Knowledge Management: A Study on the Role of Teacher in Sharing the Knowledge using New ICT Tools

P. Haripriya, DR. N.S. Chakravarthy,
Research Scholar, Associate Professor in Management,
Management, Rayalaseema University, Bhavans Vivekananda College,
A.P., India. Sainikpuri, Secunderabad, India

ABSTRACT

Applications of skills, experience, creative and intelligent ideas and so on are a kind of knowledge skills. These skills are applied by the learners and teachers as a part of Knowledge Management. Its main interest of elevating attitude depends on imparting quality education with values through full attention on topics for the discussion. Most of the people perceive that the management means something related to business and administration, but the paper presents Knowledge Management, as being management which exposes the knowledge and experience of the teacher and also the skill and interest of the learner as adding factors to achieve their success. The transformation of thought and experiences in imparting quality education to the students is the biggest debate today in the educational institutions where the management concentrates on the result with high percentage and the parents are exposed to know the class of the ward. But both are least bothered about the standard of the ward in terms of quality. To prevail over this constraint the teachers and students aim to foster for right direction with the help of using ICT tools to build the trust. New ICT tools create an opportunity for a teacher to learn new skills or up-skill them.

Keywords: Knowledge management, teacher, student, transformation, experience, quality and ICT tools.

INTRODUCTION:

Now-a-days, there are only two branches of learning which attracts the attention of the parents and managements of educational institutions. They are Engineering and Medicine. The essence of education is to make man as a human being. The source of the humanity and charity are to be inculcated right from the beginning of the education. Unfortunately, a 21\textsuperscript{st} century student concentrates on technical and other matters except humanity. The main difference between man and animal is the knowledge. Though the animals also posses the knowledge but it has its own limitation. But the knowledge of human being is infinite. To know the knowledge and acquiring it in a proper manner and utilising them in the correct direction is known as the Knowledge Management. It is an essential criterion in all fields of education. Especially, in engineering colleges where the different technicalities and principles are to be applied in a creative manner, Knowledge Management is highly essential for them in times of placements and interviews. Acquiring knowledge has various processes. The Mother, Family, Society, Atmosphere and above all Teacher play a critical role in Knowledge acquisition. The interest created by these factors encourage the individual to develop their knowledge in many forms like reading books, exchanging ideas, arguments in and involving themselves in healthy manner by paying attention to the speeches of eminent scholars and so on. These forms enhance the interest of the learner to resort for all round development.

It is purely a competitive world. Mere knowledge of books prescribed for study is not enough. The multi dimensional approaches of the individual make a path to the success. In all these aspects, the role of teacher is
very crucial. Right from the beginning of the education, every learner will be influenced by the style of teaching of their teacher. Some of the teachers inspire the learners not just for the purpose of getting good marks in the exams but also for the interchange of ideas between the teacher and student will enhance the skill and intellectual talent of the learner. The conversation between the teacher and the student’s taught will sow new ideas in the minds of young people. These discussions and conversations are to improve the academic standard of the learner and help for career development. The efficiency of the teacher and the interest of the student go hand in hand to achieve the success. Transformation of ideas and thoughts follows the process of KM through which current state of organisation transforms into knowledge enabled organisation. (G.I. Petrova et al. 2014). Active information and knowledge sharing are considered as pivotal attributes of a learning organisation. KM practice has the ability to engross students, teacher, culture and technology. It requires voluntary involvement of students and teacher in the activities organised for the improvement of the student and for the developing the standards of the institution. If the two are in the right track going ahead for the development, it leads to the development of the society as a whole.

**Objective:** The main objective of the study is to follow the process of knowledge management and Share knowledge among academic teacher to the students to play responsible role in the society. Knowledge management allows economic teacher of students to learn faster. Through sharing as reuse knowledge organisation will give better citizens today society.

**ROLE OF KNOWLEDGE MANAGEMENT:**

Knowledge management is the management of information organisation information and knowledge by applying skills, experience, innovation and intelligence. It is management discipline focussed on delivering value through attention. To acknowledge, KM is the management with a focus of knowledge and experience of Teachers as an asset and it could add up to many thousands students as years of experience. (Mamata Bhusry and Jayanti Rajan, 2011) Knowledge as an intangible asset cannot be measured and it is considered a valuable asset required for an organisation, but requires some process to be managed. The value is not realised or recognised. (Vandna Sharma, 2010), Knowledge should be trapped between teachers and valued knowledge or learned knowledge can be trapped with students. With title sharing and reuse of knowledge in the organisation, comes the benefit of not to misunderstanding the concept and making or repeating mistakes. This is successful protective knowledge becomes beneficial as well as effective. Infelicitously, most of the information acknowledge sharing studies have been done in organisation sitting and very little is known about the knowledge sharing pattern for students. (Anca Draghici et al. 2014) Knowledge management adds value for innovative thinking, creating innovative knowledge based process and products as students. Collaboration - conversation among students develops teamwork whereas coordination develops friendly understanding among them. (Lamprini Trivella, 2015)

Learning experience from teacher to students is a systematic learning as we use knowledge to improve or get outstanding results. Knowledge retention is nothing but protecting against the loss of knowledge with appearance staffs fast attention quickly transferring operational knowledge to new staff.

Knowledge is a value to any organisation and knowledge transfer process between teacher and students is according to knowledge transfer models which are more efficient in the condition of new knowledge based society. The teacher-student collaboration has reached a new dimension with the contact of open innovation since the beginning of 21st century, where in innovation has evolved. The open innovation models suggest that organisation should bring together external and internal ideas and technologies as an effective way to exchange knowledge for the advanced technologies. The teachers and students aim to support for right line of thought with the help of using ICT tools to build the requisite. Use of knowledge management process in delivering the knowledge with teacher and students through which the later will be trained to develop, to manage and to use broccoli the knowledge and solve any type of problem.

**KNOWLEDGE MANAGEMENT PROCESS:**

- Ensure a consistent high quality user friendly environment.
- Ensure to achieve objectives and keep it with the knowledge models of staff and students.
- Special rule in defining roles and responsibilities.
- Support best practices in knowledge sharing using ICT tools.
Enhancement of knowledge sharing through ICT tools:
In the 21st century as innovation has evolved many changes in the teaching style of the teacher has to go hand in hand with new methods of using innovative tools. No more the teacher can be “outdated” or “obsolete”. The moment teacher does not update himself/herself; they cease to stay alive and thus become unsuccessful to connect with their students. The teachers who apply concepts which are passé start feeling that they are incapable and incompetent. Thus teacher’s role is to update skill as time pass by. Even though the role of the teacher does not change much compared to traditional teaching, adapting to find the modern classroom environment, the, attitudes and learning styles needs of using new technology (ICT) to re-skill and up skill themselves. (Vipinkumar V.P et al. 2011) It is a relevant fact to observe that the cropping up of Information and Communication Technologies (ICT) in the last decade has opened new opportunities in knowledge management that could play a prominent role in meeting today’s challenges related to sharing, exchanging and disseminating knowledge and technologies.(Dwi Sulisworo 2012) ICT enables, qualified professionals and experts with accomplished skills in different fields to be empowered contribute their knowledge effectively and efficiently .ICT acts as a moderator factor that relates the HEIs processes and the KM processes to achieve the organizational competitiveness (Simin Ghavifekr 2016) ICT employed in teaching and learning process can support teachers in overcoming the barriers and become successful technology users(Hannelore Montrieux, 2015). The classroom aura has a bearing impact on both teaching and learning practices. The innovative teachers endeavour to shift from a teacher-centred to a learner- centred approach. (Payal and Vinod Kumar Kanvaria, 2018) Integrating ICT tools into the classroom will give effective results in understanding the concepts better provided if the student concentrates on their learning and be keener in putting the efforts. Perceptions connected with the use of ICT tools in the classroom for teaching and learning were found as follows:

**Students concentrate more on their learning:**
- Students work harder classroom climate become more productive
- Classroom climate become less disturbing as students engage more in their work
- Students feel more autonomous in their learning
- ICT facilitates collaborative work among the students
- Students understand more easily what they learn

**Knowledge management using ICT tools can be achieved through the following objectives:**
- Specifying assigning roles and responsibilities to teachers and encouraging them so that they actively participate in the same.
- Training programs are arranged for staff to enhance their skills in the core subject.
- Necessary infrastructure and skilled personnel to aid the flow of knowledge and information.
- Promotion of best practices in the flow of information.
- Involvement of all the stake holders.
- Use of online content existing in the following sites like NPTEL NMEICT, INFLIBNET, DELNET for knowledge sharing and management
- ICT enables best way to collaborate teaching learning process to student learning centre .Teaching through a new way by creating lessons using videos (A-synchronous-lecturer trap, blogs, wikis) and PowerPoint presentation.

**RESEARCH METHODOLOGY:**
This study is the nature of descriptive research design. This study measures the description of variables related to teaching and learning performance of faculty. It is a fact finding research and it does not allow the researcher to control over the variables. Both primary and secondary data were used in this study. Primary data collected through goggle form with a well-structured questionnaire. The questionnaire consists of three liker scales, where 2 = strongly agree, 1 = agree and 0 = disagree. Secondary data were collected through websites, newspapers, journals and magazines. The target sample respondents were 160 but only 123 respondents were filled in goggle form from various engineering colleges in Rayalaseema region. The teacher’s role in delivering knowledge to the students was measured on 5 parameters and another 5 parameters were used on exchange of knowledge using ICT tools. To analyse the importance of using ICT tools for teaching learning process in technical colleges of Rayalaseema region arithmetic mean, standard deviation were used.
Table 1 - Description of role of a teacher in sharing knowledge using ICT tools.

It is clear from the table that the first five parameters shows that the teacher plays a major role in imparting knowledge to the students where (p<0.05). The high mean value was 1.467. It can be inferred that teacher play a positive role in imparting knowledge. The low mean value of 1.23 confirms the requirement of proper infrastructure to implement ICT in education.

The next five parameters on imparting knowledge through new ICT tools to the students where (p<0.05). The high mean value was 1.516. It was found that new ICT tools will play an important role in imparting knowledge to the students. The lowest mean value of 1.254 infers that many teachers are not aware of new ICT Technologies and there is a strong need for training on the same.

DISCUSSIONS:

This paper has emphasized the role of a teacher in knowledge management and knowledge sharing in engineering colleges. This has also discussed how knowledge management can be done by achieving various objectives and following the processes. To achieve these objectives there is a need for the teachers to use ICT in education which requires to re-skill them and add value to teaching, by enhancing the effectiveness of teaching and learning process. It adds a new dimension to learning and teaching that was not previously available. After the initiation of ICT, students initiated learning in a technology-enhanced environment. They are motivated and effectively and efficiently engaged by using ICT tools than in a traditional classroom environment.

CONCLUSIONS:

Technologies create an opportunity for teacher to learn new skills or up-skill them. The new skills are designing lessons using online resources, creating interactive exercises and conducting online tests.

The Following are a few ideas for teachers to enhance their skills:

1. Learn to create Microsoft Forms to create survey, quizzes (pickers, moodle) and polls.
2. Learn to integrate technology into your teaching. Learn to use online resources by selecting appropriate material for teaching and creating lessons using videos (asynchronous-lecturer trap, blogs, wikis) and power point presentation.
3. Have your presence on social media. Twitter is a powerful tool to connect with professionals in your specialization and update your knowledge, share your ideas and discuss with others.
4. Be a part of a professional group and be aware of the trends in your field.

REFERENCES:

Anca Draghici, Calin-Florin Baban, Maria-Luminita Gogan, Larisa – Victoria Ivascu (2014). A Knowledge Management Approach for The University-Industry Collaboration in Open Innovation, 2nd Global Conference on Business, Economics, Management and Tourism, Prague, Czech Republic, 23-32.

Dwi Sulisworo (2012). Enabling ICT and Knowledge Management to Enhance Competitiveness of Higher Education Institutions, 112-119.

G.I. Petrova, V. M. Smokotin, A. A. Kornienko, I.A. Ershova, N.A Kachalov (2014). Knowledge management as a strategy for the administration of education in the Research University, International Conference on Research Paradigms Transformation in Social Sciences, 451-455.

Hannelore Montiexux, (2015). Teaching and Learning with Mobile Technology: A Qualitative Explorative Study about the Introduction of Tablet Devices in Secondary Education.

Lamprini Trivella, Nasiopoulos K. Dimitrios (2015). Knowledge Management Strategy within the Higher Education: The case of Greece. Procedia – Social and Behavioral Sciences, 488-492.

Mamata Bhusry and Jayanti Rajan (2011). Knowledge Collaboration in Higher Educational Institutions in India: Charting Knowledge Management, IJCSI International Journal of Computer Science Issues, Vol. 8, Issue 5, No 3, 332-339.

Payal and Vinod Kumar Kanvaria (2018). Learning with ICT: Use & Barriers from Teachers’ Perceptions, Vol. 9, Issue, 1(J), 23545-23548.

Simin Ghavifekr, Thanusha Kunjappan, Logeswary Ramasamy, Annreetha (2016). Anthony Teaching and Learning with ICT Tools: Issues and Challenges from Teachers, Perceptions Malaysian Online Journal of Educational Technology, Volume 4, Issue 2 38-57.

Vandna Sharma (2010). A perceptual study on KM orientation in Indian private Engineering institutions, International Journal of Educational Management, Vol. 26 No. 3, 234-251.
Vipinkumar V.P, Athira P.V and Mini K.G (2011). *Role of ICT in Knowledge Management*, Socio Economic Evaluation & Technology Transfer Division Central Marine Fisheries Research Institute, Kochi, Kerala, 542-549.

**Table 1: Description on role of a teacher in sharing knowledge using ICT tools**

| Survey Questions                                                                 | N  | Mean       | Standard Deviation | Std. Error    |
|---------------------------------------------------------------------------------|----|------------|--------------------|---------------|
| 1. Do you feel that a teacher play a major role in exchanging knowledge with the students? | 179 | 1.467213115 | 0.50165017        | 0.045417272   |
| 2. Are you of the opinion that training programmes are necessary for teacher so as to impart effective knowledge to your students? | 162 | 1.327868852 | 0.525257381       | 0.047554569   |
| 3. Do you feel adequate infrastructure is available at your college to exchange knowledge. | 151 | 1.237704918 | 0.536671714       | 0.048587974   |
| 4. Do you feel that the correct flow of information delivered in the class reached your students? | 152 | 1.245901639 | 0.554848266       | 0.050233602   |
| 5. Do you personally feel that the content delivered has reached the level of student’s comprehension? | 166 | 1.360655738 | 0.518527264       | 0.046945253   |
| 6. Do you feel that there should be a medium to exchange your knowledge effectively? | 155 | 1.270491803 | 0.578010476       | 0.05233061    |
| 7. Are you aware of new technologies available to deliver you content effectively Eg. Asynchronous, lecturer trap, blogs, wikis. | 153 | 1.254098361 | 0.48960131        | 0.04432642    |
| 8. Do you feel that new ICT tools will help you deliver your content effectively? | 185 | 1.516393443 | 0.517596693       | 0.046861003   |
| 9. Do you feel that the new ICT tools will re-skill and update your knowledge. | 169 | 1.385245902 | 0.603602158       | 0.054647572   |
| 10. Do you feel that new ICT tool will built your confidence level. | 172 | 1.409836066 | 0.512381143       | 0.046388809   |