Proceedings of GLOGIFT 09
November 12 – 14, 2009
National Institute of Industrial Engineering
Mumbai, India

HUMAN RESOURCE FLEXIBILITY THROUGH GENERIC SKILLS IN EDUCATION AND CORPORATE SECTORS

C. M. Bhatia
Ex. Professor, Department of Electrical Engineering,
Indian Institute of Technology, Delhi, Hauz-Khas,
New Delhi - 110016.

Meena Kapahi
Senior Lecturer, Manav Rachna College of Engineering,
Sector 43, Aravali Hills, Delhi-Surajkund-Badkhal Road,
Faridabad.

Keywords: Engineering, fundamental skills, generic skills, flexibility, human resource, higher technical education, key competencies, lifestyle skills management, Participative Learning Pedagogy, university

1. Introduction

Applying knowledge and skills in an integrated manner to accomplish *Human Resource Flexibility* and excellence is the need of the day. The current economic meltdown demands intense knowledge management to face the challenge of global competition for survival. These skills are almost essential because jobs today require more *flexibility*, enterprise and multitasking. The focus on the individual ability to develop as well as practice knowledge and skills with flexibility helps one to handle more than one task.

Although, there has been keen interest in the concept of generic and key skills as the outcome of technical education for many years now (http://www.silvercommunication.com; Bhatia et al 2006; https://careers.infosys.com; infyrms/infycareers/careers/training.asp; Bhatia and Bhatia 2008), the need for learning and practicing these skills has of late become more demanding due to global job competition and demand for multitasking. It was perhaps the Finn Report in the year 1991, which introduced the concept of generic skills in Australia. Although, the Finn Report used the term *key competencies* to describe 'certain essential things that all young people needed to learn in their preparation for employment'; the subsequent publication of Mayer Committee report in the year 1992 further clarified the concept of employment related key competencies in compulsory education and further training.

Many questions still surround the concept of generic skills, which are described by a number of synonyms such as personal, transferable, generic, common, work and employment related problems etc. The researchers in human resource area still debate whether these are the skills or competencies, capabilities or learning outcomes. It may be pointed out that key skills, which are generally taught and practiced during school education, tend to be broad and extensive. However, in higher education, such skills are generally either neglected or diluted, to focus on other key competences that cannot be taught as discrete components of curriculum. At the same time, those skills taught during university education or higher technical educations assume that the learners are literate and fulfill the pre-requisite of university education. However, in the recent past the global competition has become more intense to bring in flexibility and multitasking with stringent the job requirements. As such, a *Flexible Generic Model* is suggested in this paper to be applied "to any discipline, to any course, to any workplace and indeed to any other context".

2. The Skills

The skills discussed in this paper are termed as *generic*, because they apply to any work in general; rather than being specific to a profession/training/vocation. The expression *generic skill is* indicative of a wide range of general qualities and abilities that are increasingly being considered as significant in higher technical education. The *generic skills* include thinking skills such as rational and critical reasoning, investigative and intellectual inquisitiveness; behavioral skills such as motivation, imagination, creativity, team spirit, self-management, time management, effective communication etc. In addition there are practical skills, such as capability to identify access and manage knowledge, information and moral values (Australian Education Council 1992; Australian Chamber of Commerce 2002; Canadian Employability Skills 2000; O'Neil 2006). The paper suggests that these skills can be learnt and developed with a *flexible* approach any time in life, to contribute optimally in ones' professional career. These skills therefore need to be taught not only during higher education and training (Bhatia et al 2006; Bhatia and Bhatia 2008), but also in adult life for continued corporate growth and for becoming professionally more *flexible* and adaptable.

Suggestions have also been made in this paper to identify the basic deficiencies and remedies thereof, in the higher technical education in India; highlighting their impact on the professional career of young engineers, managers, faculty and executives (Bhatia et al 2006; Bhatia and Bhatia 2008). These skills may be defined as competencies vital for effective participation in the fast-paced world; where the professionals are hard-pressed to keep their skills updated and relevant to the ever-changing *flexibility* and hence the patterns of vocation.

3. Human Resource Flexibility

The theme of the paper is to nurture *human resource flexibility* through developing the concept of *generic skills* among Students, Faculty, Managers and Executives in professional education, especially in the areas of Science, Engineering and Management etc. It is envisaged to completely develop their key competence, their personality and also improve their problem solving capability, hence the employability. Attempts are made to highlight the importance of developing high quality scientific *human resource* in Indian sub-continent for internationally competitive workforce. The youth therefore needs to be well trained for both higher education, as well as employment through learning and practicing these skills (Australian Education Council 1992: Confederation of British Industry 1998; Kumar 2001, Khan 2001; Hager et al 2002; Bhatia et al 2006). Due to the global economic meltdown and as a consequence highly competitive job market, it is important to recognize the young budding Scientists, Engineers and Managers developing key competencies such as verbal and written communication, accessing and disseminating information, positivity in professional approach, professional ethics, moral values and working in groups to deliver the best for their survival (Thanikachalam 2005; http://www.careers.infosis.com; Mittal 2006; Bhatia et al 2006).

Having described the efforts, made by various researchers, some significant features have emerged about while looking at the description and need for *generic skills*. These features are:

- All major *generic skill* systems include *fundamental skills*, such as literacy, art of communication, behavior using numbers etc.
- Dedication to continuous enhancement of knowledge and personality development is also an integral part of these skills.
- Globally, the employers are increasingly emphasizing on developing among their employees *personal attributes*, such as being responsible, resourceful, motivated and *flexible* (Kumar 2001; Khan 2001; O'Neil 2006; http://www.silvercommunication.com ; http://www.careers.infosis.com).
- The piercing spotlight is focused on the *thinking skills* related to employability, such as collecting, organizing and disseminating information, problem analysis and solving, planning and organizing, thinking innovatively, creatively and above all learning-to-learn skills.

4. Developing Skills vis-à-vis Key Competencies

In a recently collected data it is revealed that only 13% of all the graduates and post-graduates from various Universities, Engineering Institutions, Management Institutes and Polytechnics, in India are suitable for global employment (http://www.silvercommunication.com; Bhatia et al, 2006; Bhatia and Bhatia 2008). Despite phenomenal growth recorded in higher technical education and also in the service and manufacturing sectors, it is felt that majority of students who pass out from colleges and Universities lack basic skills to qualify for the job they are targeting (Bhatia et al 2006; Bhatia and Bhatia 2008). Majority of these young graduates lack in the command over language, both written as well as verbal communication and the ability to present them selves. The Industry on the other hand requires not only the desired professional qualifications in their employees, but also the ability to present and conduct oneself. It may be appropriate to believe that all employees are the brand ambassadors. Therefore, they impact the organization's image in the eyes of business associates, customers and shareholders (Kumar 2001; Khan 2001). It is therefore imperative for employees to have a good blend of technical as well as *generic skills* like good communication, good discipline, good presentation, good time management and also very good *lifestyle skills*.

Increasing attention is also being drawn to the development of skills related to the social system, such as responsibility towards the Community and Nation and to the ethical behavior in social as well as professional environments (Australian Education Council 1992; Confederation of British Industry 1998; Australian Chamber of Commerce and Industry 2002; Hager et al 2002).

It may be mentioned that *generic skills* not only help in gaining employment, but also help in progressing within the organization. There is a common observation that people who grow the fastest in an organization are the ones who possess the right combination of the *generic* and *technical skills and* therefore possess the most desired *flexibility* to adopt any task. With increased business globalization, *generic skills* have witnessed a striking shift in perception from *good to* possess to the perception *must-have.* These skills are almost essential because jobs today require more *flexibility*, enterprise and multitasking. The jobs are no longer as constricted and specified as these were a few years back. It may be pointed out that jobs are increasingly becoming service oriented, making the possession of information and social skills very critical. Therefore, the employers look for and retain only those employees who possess and practice these skills and are *flexible.*

5. Generic Skills and Higher Technical Education

Exploring the relationship between generic skills (sometimes called employability skills) and career vis-à-vis higher technical education requires asking the three fundamental questions:

i. Are such skills taught in Career and Technical Education?

ii. Can they be taught?

iii. Do employers value these skills over technical skills?

The literature review concludes that employers want their workers to possess general competency skills such as diligence, creative thinking, sociability, cooperativeness and *flexibility*. Reasons cited for the importance of these generic skills include global competitiveness, new products, productivity targets, social networking and business growth. Although, the university education emphasize the importance of contextual teaching and learning in both classroom and work-based situations to students' skill acquisition (Bhatia et al 2006; Bhatia and Bhatia 2008), the job specific skills can not be taught in the classrooms. The classroom as well as shop-floor instructors therefore recommend that

students' university as well as workplace experiences be well monitored to insure *flexibility* for learning because of variables such as number, quality and adaptability.

It has been suggested (Bennett et al, 1999) that an elegant method to conceptualize *generic skills* in higher technical education is through the framework comprising four broad managerial skills. These skills as described by Bennett et al, 1999; have been studied and are modified with *flexible human resource* concept and are presented in Table-1. Although, the Bennett et al argue that the important key skills are fundamentally those associated with being able to manage self, others, information and tasks in hand; there is further the need to apply *flexibility* as demanded by the situation. It may be pointed out that *flexible generic model* as presented in this paper can be applied "to any discipline, to any course, to any workplace and indeed to any other context". Table-1 depicts the modified *flexible generic model* in which various elements of the model have been highlighted through *flexibility*.

Table-1: Flexible Generic Model

Self Management	**Management of Information**
Manage time effectively Set objectives, priorities and standards Take responsibility for self learning Listen actively with purpose Use a range of academic skills e.g., analytical and reasoning with *flexibility* Develop and adapt learning strategies with *flexibly* Show intellectual *flexibility* Use learning in new or different situations Plan/work towards long-term goals Purposefully reflect on own learning Clarify with criticism constructively Cope with various stresses in a *flexible* manner	Use appropriate sources of information Use appropriate technologies Use appropriate media Handle large amounts of information and yet be flexible Use appropriate language and form Interpret a variety of information Present information competently Respond to different purposes/contexts and audiences Use information critically Use information in most innovative, creative and *flexible* manner
Management of Others	**Management of Tasks**
Carry out the agreed tasks Be more *flexible* to respect the views and values of others – give adequate time and space Work productively in a cooperative context Adapt to the needs of the group Defend/justify views and actions Take initiative and lead others Be *flexible* to delegate powers/tasks/responsibilities and stand back Negotiate and yet be *flexible* Offer constructive criticism Take the role of chairperson Learn in a collaborative context	Identify key features Conceptualize ideas Set and maintain priorities Identify strategic options Plan/implement a course of action and yet be *flexible* Organize various sub-tasks Use and develop appropriate strategies Assess the outcome

Assist/support others in learning	

By their very nature, the *generic skills* are rather difficult to be taught through formal classroom instructions, especially in the institutions and universities. These skills rather need to be closely observed, understood and followed. Necessarily one has to possess the will to learn and practice. Traditionally, the development of these skills has been attempted through the following three main types of learning activities:

i. Integrated Learning Approach

ii. Stand alone Learning Approach

iii. Skills development in parallel with or along with the conventional curriculum.

The first two approaches are not suitable to be practiced at the higher technical education level and are therefore recommended to be practiced at schools. However, the third approach has been tried by Bhatia et al 2006, in one of the engineering colleges located within the National Capital Region (NCR), with very encouraging results. By following the Participative Learning Pedagogy the following benefits are derived:

i. This Participative Learning Pedagogy encourages students to act independently and responsibly.

ii. The Participative Learning also motivates students, helping themselves to improve their own methodological abilities, becoming less faculty dependent, as well as reducing the faculty's direct participation in the learning process.

iii. It also stimulates professional action skills and flexibility by learning through the implementation of real-world examples and exercises.

iv. Students are encouraged to read books, reference material and journals on the subject and also surf the Internet for more information.

v. Students' creativity comes in to play and their talents get utilized.

vi. Besides making them proficient in collecting useful and coherent subject matter, the students learn to articulate effectively and learn the art of presentation and group working.

vii. During the college technical festival, the students do demonstrate their creative spirit. This creativity of teaching and learning process makes them groom to acquire good presentation skills, in make learning an enjoyable experience and hence the flexibility.

viii. An informal environment of learning in classes is established. The difference between the teacher and the taught breaks down, thus the learning process improves.

ix. The Students groups know the need of their fellow students and prepare the course material accordingly. The peer-to-peer communication is therefore, at the same level, and in the same language, of presenters and learners.

x. As a corollary to point (ix) mentioned as above, the faculty is also helped to organize the form and content of his/her lectures to suit the students' needs.

xi. The faculty is made to remain on his/her toes and is alert all through.

6. Flexibility in Skills Development

Development of *generic skills* is a matter of continued importance to every educational and corporate sector (Australian Education Council 1992; Confederation of British Industry 1998; Conference Board of Canada 2000; Hager et al 2002). Although, it may have been assumed in the past, that these skills were being well developed under effective guidance of parents and through compulsory schooling, the behavior pattern of present youth, while going through their higher technical education and training clearly hints at the otherwise (Hariharan 2005; Mittal 2006; Bhatia et al 2006; Bhatia and Bhatia 2008). The basic aim of higher technical education is undoubtedly to transform the whole society, so as to a make it an excellent knowledge centre. The higher technical education should not only impart formal education, but should bring in the awareness of the needs of society by Institutions/Universities. These Institutions/Universities should organize short term training programmes for the benefit of gram panchayats and gram sabhas and local individuals. Thus, *generic skills* need to be taught to all citizens. As already stated, these *skill*s include *goal setting, communication and clarity of thought, mediation, duties to the organization & society and to the Nation* and all other aspects of HRD. The aim is to create good *International Citizens* with a clear idea about society and environment and to create a strong value-based knowledge based International Society.

In order to develop India as *global human resource capital,* the *human resource flexibility* is highly desired and needed. Hence, there is a strong demand to pay specific and intense attention to *basic skills* including literacy, attitude, behavior and proper use of information technology. There is general agreement in almost all Engineering and Management institutions of higher learning, that these skills and attributes are developed in many contexts, but still require explicit attention by the Education as well as Corporate Sectors. The assumption that these skills can be developed through the Higher Technical Education and experience, without explicit attention needs a second thought (Thanikachalam 2005; Bhatia et al 2006; Bhatia and Bhatia 2008).

The main motivation behind learning and practicing the *generic skills* is that "success depends crucially on their being made explicit and compulsory by the organization e.g., Corporate Sector, Institutions/Universities and Employers". Leaving this aspect of *human resource* as implicit, as they are, in many traditional Universities, does very little to encourage learning and development (Hager et al 2002; O'Neil 2006). In Educational Institutions focus should be laid on helping students to become *work-ready* in terms of their *generic and technical skills* development (Bhatia et al 2006; Mittal 2006; Bhatia and Bhatia 2008) and hence more flexible. In workplaces on the other hand, the organization expects to see employees *accomplished good performance*. For this to happen, the organization/employers must strengthen *skills* development of their employees through on the job training and learning process (Confederation of British Industry 1998; Australian Chamber of Commerce and Industry 2002; http://www.silvercommunication.com; http://www.infosys.com).

7. Conclusions

It is hoped that suggestions made in this research paper would bring in more awareness among the Corporate Executives, Managers, Engineers, Scientists, and Researchers in favour of higher technical education and training; to bring in *flexibility* in higher technical education by introducing Participative Learning Pedagogy and relevant courses on *human and ethical values, harmony, pursuits of happiness, generic skills, and contentment* as a part of the human resource and manpower training. This will help to developing excellent skills among young Engineers and Managers to become flexible in their approach.

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