

KNOWLEDGE SHARING AMONG INDIAN HIGHER EDUCATION AND INDUSTRIAL ORGANISATION: AN OVERVIEW

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Abstract: - The success of knowledge management initiatives depends on knowledge sharing . As we know that Human being while traveling through Pastoral, Agrarian and Industrial Societies has now reached to Information Society to Knowledge Society. With the advent of ICT there are now drastic changes almost in ever,' sphere of life. We breathIn age of IT Within a decade, it has absolutely changed the working of traditional libraries. Now the libraries specifically, of higher education have to start changing their role in knowledge management. Not only manage the knowledge but also contribute in the process of knowledge generation & knowledge sharing, should be the working of academic libraries. By collaboration with industrial firms for knowledge sharing, academic libraries can play an important role in the field of knowledge generation & knowledge sharing. This paper try to discusses about knowledge , knowledge shairing,Higher Education In India, Objectivesoh Higher education, Challenges of higher education, problems of higher educations. This paper reports the Collaboration between universities & Industrial organizations for knowledge sharing. collaboration policy, needs for collaboration, Role of university library and benefits of collaborations academic libraries are discussed in detail.

Key Words: Knowledge, KnowledgeShearing, Organization's, Higher Educations.

Introduction

In Vedas there is one Shloka about knowledge and wisidome:

Na ChorHaryam, Na Cha RajHa'yam
Na Bratrubhajyam, Na Cha
BharkariVyayeKruteVardhatEvNitya
mVidyaDhanamSaivaDhanePradhan
amVidya means knowledge —As you
consume or spend, it increases; as
you share, it expands. No one can
steal it, not authority can snatch,
not divided in brothers, its the best

property among all the properties
anyone can have.

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libraries specifically, academic libraries of higher education have to start changing their role in knowledge management. Not only manage the knowledge but also contribute in the process of knowledge generation & knowledge sharing, should be the working of academic libraries. By collaboration with industrial firms for knowledge sharing, academic libraries can play an important role in the field of knowledge generation and knowledge sharing.

Recently, the contract for research on production of colorful cotton is done between KhadiGramodyog board and Dharwad University, Karnataka. This kind of collaborations must be encouraged by government, universities and firms.

Knowledge sharing is becoming increasingly important to ensure that practice and policy are based on sound evidence. For this to happen, the gaps among research, practice, and policy must be bridged. Knowledge sharing is a tool that can be used to promote evidence-based practice and decision making, and also to promote exchange Knowledge is known about knowledge-sharing strategies and their effectiveness. There are a number of possible reasons for why a coherent, integrated understanding of

knowledge-sharing strategies does not yet exist:

- Knowledge sharing often occurs within and among diverse disciplines whose members may not communicate and share their expertise and promising practices.
- Knowledge sharing occurs even when sharing knowledge is not the objective; when informal knowledge sharing does occur, it may not be identified as a knowledge-sharing strategy.
- Knowledge sharing encompasses a broad scope of activities; lack of agreement on what “counts” as knowledge sharing limits collaboration and shared understanding.

Knowledge sharing includes:

- Any activity that aims to share knowledge and expertise among researchers, policymakers, service providers, and other stakeholders to promote evidence-based practice and decision making.
- Situations in which knowledge sharing may not be an explicit goal, but knowledge and expertise are shared nonetheless.

Knowledge & Knowledge Sharing

Knowledge is familiarity, awareness or understanding of someone or somethings, such as fact, information, descriptions or skills, which is acquired through

experience or education by perceiving, discovering or learning.

Oxford English Dictionary defined Knowledge as (i) expertise, and skills acquired by a person through experience or education; the theoretical or practical understanding of a subject, (ii) what is known in a particular field or in total; facts and information or (iii) awareness or familiarity gained by experience of a fact or situation.

To share knowledge means to learn, understand, extend and repeat the information, the ideas, the views and the resources with each other, connected with, on a specific ground.

If we both exchange 1 Rupee coin, we both have 1 rupee each.

But if we exchange 1 Good Thought, we both have 2 Good Thoughts....

If you share a rupee with me, you will lose something, I will gain something and the Rupee will be divided.

But if you share knowledge with me, we both will gain something and the knowledge of both of us will be increased.

This is knowledge sharing.

“Knowledge sharing... [is] the transfer and communication of knowledge... [it] is connecting people with the knowledge they need - rather than collecting and compiling documents.” (ILO)

Knowledge sharing is an activity through which knowledge (i.e. information, skills, or expertise) is exchanged among people, friends, or members of a family, a community, an organisation or collaborative parties.

Higher Education in India

India has a strong tradition of higher education since ancient time. Western and secular education, with an emphasis on scientific inquiry came to India only with the British. The first college imparting western education in India was set up in Serampore in Bengal in 1818. The three central University of Calcutta, Bombay and Madras were established in 1857, with the sole aim of producing English knowing people to assist British officers on military and civil administration. Initially 27 colleges were affiliated to them. Subsequently more University and colleges were set up. At the time of independence there were 19 Universities in India.

Today's , India is the third largest higher education system in the world after (China & USA) in the terms of enrolment. In terms of the number of institution, India is the largest higher education system in the world with near about 17973 institutions (357 universities and 17625 College). However the average number of students per educational institution in India is lower than that in the US and China.

The following types of institutions are importing higher education in India

- Universities under the Government.
- Private Universities.
- Deemed Universities.(Uri aided)
- College under Government.
- Private College (Added)
- Private College (Uri Aided) established under self financing scheme.
- Distance Learning (open Universities like IGNOU, UPRTOU).
- Non- Universities Sector (Polytechnics and Industrial training Institute)
- Foreign Institution.

Objectives of Higher Education in India

- A. To seek and cultivate new knowledge to engage vigorously and fearlessly in the pursuit of truth and top interpret old knowledge and beliefs in the light of new needs and discoveries.
- B. To provide society with competent men and women trained in medicine, science and various other professions who will also cultivate individuals with the sense of social purpose.
- C. To strive to promote equality and social justice and to reduce social and cultural differences through diffusion of education.
- D. To foster values in teachers and students and through them to society generating the attitudes and values needed for developing the

good life in individuals and Society. [Uberoi 1995].

Teaching at higher education mostly concentrates on giving information which is not the sole objectives of higher education. Along with giving information, the objectives of educational programmes should be to provide student with:

1. A broad based education that will enable information professional to function effectively in a wide variety of information-related organizations and environments.
2. Education in a much expanded, empirically derived body of general knowledge about the nature of information and the character of the information transfer process.
3. Education that prepares the individual to function effectively as a professional in an environment where basic assumptions may be subject to searching review, sweeping modification or may even be discarded completely in view of the changing environmental conditions.
4. Education that prepares information professional to assume higher level responsibilities early in their careers and to compete effectively in the competitive markets.
5. Education that lays foundation for life-long self-directed independent learning.
6. Education that develop reasoning-power, thinking-power, decision-

making ability, self-concept, value-clarification, proper study-habit, tolerance, risk-taking capacity, scientific-temper etc.

The Basic Objectives Of Education is –

- a) The power of reasoning and thinking.
 - b) The ability of judgment and decision making.
 - c) The comprehension, speed and vocabulary.
 - d) The science of human values.
 - e) The study habits.
 - f) The scientific temper and tolerance.
- The basic purpose of the education is to propose young men and women ready to serve in the different field of national life equipped with varied skills and endowed with qualities of good citizenship.

The basic purpose of the education is to prepare young men and women ready to serve in the different fields of national life equipped with varied skills and endowed with qualities of good citizenship. It makes one independent, 'lkfo |k ;kfoeqDr;'A

In modern context when the world has turned into a global village the education too should be world class. For that quality and excellence are necessary-Quality in both content and delivery. Content of education should self employ a person or

Prepare him/her for employment in any private, corporate or public sector job.

Main Pitfalls of Higher Education In India

When we analysis the Indian system of higher education we find crisis of –

- Content
- Delivery
- Good teachers
- Good research
- Evaluation system
- Employability
- Character building

Problem of Higher Education

This is the changing scenario. It is creating numerals problems in the field of higher education. What are the problems of higher education? How to face these problems bravely and tackle these successfully are real challenges of Higher education. These are as under:-

1. Outdated curricula and lack of its restructuring and updating.
2. Old and worn out examination and evaluation systems,
3. Swelling enrolment of students,
4. Deterioration of standards,
5. Student unrest and political interference.
6. Scarcity of good teachers and domination in the motivation of the students and teachers.
7. Paper degree holders products misfits in society

8. Failure to reconcile equality and excellence.

9. Crises of character.

These problem of higher education are the products of past and present failure in higher education. The challenges of higher education are being faced in the present and will remain challenges in the future if the solutions to these are not found out. Therefore, we have to face these challenges bravely; find out new solution intellectually and practice the solution in future fearlessly to change the present gloomy picture of higher education painting a new, that too, bright one.

Challenges of Higher Education

I have just pinpointed few problems of higher education. What are then the challenges of higher education? These are as follows:-

1. Restructuring of Courses

Our courses in higher education are old and outdated. These must be updated to be in true with the latest developments in science and technology. The courses should be restructured to suit the needs of the people. Needs of the people always change as per the developments in science, technology and world culture. Taking into consideration the faster rate of obsolescence in the knowledge: we have to restructure the courses from time to time. The activity of the restructuring of the courses is life long and unending. Therefore, the objectives of the

restructuring are to develop various skills-skills of hand and heart of men and women and develop their abilities and potentialities which will be used for social uplift and national development.

2. Reforms of Examination and Evaluation System

Our present system of examination and evaluation are old and worn out. These are making our students and teachers examination and degree oriented and not knowledge oriented.

Malpractices in examination, bribes to examiners and corruption is everywhere, Therefore, this present system of examination and evaluation must be at once given up another should be in produce which will evaluate objectively the skills of productivity and creativity as well as the abilities and potentialities of the students, and the teachers alike. Mere medicine will not do much to the present diseased examination system. A major operation is a must now.

3. Delinking the Degree and the Employment

Our college and university products-paper degree holders are misfits in the society. These graduates generally want to be employed as clerks or secure similar employment. They do not have a will to do physical work for productivity, intellectual work for productivity,

intellectual work for creativity, and spiritual work for humanity. A Degree is now a days a basic qualification for clerical work. Therefore, the degrees and employment should be de linked. For example a candidate who wants to be a lecturer in college or university, should pass NET or equivalent examination. In the same way, every department either govt. or semi-govt., private(for example banking or agriculture, Industry etc.) must conduct its own rigorous written and oral examinations to select the best ones its departments. They should not rely upon the paper qualification.

Besides, there should be a macro planning for job-oriented business baised, and industry inspired education. The youth of the nation must be inspired, encouraged and helped in free entrepreneurship in order to restrict the swelling enrolment o f students in the higher education.

4. Determination of Standards and Dimination in the Motivation of the Students and Teachers

Due to mass education, quality in higher education is increased. When quantity increase, the quality decrease. This is one of the reason causing deterioration of standards in higher education. A craze for degree and negligence of skills and knowledge, lack of good teachers as well as the dimination in the

motivation of the students and teachers are other causes of deterioration in the standards in the higher education. Inability of self-realisation is another reason of deterioration of standards. For example, a person named X is really interested in music and he loves music but he is compelled by situation to become an engineer will be harmful to himself, his profession and society as well as nation. He uses his power and influence to make his sub-standard, the real standard.

In order to avoid the deterioration of standards, the govt. should have the political will to sanction autonomy to colleges and universities. Quality and standards should be loved and respected in the society and persons having satisfactory educational standards or quality should be well paid in different department services. The teachers and students will be motivated to achieve quality and excellence and problem of deterioration of standards will vanish into thin air.

5. Autonomy and Political Interference

It is universal truth that politics is the game of scoundrels. Imparting education was the holy mission of saints and seers who were honored and respected by the politician i.e. kings in the past. But now-a-days, all the teachers, and principals so called educationists

are standing in queue to respect, and garland the ministers and politician. This is because in the past the kings patronized such work but never dictated their terms. Now-a-days, the politician are prudent enough to talk much in favour of autonomy in education but at the same time, they directly or indirectly dictate their and conditions which will safeguard their chair or authority, that is why political interference in education is rising day by day. The overall situation of higher education also is made worse. A stitch in time saves nine. The political interference in education must be minimized and utmost autonomy should be given along with the sufficient grants institutions working devotedly in the field of education.

6. To Reconcile Equality and Excellence and to Achieve Justice in Education

How to reconcile equality and excellence in education as well as how achieve justice in education is the great challenges before the thinkers, educationists, and politicians. Our constitution assures us an equal opportunity of education to all, but what is the reality? We have bitterly failed in universalisation of education. More than 30% of the people of India are still illiterate. TO speak of equality in higher education is humbug. Only about 70% of student

population is taking advantage of higher education. Of these about 6% student population is from rich and well to do families, while only 1% student population is from the poor families. Is it equality? Is it equality? Is this situation in the higher education justifiable? Moreover if we consider the budget allotted to various levels (Primary-middle, secondary higher secondary and higher education) the pyramid appears to be topsy-turvy. Roughly speaking, more than 80% of the budget is allotted to other levels. This is sheer injustice to the majority of the student population coming from the poor families. To reconcile equality and excellence and to achieve justice in education is the most difficult we are facing.

To find out the proper solution for this, the thinkers the educationists and the politicians should sit together and discuss the issue in its basic and find out the ways and means and try to implement them rigorously in order to reconcile equality and excellence and to achieve justice in education.

Collaboration for Knowledge Sharing Between Indian Higher Education and Industrial Organisations

For policy makers, it is very much essential to invent new ways to establish a proper knowledge sharing system. Collaboration between universities and industrial

organisations can play an important role in the field of knowledge sharing.

As we know, the research work is a continuous process, on various levels, at many places, simultaneously. In any subject or any field, day by day knowledge is adding new dimensions from the corners of the world.

Every year, a number of students take admission in universities. Some of them comes in front line & starts research work in their particular subject. Mostly, the research work done at this level, lies in the thesis in university libraries. Most important is to expose these works.

The concept of collaboration for research work is not new. Many countries like U.K., Germany, the US, France and Japan, Canada, Brazil, South Africa are involved in this kind of collaborations on international levels also. However, for India, we have not done much more in this field.

It is very much essential to apply knowledge on practical ground. For that, collaboration of universities and industrial firms is a must. Globalization demands that our society needs to move faster, work smarter and take more risks than at any time in our history. For both firms and universities it is learning and not knowledge that is the primary source of value, because the ability to change knowledge - to

learn - is a source of power (Jacques in Prichard et al. 2000-2008). One has no option but to partake in this wrenching process.

Every university has its research students and subject experts and every industrial firm has its experts, employees who practically work on projects having working experience of number of years. By collaboration, they all can share the knowledge and can lead the work in particular direction, can add new dimensions in knowledge and can establish new standards.

Knowledge becomes meaningful when it is utilized on practical ground. Any new invention for example, to make fuel from water. The researcher invents it and the industrial firm puts it in practice.

(Schwartz, 2004) indicates that if firms and universities are observant and are able to leverage research and development (R&D) and convert more meaningful arbitrary occurrences into opportunities, they may change an economy and the world. Firms and universities need to apply thinking strategies to their surroundings, to increase collaborations and knowledge sharing while ensuring that sufficient mutual benefits can be derived.

The manner in which knowledge flows between universities and industry is a complex and diverse process. It is fair to say that the

relationship between university and industry (Kenny 1986-73) seems to be blossoming in many forms all over the world. However, a wide gap seems to exist in the expectations and perceptions of both industry partners and universities, probably as a result of a poor understanding of the knowledge transfer mechanisms in their R&D collaborations. Therefore the main research question centers on gaining an understanding of the needs of knowledge transfer between industry firms and universities which can provide some reasons why industry partners approach universities for R&D engagements and what issues industry considers to be of importance in these collaborations. Having this knowledge could better equip and enable universities and industry to make pro-active and appropriate decisions in their future collaborations.

As shown in 'Lambert Review of Business-University Collaboration' December 2003 two broad trends are reshaping the way that companies are undertaking research around the world.

The first is that they are moving away from a system in which most of their R&D was done in their own laboratories, preferably in secret, to one in which they are actively seeking to collaborate with others in a new form of open innovation.

The second is that business R&D is going global. Multinationals are locating their research centers in their most important markets, especially if those markets happen to contain centers of outstanding research. Their home country is no longer the automatic first choice for their R&D investment.

These trends have big implications for universities, which are potentially very attractive partners for business. Good academic researchers operate in international networks: they know what cutting-edge work is going on in their field around the world. Unlike corporate or government owned research facilities, university laboratories are constantly being refreshed by the arrival of clever new brains.

It is realized that the quality of the research work has risen in recent years. There has also been a marked change of culture in the past decade, with many universities casting off their ivory tower image and playing a much more active role in the regional and national economy. The main challenge is not about how to increase the supply of commercial ideas from the universities. Instead, the question is about how to raise the overall level of demand from industries for research from universities.

Collaboration with university and other public research organizations seems to have become increasingly

important for firms, as the technological interdisciplinary and Complexity and the competitive pressures to shorten product life increased (Hagedoorn, 1996) (Caloghirou (et al) 2003). By collaborating with universities, firms may reduce uncertainty inherent from the innovation process, as well as expand their markets, access to new or complementary resources and skills, keep up with evolution of scientific knowledge, and create new technological learning options on future technologies (Hagedoorn et al. 2001). In particular, in the new industrialized countries (NIC), as their economy and their technological capabilities improve, national public research and educational organisations (PREO5) are expected to play an increasing important role in supporting indigenous firms to move into more dynamic and higher-opportunity industries (Mathews and Hu, 2007) (Mazzoleni and Nelson, 2007). Firms (especially small firms) active in high-technology sectors were found to achieve higher Productivity through university-industry collaboration (Motohashi, 2005). Consequently, following the innovation policies of developed countries governments in the new industrialized countries are focused in fostering science-industry interactions and the development of

high-technology sectors (Wong et al, 2007) (Gouvea and Kassicieh, 2007). It is very much essential to understand needs for collaboration and decide collaboration policy to better understand and increase the collaborations.

Needs for Collaboration

- Knowledge which is generated in research works at university level, lies in theses unused in libraries. To pull out the Knowledge from thesis.
- In universities research work goes on and on haphazardly without any specific direction. To give a specific direction.
- To take forward the knowledge from wherever it is.
- Research work is going on and on in every universities without proper co-ordination. To avoid re-inventing and repetition of research work.
- By getting a perfect direction, research work will be done more speedily. Knowledge will grow faster which is very much essential for knowledge society.
- To get fresh & pure knowledge directly from universities for industries.
- To reduce the time for research at the industrial level.

Knowledge cannot be produced in an unplanned fashion- it needs to be managed well. For that universities & firms who have joined hands for a specific subject or

specific purpose should first of all, decide a common frame of work.

Collaboration Policy

Universities have research students and subject experts while enterprises have their experts, experienced workers, and mechanism. By collaboration, the knowledge can be shared among both of the parties.

Each organization and university should develop a policy specific to its own needs and objectives. This policy should define the:

Objectives

First of all, it is very much essential to clear the objectives for which both the enterprises & universities have joined hands.

Context

Research should be developed in a context of creation and application of knowledge. Research should be designed to reflect that knowledge is developed collectively and that the 'distribution' of knowledge leads to its continuous change, reconstruction and application in different contexts, by different participants with differing backgrounds and experiences.

Participants

Research students and subject experts at university level and the experts and employees who have practical working knowledge and experience at the other end should be participating in the venture.

Processes

The research work should be developed to support and enhance knowledge intensive process, tasks or projects, e.g., creation, construction, identification, capturing, acquisition, selection, valuation, organization, linking, structuring, formalization, visualization, transfer, distribution, retention, maintenance, refinement, revision, evolution, accessing, retrieval and last but not least the application of knowledge.

The whole work should be a knowledge life cycle by involving the research students and subject experts as a knowledge generator, the experts of a firms who execute the knowledge and the workes who actually utilize the knowledge on practical ground.

Here, knowledge will flow in both the directions. and at the time of actual execution of practical ground, if any difficulty derives, the feedback will be given to the researcher and by removing the deficiencies, it will be improved and will be made more perfect and more useful for enterprises.

Privacy and Other Rights

To keep the matters and materials and the progress of work top confidential between collaborating parties only is a must. All rights should be reserved for enterprises if it is supported financially by firms.

Motivation

Enterprises should encourage researchers to interact, to work together on projects and share their ideas.

Resources

Financial resources

- Some times government supports the research work at university level. Recently, Government of India has allotted grant of Six Hundred Million Rs. to support the research works and to increase five times the no. of researchers in universities in 10 years.
- An industrial firm is interested to develop its production capacity at the lowest cost and develop the product as the most marketable product.
- Research students should be supported financially by firms in the form of stipends, fellowships or scholarships

Human capital resources

- The experts and employees of the firm, and students, subject experts, lecturers, readers and professors of the university will make the key resource.

Physical resources

- Laboratories, Libraries, Departments of the university and plants, equipments, technologies and locations and raw materials of the firm will be utilized for knowledge development.

Organizational resources

- The firm's organizational structure, planning, controlling and

coordinating systems and culture will be utilized by researcher.

Role of Higher Education Library in Collaboration

The role of university library is much more important in this type of collaboration. The university librarian will be overall in charge of the project. He will act as the link between the university departments and the industrial firms. He will work as the knowledge manager during the process.

First of all, it should be compulsory to deposit one copy of all the research works, papers, thesis, reports etc. in university library.

The librarian will be responsible for maintaining the research works in proper classified way with the help of latest information and technological instruments.

When any requirement comes from the collaborative party (the enterprise), the available material will be accessed in library and the party will be informed. and for further works, it will inform departments, faculties and research students also. The research work will start a journey. At this stage also the researcher will again come to library to get materials for his work.

After completion of work, a copy of a work will be given to the librarian. He will contact the party and give the materials as per their

requirements. The party will apply the knowledge and if, any problem derives, feedback will be given to the researcher through the knowledge manager. Again the research work will start a journey for next destination. All the work will be a continuous process. The wheel of research work will go on and on. The knowledge will be generated and shared between the parties through the university library. The whole work will be a knowledge life cycle centering university library as an axis. This is a design how university libraries can better contribute in collaborations with industries.

Benefits of Collaboration

- Sharing of valuable knowledge.
- Can avoid re-inventing the wheel, reducing redundant work.
- May reduce the cost for inventions.
- Creation of knowledge with the help of experts and experienced persons.
- By giving a right direction to the enthusiastic intelligent students, making them experts of future.
- Which kind of change industrial firms wanted? Which kind of problems they are facing and to solve it, which kind of research works they are expecting from the university will be cleared well in advance. Maximum production with the lowest cost is the main aim of all enterprises. If, they were raw materials, or machinery and technology or management deals, By collaborations, the firms will inform

university and university will frame the research work as per the needs to fulfill the aim.

- Any kind of the problem arised, will be solved at the primary level which will save the time, money and man power.

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