

**A STUDY OF KNOWLEDGE MANAGEMENT STRATEGIES OF TEACHER
EDUCATORS IN RELATION TO SLECTED VARIABLES**

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Abstract

The global shift towards knowledge-based work has provoked a flood of books describing a scalar spectrum comprised of data, information, knowledge and wisdom (eg: Wiig et al 1997). But information to one person may be data to another. In this sense, knowledge can be defined as 'information with meaning and context'. The possession of knowledge and insight provides power and influence to individuals - and to organisations via the knowledge-based theory of the firm (Nonaka & Takeuchi 1995). Grant observes that "knowledge-based theory also permits us to look beyond conventional transaction cost analysis to better understand the optimal boundaries of the firm" (Grant 1997). But knowledge is tacit and exists in people's heads; so knowledge management must be a personal matter. Collectively, it is only feasible to 'manage for knowledge'.

We recognize knowledge management as a socio-technical phenomenon where the basic social constructs such as person, team, and organization require support from information communication technology applications. Considering educational institutions as organizations and building on the knowledge-base theory of the organization, it is imperative to understand human resources in the organization as they are an important ingredient of "intellectual capital". The researcher seeks to understand teachers and their perceptions of their knowledge management practices in relation to other vital variables that contribute to these knowledge management practices.

This research paper studies the Knowledge Management strategies of teacher educators as perceived by self and as perceived by student teachers in some teacher training colleges. It also studies the Organizational Culture as perceived by the teacher educators in these teacher training colleges. Finally it seeks to ascertain the relationship between; Knowledge Management strategies of teacher educators as perceived by self, with perceived organizational culture, teaching experience and knowledge management as perceived by student-teachers.

Introduction:

The global shift towards knowledge-based work has provoked a flood of books describing a scalar spectrum comprised of data, information, knowledge and wisdom (eg: Wiig et al 1997). But information to one person may be data to another. In this sense, knowledge can be defined as 'information with meaning and context'.

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Knowledge management is a socio-technical phenomenon where the basic social constructs such as person, team, and organization require support from information communication technology applications. In an era of business transition, the effective management of knowledge is proposed as a strategy that effectively utilizes organizational intangible assets. Against this conceptual debate, three main approaches to knowledge management have emerged: knowledge value management, intellectual capital management and knowledge productivity.

The analysis of the knowledge Management debate highlights its development as a response both to the ideological debate around the concept of a post- industrial society as well as the shifting economic pressures confronting business industries. In education too with the privatization of education, education is not spared of these economic and social pressures. Various studies show that the use of IT to ‘capture’ knowledge is an important ingredient, but other elements such as “intellectual capital” (where human resources is one of the intellectual capitals) concept reflect the increasing need to organize, capitalize and valorize knowledge to address problems of business restructuring and competitiveness.

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This research paper is built on the premise that knowledge management is a vital process which is more than a product to be assessed in an educational institution but a complex mediated process that needs to be understood empirically. If this is the required skill that needs to be developed in organizations, we in education too need to consider the various variables that are interrelated to this KM skill. This will enable us to develop a conceptual base that would guide the skill development in student teachers. This research paper studies the Knowledge Management strategies of teacher educators as perceived by self and as perceived by student teachers in some teacher training colleges. It also studies the Organizational Culture as perceived by the teacher educators in these teacher training colleges. Finally it seeks to ascertain the relationship between; Knowledge Management strategies of teacher educators as perceived by self, with perceived organizational culture, teaching experience and knowledge management as perceived by students.

Sample: The sample comprised of thirty two teacher educators from eight B.Ed. Colleges in Mumbai and 320 student teachers of these thirty two teachers. The sampling technique used was the stratified technique in the first stage for selection of the colleges and available or convenient sampling technique in the second stage for selection of the teachers and students.

Tools for research

For the purpose of the present study, the researcher has used three tools as follows:

- 1) Knowledge Management Strategy scale for teachers as perceived by teachers by Marathe (2010), on the basis of the dimensions given by Organizational Knowledge Assessment (OKA) tool funded by WBI (World Bank Institute). The internal consistency 0.71 and test re test reliability was found to be 0.76.
- 2) Knowledge Management Strategy Index for teachers as perceived by students by Marathe (2010), on the basis of the dimensions given by Organizational Knowledge Assessment. (OKA) tool funded by WBI (World Bank Institute). The internal consistency 0.68 and test re test reliability was found to be 0.70.

Readymade Tools

- 3) Organizational Culture (2000) Questionnaire prepared by Hee-Jae Cho (Cronbach's coefficient alpha .87)

Design of the Study:

The present study has adopted the descriptive method of the causal – comparative and correlational type for processing the data, classifying, analyzing and interpreting the findings.

Operational definitions of the terms:

Knowledge Management Strategies – In this study, Knowledge Management is operationalised in terms of:

- 1) Culture and Incentives – the attitudes, beliefs and incentives that the teacher educator uses to shape, create and support the use of knowledge to reach the goals of education.
- 2) Knowledge Identification and creation – the capability of the teacher educator to identify and create knowledge, especially those that contribute to the goals of education
- 3) Knowledge Sharing – the capacity of the teacher educators to share intellectual assets in ways that enable the student teachers to reach their educational goals.
- 4) Communities of Practice and Knowledge Teams – the existence, nature and use of pools of teacher educators within the college that can be effectively leveraged to solve problems and enable the student teachers to reach their educational goals.
- 5) Knowledge and Learning – the existence and the capacity of the teacher educators to build human capital in terms of student teacher through training and other structured or formally driven knowledge building activities.

Teacher Educators –

This refers to a member of a college faculty who is primarily concerned with the professional preparation of teachers full – time Bachelor of Education Degree Course.

Student Teachers –

It refers to the students in the B.Ed. training colleges in Mumbai for the one year full – time Bachelor of Education Degree Course.

Organizational Culture – In this study, Organizational Culture has been operationalised as follows:

- 1) **Involvement** – it is the empowerment, team orientation and capability development which the teacher educators experiences in the institution.

- 2) **Consistency** – it can be understood as the core values which the teacher educators share and the agreement, coordination and integration experienced by them.
- 3) **Adaptability** – it is the ease with which the college accepts change, are student focused and possess a climate of organizational learning.
- 4) **Mission** – it is the feeling of oneness which the teacher educator feels for the strategic direction, goals and objectives and the vision of the institution.

Aims of the study:

1. To study the Knowledge Management strategies of teacher educators as perceived by self and as perceived by student-teachers in teacher education colleges.
2. To study the Organizational Culture as perceived by the teacher educators in teacher education colleges.
3. To ascertain the relationship between Knowledge Management strategies of teacher educators as perceived by self and Organizational Culture in teacher education colleges.

Objectives of the study:

1. To study the Knowledge Management strategies of teacher educators as perceived by self on the basis of types of management, viz., (a) Private-aided (PA) teacher education colleges and (b) Private-unaided (PU) teacher education colleges.
2. To study the relationship between Knowledge Management strategies of teacher educators with Organizational Culture
3. To study the relationship between Knowledge Management strategies of teacher educators with students' perception of teachers' Knowledge Management Strategies.
4. To study the relationship between Knowledge Management strategies of teacher educators with their teaching experience (TE).

5. To study the relationship between Organisational Culture and Teaching Experience.
6. To study the relationship between knowledge Management and Teaching experience when the effect of Organisational culture is partialled out.
7. To study the relationship between knowledge Management and Organisational Culture when the effect of teaching experience is partialled out.

Analysis of the Data:

Null hypothesis was formulated for all the objectives and to test these hypotheses, the ‘t’ test and coefficient of correlation is computed.

1. There is no significant difference in the Knowledge Management strategies of teacher educators as perceived by self on the basis of types of management
 - a. Private Aided teacher training colleges
 - b) Private Unaided teacher training colleges.

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To test this hypotheses the ‘t’ test was used as shown in the following table.

Table 1: Differences in OC, KM as perceived by teachers and KM as perceived by Students on the basis of the type of institution

Variable	Groups	N	Mean	SD	t -ratio	l.o.s	100 ω^2_{est}
OCS	PA	13	239.25	29.71	0.129	-	-
	PU	19	237.95	25.19			
KM-	PA	13	274.5076	20.76517	0.581		

Teachers	PU	19	279.6316	29.12084			
Km- Students	PA	13	145.4734	14.23937	0.664	-	
	PU	19	148.5895	11.03434			

From Table D, for $df = 30$,

Tabulated $t = 2.04$ at 0.05 level

$= 2.75$ at 0.01 level

Interpretation of 't' :

The obtained 't' for OCS, KM -Teachers and KM-Students are 0.129 , 0.581 and 0.664 respectively which is less than 2.04. Thus 't-ratios' are not significant for the differences in the organisational culture scores, knowledge management scores of teachers and students' perception of teachers knowledge management strategies. Hence the null hypothesis is accepted.

Conclusion 1:

There is no significant difference in the scores of Organisational Culture, scores of Knowledge Management as perceived by teachers and students' perception of teachers' knowledge management strategies on the basis of school types.

2) For objective 2,3,4,5 null hypotheses was formulated and the co-efficient of correlation was used to test these hypotheses as shown in the following tables.

Table 2 : Significance of 'r'

Variable	Sample	.r	l.o.s	Variance
KM- as perceived by Teachers and OCS	32	0.5323	0.01	53.23
KMS-as perceived by Teachers and KM- as perceived by Student-teachers	32	-0.0249	N.S.	--
KMS-as perceived by Teachers and TE	32	0.244	N.S.	
OC and TE	32	0.0423		

The tabulated 'r' for the respective df at 0.05 level and 0.01 for the total sample of students (TSS) are as follows for all the preceding stated variables.

N	df	Tabulated 'r' at 0.05 level	Tabulated 'r' at 0.01 level
32	30	0.349	0.449

From the preceding analysis it is seen that the obtained 'r' for KM- as perceived by Teachers and OCS is greater than the tabulated 'r'. Hence 'r' between KM- as perceived by Teachers and OCS is significant at the 0.01 level.

The obtained 'r' for the (a) students' perception of teachers' knowledge management strategies and OC, (b) KMS-as perceived by teachers and students' perception of teachers knowledge management strategies and (c) KMS-as perceived by teachers and TE are less than the tabulated 'r'. Hence the null hypothesis is accepted for these relationships.

Conclusion 2:

The 'r' between 'KM- as perceived by Teachers and OCS is 0.5323, which is positive, moderate in magnitude and significant at 0.01 level. Thus the null hypothesis is rejected. 53.23 percent of the variance in KM- as perceived by Teachers is associated with OC. This implies that more conducive the organisational culture, the higher will be the KM- of teachers.

3) In order to test the 6th and the 7th Objective, the null hypotheses were formulated and **partial correlation technique** was used.

Table 3 : 'r' Values

KM as Perceived by Teachers (1)	Organisational Culture(OCS) (2)	TE (3)
M ₁ = 280.906	M ₂ =237.265	M ₃ = 6.563
SD ₁ = 25.32	SD ₂ = 26.228	SD ₃ = 4.981
r ₁₂ = 0. 532254 KM- as perceived by Teachers and OCS	r ₂₃ =0.036 OC and Teaching Experience	r ₁₃ =0.230 KMS-as perceived by Teachers. and TE

The 'r' between knowledge management scores of teachers and teaching experience is 0.2947 when the effect of Organisational Culture is partialled out. The 'r' between knowledge management scores of teachers and organisational culture is 0.539 when the effect of teaching experience is partialled out. This is less than the tabulated value; hence the null hypothesis is accepted.

From the preceding analysis is seen that (a) even after the effect of organisational culture from the relationship between teachers' knowledge management and teaching experience is partialled out, the magnitude of the relationship between teachers' knowledge management and teaching experience does not change significantly and (b) even after the effect of teaching experience from the knowledge management scores of teachers and organisational culture is partialled out, the magnitude of the relationship between teachers' knowledge management and teaching experience does not change significantly.

Conclusion 3:

Discussions: From the preceding analysis it is seen that the type of institutions (Private aided and Private unaided) does not make a significant difference in the perceived knowledge management scores as well as the perceived organisational scores of teacher educators. However, there is a significant relationship between Knowledge Management scores of teacher educators and Organisational Culture Scores of teacher educators. When the linear relationship was ascertained, the 'r' between Knowledge Management- as perceived by teachers and Organisational Culture was 0.5323, which is positive, moderate in magnitude and significant at 0.01 level. Whereas, the relationship between Knowledge Management- as perceived by teachers scores and teaching experience was not found to be significant. It is also seen that even after the effect of organisational culture from the relationship between teachers' knowledge management and teaching experience is partialled out, the magnitude of the relationship between teachers' knowledge management and teaching experience does not change significantly. The correlation value increases to 0.2947 which is still not significant. It is also seen that even after the effect of teaching experience from the knowledge management scores of teachers and organisational

culture is partialled out, the magnitude of the relationship between teachers' knowledge management and teaching experience does not change significantly. The correlation value increases to 0.539. These results are in accordance to Balthazard.P. and Cooke's (2004) who found that culture creates expectation of behaviour which can hamper Knowledge exchange and ultimately Knowledge Management.

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