and in all three job positional groupings (professor, associate professor and lecturer) with regards to 'Building Relationships and Developing People' and 'Leading the Instructional Program'. In particular teaching faculties' perception about relationship building and human resource development was found to be in agreement in that "they felt confident with the provision of fairly, equitably and with dignity treatment, effective strategies for professional learning and delegation of power effectively to provide opportunities for staff to self-actualize". This suggests that educational institutes can standardize their instructional program aiming at relationship building with regards to faculty participation concern. The findings, however, indicated that all the respondents liked the securing of accountability, therefore, educational institutions can develop and present a coherent, understandable, accurate and transparent account of the institute's performance to a range of

audiences (e.g., institute's governing body/management, parents and community) on the strong attitudes that accountability aligns institute targets with university and provincial targets.

As far as the 'Setting Directions' is concerned, professors appeared to be having stronger perception than that of associate professors and lecturers. The mean for professors was higher for 'Setting Directions' (i.e., ensures the vision is clearly articulated, shared, understood and acted upon by all, works within the institutional community to translate the vision into agreed objectives and operational plans which promote and sustain institute's improvement, demonstrates the vision and values in everyday work and practices, motivates and works with others to create a shared culture and positive climate, ensures creativity, innovation and the use of appropriate technologies to achieve excellence, ensures that strategic planning takes account of the diversity, values, and experience of the faculty members and provides ongoing and effective communication with the faculty members). This indicates that professors perceived the 'Setting Directions' attribute more favorably than associate professors and lecturers. This might be explained by the fact that professors are more recognized for effective decision making and have more experience of the workplace so the level of familiarity with the decision making situations is greater for them than for the associate professors and lecturers.

The perception of teaching faculty about the 'Setting Directions' attribute was found to be different from principals' viewpoint. The mean for teaching faculty was lower than that of principals indicating that teaching faculty perceived the 'Setting Directions' attribute less favorably than the principals. Some possible explanation is that principals have more familiarity with the setting of directions in educational institutions.

For 'Developing the Organization' concern again there were some differences in viewpoints. Professors had a higher mean than that of associate professors and lecturers showing that professors were the most concerned with the development activities of the institution. The reasons for it could be that professors might have a wider experience in decision making than associate professors and lecturers.

Principals were also found to differ from that of teaching faculty for 'Developing the Organization' concern. The mean for principals found to be higher than that of teaching faculty. Possible explanations for these differences may be that principals are in administration and, as a result, might have more time to do development activities. This part of the research emphasis on to reveal the professionalism of the teachers to be valued by involving them in decision-making process.

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