

Issues in Management of Human Resources in Open Universities

by Madhulika Kaushik



COMMONWEALTH of LEARNING

**Commonwealth Educational
Media Centre for Asia**

Issues in Management of Human Resources in Open Universities

INTRODUCTION

Open Universities today form an important constituent of the Higher Education infrastructure in most countries, accounting for the enrolment as high as 25% of the total enrolment in higher education in some Asian countries. With proven advantages of creating equity & access with quality and bringing into their fold those traditionally left unreached by conventional universities, open universities represent a managerial model that has successfully worked in filling the demand supply gap in high population countries. The universities also proved to be an answer to the unmet educational needs of the working population desirous of improving their competence profile to remain relevant in a highly competitive world. The advances in information and communication technologies, coupled with the investments that governments are now willing to make in the ICT infrastructure, provided a further acceleration to the growth and scope of the open universities, even beyond national borders.

Open Universities form part of the knowledge industry, with people being the key resource and forming the nucleus of creation of core value of the institution. Human resources in this kind of enterprise represent a noncopiable strategic advantage and an investible resource capable of adding long term value. As large, dynamic and multilocation systems with a

very large learner base and required to operate in highly competitive market environments, open universities today face challenges in managing their human resources which are somewhat unique in their own way. While some of these challenges are symptomatic of the emerging educational scenario in developing nations and therefore share common ground with conventional universities, others emanate from the differential nature of activities and job profile of the Open Universities academic and therefore need a fresh look. It may also be noted that most senior academics at the open universities and most of the policy makers have spend earlier part of their careers in conventional systems and the carryover effect is sometimes apparent in the addressing of the HR issues at open universities. In this paper, an attempt is being made to identify some of the key issues of managing the academic and administrative human resources at the OUs. At the outset, I would like to acknowledge the immense help that I got by interacting with at least 5 present and former Vice-chancellors, 8 PVCs and many senior academics of open universities in India. Inputs from a questionnaire on HRM in OUs sent to the state open university Vice-chancellors about 5 months back have also been utilized to develop this paper. I acknowledge the contribution of all those who participated in the survey

The first part of the paper outlines the challenges that relate to the academic human resource subsystem at the open university, the second and smaller section tries to bring out issues in relation to the administrative subsystems.

The advances in information and communication technologies, coupled with the investments that governments are now willing to make in the ICT infrastructure, provided a further acceleration to the growth and scope of the open universities, even beyond national borders.

MANAGEMENT OF ACADEMIC HUMAN RESOURCES

The robustness and credibility of any academic systems, open universities included, is largely dependent upon the quality of the academic inputs and the teaching learning processes created to maximize learning. The quasi permanent separation of learners and teachers adds an added dimension to the delivery of services, where a variety of means and approaches

are applied to render distance meaningless in the learning transactions. The open universities academic has therefore had to be a content expert, an instructional designer conversant with various modes of course delivery, multimedia savvy teacher and a course administrator all at once; in addition to being a mentor and guide to his learners. The concept of course teams has therefore, found favour in most open universities, whereby some of this required expertise can be pooled. Open universities academics have also had to deal with and grow with successive waves of technology changes as applied in programme delivery. Inter institutional mobility and the foray by large industrial houses into the domain of workplace based open learning have created a different dynamic into the HR challenges confronting OUs, seriously affecting the capacity of the universities to attract and retain desirable talent. In this paper the key issues with respect to management of academic and administrative human resources are outlined under the various heads of Acquisition, Induction, Retention, Motivation, Performance Assessment, Promotion, Training and challenges of managing and change.

Acquisition of Human Resources

The ability of an institution to attract the best possible academic talent is a function of its perception of being a preferred employer on the one hand and the prospective academic's belief in possibilities of achieving growth or handling new challenges at the institution, on the other hand. The issue that needs to be deliberated upon here is, how attractive is an open universities as an employment destination? An analysis of the response to the employment advertisements by the national university at various levels for academic positions shows that while the response is in the ratio of 1: 70 or so at the entry level position, the situation changes when the position is at senior academic levels. This is especially true of professional disciplines like IT, Management, Law and engineering to name a few. Discussions with policy makers and senior academics presented interesting insights into this scenario. Some felt that with the focus of learning activity in higher education increasingly shifting to the work place, those entering the domain of ODL now will have an added advantage of developing highly marketable expertise and hence the high interest at the entry level. A more pragmatic view came in the form of the opinion that the opportunities for employment for academics in the public system are now extremely limited while the numbers of qualified aspirants is growing each year, so the number of

The ability of an institution to attract the best possible academic talent is a function of its perception of being a preferred employer on the one hand and the prospective academic's belief in possibilities of achieving growth or handling new challenges at the institution, on the other hand.

applicant is bound to be high for entry level positions. However, once these aspirants join the OU and get to grapple with the far higher work load than in conventional Universities, they tend to start looking for opportunities to shift. Their constant exposure to external academic peers and superiors on account of the collaborative nature of content design, development and delivery processes and other academic exchange activities, especially at the National University level, often facilitates their search for avenues, very often to the conventional institutions.

As far as the relative attractiveness of open universities as employers is concerned, it has been felt that in terms of providing opportunities for self development, faster career progression, technological infrastructure and facilitations provided for discharging responsibilities, working with contemporary systems and work culture, open universities present a more attractive alternative. Longer working hours for the same pay, greater demand on academic and managerial skills, continuously needing to reskill and reinvent themselves and an over dependence on administrative procedures for effective work performance are on the other hand factors that keep promising talent away from open universities. As a former long standing Vice-Chancellor of 2 open universities opined "Academics sometimes worry that their work experience at the open university may not be taken as comparable teaching experience by a conventional university, should they want to shift back". This perceived barrier to inter institutional mobility has caused many a mid career academic to stay away from Universities as an option.

In general again large scale privatization, typically in professional education spheres has eroded the attractiveness of public universities as employers in general and open universities have also suffered as a consequences of the huge pay and perks disparity between the public and private system. Inputs from state open universities show that while they have

been highly successful in attracting first rate entry level academics and staff they have been only moderately successful in attracting first rate researchers or senior level academics

In terms of the recruitment efforts; while there is a generalized consensus on what constitutes the job profile and job description of the Open University academic; an analysis of prevailing practices reveals that these have not been converted to formalized written documents. Consequently the recruitment advertisements have very little information about the job content or the competence set required. The teaching position ads, are fairly generalized, using almost the same format as those seen for conventional universities except for the added requirement for experience in open and distance learning systems. There is of course the prevailing belief among policy makers, that having chosen good academics, open universities have had to create their own cadres by training people in the ODL processes once they join the system, so “there isn’t a ‘real’ requirement of defining and communicating a differential kind of job profile as a good academic would perform well across alternative system”.

This brings forth a related issue, that of a good match between the competencies required and those evaluated during the selection processes followed. All open universities in India, follow the prescribed processes very similar to that in conventional Universities :of inviting written applications, shortlisting them and conducting face to face interviews for all shortlisted candidates with the help of a duly constituted selection committee, the constitution of which is as per laid down statutes. On deliberation of the issue of whether excellence in interviews was a good predictor of job performance; most of the senior administrators associated with selection processes for a long time, felt that by and large the system has served them well, barring a few instances. It was,

Open universities, in order to become preferred employers, need to develop a career progression path different from the conventional system, offering better service conditions, including housing, and providing both opportunities and support for research.

however; also strongly felt that the selection process options needed to be extended to include other methods like invitation, secondments and even campus interviews to get a wider spectrum of choice. It is also required that the recruitment advertisement are modified to be more reflective of the nature of the job and the competence profile required.

Recently made provisions of adjunct professorships and fellowships at the national university have sought to widen the choices at senior levels.

On the issue of whether open universities are “preferred employers” for academics at different levels, the general feeling among the policy makers was that OUs are not the first choice of the most promising seekers. As noted earlier the entry level interest is on account of limited job opportunities in the higher education sector as a whole, while the senior level response is more reflective of the relative attractiveness of the OUs, as the aspirants are already in academic careers elsewhere.

It was very clearly opined by more than a few policy makers contacted that Open universities, in order to become preferred employers, need to develop a career progression path different from the conventional system, offering better service conditions including housing and providing both opportunities and support for research. It was, however, accepted by most that one of the key challenges faced by open universities is to evolve a public perception of their desirability or attractiveness as a preferred employers which does not seem to exist today.

Induction and Orientation

In the initial years of their establishment, most open universities, including the national university followed an intensive programme of induction training, focused on various aspects of content development and instructional design, assignment development, audio video development, presentation skills and the like. As the Universities have grown, the intensity of the induction effort has visibly reduced, partly owing to the fact that in house training expertise now exists to conduct shorter duration, but more customised training/orientation provided in a more spaced out manner of rather than a 2 week long induction training. Also, as the experience within departments and disciplines has grown, the processes of learning on the job, or by being ‘attached’ to respective senior faculty or inclusion in a given course team have taken precedence over formalized extended induction exercises. There was also the view, specially

in case of state universities, that sufficient or even sanctioned permanent faculty is not being recruited, either on account of resource crunch or an accepted policy of using full time consultants on whom the induction effort is simply not spent (ScG.Bss). At the national university level it is increasingly being felt that the induction/orientation training process needs to be standardized and customised packages need to be developed for different aspects of the work of the OU academic. The induction training effort need to be also customised on the basis of the different levels at which new faculty joins the organisation. The induction processes need to be scheduled within the first or second month of joining the organisation in order to lessen the familiarization or warm-up period duration that most new OU academics, specially at the entry level seem to experience

Training and Faculty Development

In addition to the induction and orientation programs, training for faculty development during the course of employment has received substantial attention at the open universities. It is apparent that the open university academic has a very dynamic job portfolio and is bound to be dabbling in a far wider range of activities than his conventional peers. The rate of knowledge obsolescence and technology change being fairly rapid, training as a tool for ensuring faculty development has been fairly well institutionalized at the open universities. The response to training, however, has been mixed. As a former Vice-chancellor says 'the inventing and reinventing of HR are a very common requisite of the ODL system. The job portfolio being highly dynamic, it is seen that not all people are willing to change at the same rate. Some 'excellent' performers find themselves left unequipped with each new wave of change in technology, media usage or delivery processes but are not really willing to train for every such newfangled technology'.

According to ScG "Acquisition of excellence for the OU academic is a constant endeavour, people who adapt and grow with the system are bound to rise while those who do not reskill are bound to fall behind." Inflexibility and lack of adaptability are not really suited to the work culture of dynamic systems like the OUs. Being highly oriented towards constant search for innovative solution in their quest of greater access, learner facilitation, cost economics and quality of services, open universities are on a different footing in terms of acceptance of change, an attitude that needs to be permeated across the

Acquisition of excellence for the OU academic is a constant endeavour, people who adapt and grow with the system are bound to rise while those who do not reskill are bound to fall behind.

organization. Training and retaining as institutionalized process directed at reskilling the faculty and keeping them at high levels of competence and productivity are a necessity at the open university and efforts are constantly being made at the national university to maintain a regular training calendar. It is however strongly felt that not more than 10% academics on their own are willing to spare time and effort for training in newer fields like online content development or integrated multimedia development. Despite the desirability of training, it is the sad fact that participation would not really come forth from most of participants if some institutional compulsion or imperative did not demand it. This may also be on account of the fact that training calendars and faculty deadlines for courses on offer, do not often match. Training requires the time constrained, deadline bound academic to take time off from his schedule, often at the cost of falling back in their assigned responsibilities. The Policy makers on the other hand feel that as the process of change at the Open University is a continual one and not a matter of abrupt change, academics may choose their own pace of change but will need to continuously adapt and update if they wish to remain relevant and productive. It was also felt by almost everyone contacted, that a far greater investment is needed to be made in training by the open universities and the activity needed to be highly customized and responsive to the needs of the faculty. Training in the use of innovative content development applications and new delivery technologies was viewed as being worthwhile investment though its impact "may not to be translated into measurable outputs in the short term". It was also apparent by looking at the prevailing experiences of training at the open universities, paradoxically so, that most academics preferred to have a face to face training experience rather than an online or self instructional packages for themselves, specially in the field of computer related competencies or those related to multimedia or online content development.

Performance Assessment and Appraisal

The response to the survey of state open universities showed that performance appraisal of the core faculty was not a formalized exercise except in cases of assessment for timescale promotion. Self appraisals as performance assessment tools for academics were not found to be the very prevalent. Reports by the superiors and sometimes peer evaluation formed the basis of performance assessment of Academics. Experience at the national university, on the other hand, shows that while self appraisal is the main process used for periodic performance appraisal, making it an annual requirement has been strongly resisted by faculty and other academic staff. Consequently, the self appraisal formats are only utilized for the purposes of providing information prior to confirmation on a particular post or at the time of seeking timescale promotion. Fairly well designed and comprehensive formats have been prepared and implemented for all categories of academic staff, both at the headquarters and at the regional centers, with an objective to reflect and provide opportunity to access almost all aspects of the work done by academics at the open universities including the situations where they may have been one of the members in a course team or participated in a group activity. It is, however, evident that the real value of such an assessment process would begin to get realized only when the process is used for all categories of academics at all levels on a continuous and annual basis, regardless of whether an academic is due for promotion or not. The fairly strong resistance of the open university faculty towards annual performance appraisal, even a self assessment, also draws strength from the fact that the far larger majority comprised by the teachers in conventional universities have never had any system of formalized annual performance assessment.

The content of the self appraisal processes in use was also studied. Bulk of the appraisal process seemed to be weighed towards quantitative assessment of the quantum of work

produced during the time period under consideration rather than the quality of inputs or contribution made. Responding to this, extensive changes have already been initiated in the content of the self appraisal form which await formal approval.

Work Culture at Open Universities

Senior academics and policy makers with experience of work in both conventional and Open University systems felt that on account of well defined individual and group responsibilities, and the requirements of producing tangible outcomes of work by the faculty, open universities present, in relative terms, a better work culture than the conventional systems. It was, however, felt there was vast scope for improvement the prevailing work environment in the open universities to acknowledge and recognize high quality contribution and performance which could be brought about by developing benchmarks and quality indicators. Academics at the Open University feel that an in built consciousness about quality of output is inherent to their work design because the nature of their presentation and output, whether in the form of developed material, teleconference sessions or Multimedia CD's is both public and tangible. The possibility of open access to this output and therefore its open scrutiny by anyone is something that forces them to follow self imposed standards of quality, which in turn is responsible for the kind of work culture prevailing at open universities.

Policy makers on the other hand felt that the institution of timescale based promotions right up to the level of professors; as part of the over all policy for the higher education sector in the country, is one of the prime factors responsible for the erosion of the work culture which marked the initial years of the Open University. Some also expressed the view that the team based approach of course development at the school level has resulted in a more relaxed pace of work and the development cycles of courses do not really reflect the impact of application of ICT as was expected. The lag between the planning of course and actual offer of the same continues to be fairly long, and rules at the national university now require that if the course offer has been delayed beyond two years of the its approval, the approval would lapse. It was also felt that the team based approach to course development, sometimes allowed an average performer to survive if not prosper. The practice of developing discipline level work plans, with faculty

On account of well defined individual and group responsibilities, and the requirements of producing tangible outcomes of work by the faculty, open universities present, in relative terms, a better work culture than the conventional systems.

responsibilities for development and maintenance outlined, and periodic assessment of the same has produced some positive outcomes in terms of individual accountability within course teams, but imbalances in faculty workload between different disciplines and even within the same discipline; depending upon the availability of people in a given specialization or the focus of developmental activity within the school at a given point of time; continue to exist and sometimes affect the motivation levels among the faculty. While work assignment is a prerogative of the academic head or the director, and defined work norms exist in the open universities, wide variations over and above the minimum required work norms are found to exist across disciplines and schools, depending upon the stage of development of a particular discipline, the programme on offer or under development and of course the dynamism of a given discipline/school. The problem is especially acute in case of professional disciplines where the requisite number of specialists is always in short supply and the scheduled course offers have to go on regardless of the shortage of faculty in a given specialization. Though work norms for Open University academics have been developed by the Distance Education Council, a fairly large percentage of the academics live with workloads far in excess of the norms.

The organizational necessity of dealing with a fairly high incidence of change is also the hallmark of the work environment at open universities. As organizations grow older, the inertia to change begins to affect larger proportions, even as the imperative to change becomes more pressing. To quote a senior academic and administrator "Open universities need to, within their bounded autonomy, devise a twin track policy of promotion and advancement, creating a system of faster and dynamic opportunities for dynamic, growth oriented and achieving individuals, which could in a turn create a demonstration effect and develop a counter to the resistance to change." (SCG)

The openness to change in the context of program and course content, as well as willingness to develop innovative courses were found to be high among the open university academics, resulting in frequent revisions and a fairly regular pace of introduction of contemporary, innovative courses and programs while the acceptance of new technologies for content development and delivery was not as apparent. Networking skills of academics, in terms of sourcing talent to contribute to the

The organizational necessity of dealing with a fairly high incidence of change is also the hallmark of the work environment at open universities. As organizations grow older, the inertia to change begins to affect larger proportions, even as the imperative to change becomes more pressing.

courses and mobilizing external experts to help with teleconference based learner support were also found to be an important determinant of effectiveness as course coordinators.

In the context of faculty motivation, academics at the open university, like all tenured position situations, can be classified into the three categories of the self motivated, the situationally motivated and those who may require organizational incentives to put in any effort above the minimum requirement. The challenge for the university lies in raising the proportion of the first category in comparison to the other two. According to most of the senior policy makers and some senior academics contacted, not more than 50 percent of the academics today belonged to the first category.

Faculty Research

Though at the policy level, Provision has been made to allow the academic to devote up to 1/3 of his time to professional development and research, the objective reality of deadline bound work schedules has kept most academics from reaching this level of research activity. The desirability of discipline based versus systemic research has also plagued the Open University academic. His greater familiarity with his own subject and the compulsion of producing work for recognition in his own discipline draw the academic towards discipline based research. Being relatively new systems needing to develop their own research base and knowledge pool about the effectiveness of courses and programs, delivery mechanisms, media alternatives, learner support systems and indeed, changing learner needs; open universities on the other hand, seem to require greater emphasis on systemic research while mechanisms to support research, both discipline based and systemic, have been put in place in the form of study leave, minor and major research

grants, travel grants and sabbaticals the research output is not large. The output of research in terms of both quantum and quality needs to be improved specially in the direction of experimental research, impact analysis studies, cost effectiveness studies and continuous tracking studies of learners and those passing out of the open universities.

ISSUES IN MANAGEMENT OF THE ADMINISTRATIVE SUBSYSTEM

Most open universities today represent very large systems with far larger learner populations than ever envisaged. The requirement of creating support infrastructure to reach nationwide student populations and serve them with learner supportive, accessible and responsive systems has resulted in large administrative set ups for these Universities. The teacher to non academic staff ratio at the national open university is 1:6 as against that of 1:3 in conventional universities. Being publicly funded institutions; the open universities have administrative structure designed as per approved staff positions and designations. Even though the nature of operations and open universities is fundamentally different, no serious effort seems to have been made here by any pay commission or administrative reform commission to lay down job positions, job descriptions, promotional policies designed to the requirements of the open universities. Attempts to affect modifications in the cadres by the open universities themselves and get the same approved have been frequently cold shouldered. As a result institutions, have often used short term, ad hoc institutional mechanisms for meeting their administrative staff needs or for fulfilling their growth aspirations, sometimes leading to far greater problems in the long term. A point in the case is the policy of filling up of positions up to the level Senior assistants and section officers on a 100% internal promotion basis and those of Assistant Registrars on a 50%

internal promotion, which has serious implications for the quality of administrative competence and the infusion of fresh blood in the system

Open universities with national or state level jurisdiction result in multi- location, dispersed regional offices which in turn to look after district level learner support centers, in a three tier administrative set up. The development of Administrative policy is usually a centralized activity; with inputs invited from the regional centers. The implementation of such policy is a multi level coordinated exercise, building upwards from the learner support centers to the headquarters via the regional offices and culminating in overall centralized monitoring and control. There is often some difference of opinion or approach between the local realities and organization wide standardized policies as well as requirements of control and monitoring. Maintaining regular flow of enrolment data, assignment grades and financial expenditure at the end of financial year from each centre, presents a challenge in itself. Use of technology has eased off the situation somewhat, but search for more effective solutions are required to prevent suboptimisation.

As noted above, the Open universities have been functioning with sanctioned administrative structures and positions, notwithstanding the fact that these were designed for conventional face to face universities and are not really suited to the requirements of ODL systems (Reddy 2003). To optimize the usage of its I.T. support infrastructure for operational efficiency, Open universities require a Multi skilled workforce rather than an army of office assistants, senior assistants, Section Officers, Assistant Registrars and the like. Attempts to modify the cadres to incorporate the requirements of the system are strongly resisted by the stakeholders are met with long delays at the hands of the approving mechanisms. As a result, open universities are saddled with cadres that they have little use for, and denied the human resources that they need to make their administrative systems more responsive and effective. If the deadwood not only resist change but also affect work ethics and institutional climate. To meet their time bound work targets, institutions tend to cope with a large pool of contractual, casual appointments which do not present lasting solutions and sometimes lead to problems like litigation. In the words of a senior policymaker " while attempts to reengineer the

There is often some difference of opinion or approach between the local realities and organization wide standardized policies as well as requirements of control and monitoring.

administrative cadres are consistently made, the approval and sanctioning mechanisms being what they are, it is safer to conform till we carve out a niche strong enough to demand a differential treatment,.... (the institutions) function under a limited autonomy and confrontation in these situations could actually be counterproductive". Serious consideration of this issue is required at the level of Distance Education Council, in consultation with the government so that the administrative set up evolved is more in tune with the prevailing reality of the ODL operations and systems. The institutions on the other hand, have to evolve adaptive mechanisms of continuous training and reskilling of the existing cadres.

ISSUES OF MANPOWER PLANNING, COORDINATION AND CONTROL

The future human resource requirements at the national university are worked out on the basis of school wise projections of workload emanating out of prospective course development and course maintenance responsibilities. The administrative manpower requirements are worked out on the basis of those required for supporting the schools as well as for providing the learner support services as projected for future. Almost all planning is today done over a plan period spanning five years. Varying practices ranging from formal presentation and defense of school wise projections to written submission of human resource requirements in a given plan period have been used to formalize Institution level plans for submission to the government for approval. The actual availability of human resources for future growth and development is however dependent on the posts and resources actually sanctioned under the plan and non plan grants by the government. Some of the other challenges of coordination and control faced by the open universities are in respect of

- ❖ centralization Versus decentralization of decision-making;
- ❖ delegation and scope of autonomy for the various decision-making levels both Academic and Administrative;
- ❖ standardization Versus localization for Organizational Effectiveness; and
- ❖ sourcing and retention of faculty and staff for Isolated and or Disturbed regions

It is high time that, responding to their own specific requirements, open universities pressed for the necessity of differential norms for recruitment and promotion options, advancement policies and indeed different cadres and attention on the direction and design of their own human resource policy.

SUMMING UP

It is apparent that the nature of challenges of Managing human resources at the Open University are both varied and typical to their own context. They are also critical, since the final value created by these systems is highly people based. Finding and retaining the right kind of academic talent and nurturing it consistently for organization effectiveness are fundamental requirements but are becoming increasingly difficult, as competition for the talent pool is becoming more intense. Serious implications for planning and acquisition of human resources for ODL exist in terms of

- ❖ Developing formal job descriptions and Job specifications for the open university academic
- ❖ Developing desired competence profiles for academics at all levels
- ❖ Articulating the same in recruitment advertisements and appointment invitations
- ❖ Designing Induction programs and other training activities to realize the desired profile
- ❖ Put into motion processes required to develop open universities as attractive destinations for employment research and personal growth

Also, it is high time that responding to their own specific requirements, open universities pressed for the necessity of differential norms for recruitment and promotion options, advancement policies and indeed different cadres and attention on the direction and design of their own human resource policy. and the articulation of the same would help the open universities in initiating the processes of change they seek in creating a human resource structure more suited to their own needs.

About the Author



MADHULIKA KAUSHIK is a Professor of Management Studies with specialization in the Area of Marketing. Her areas of work and research interests include consumer behavior, Marketing of services, Entrepreneurship education, Management of Distance Education systems and Quality Assurance in Distance Education.

Dr Kaushik holds a MBA and PhD from Jodhpur University, Rajasthan in western India, where she taught Management at post graduate level for ten years. Currently, she is a Professor with the Indira Gandhi National Open University and the Director of the National Centre for Innovations in Distance Education. She has also held other senior positions at IGNOU as Director, School of Management Studies, and Electronic Media Production

Centre . Professor Kaushik is actively engaged in research and has extensively published on various aspects of ODL including papers on Consumer Behavior in respect of Distance Education, Multilateral Cooperation for women's entrepreneurship education, Video conference as an Access option, GATs and ODL, Networking and collaboration in ODL, Management of Open and Distance learning system, Quality Assurance and Human Resource Management. She has also been a consultant to various national and international organization including the Govt. of India, FAO, UNDP and COL.

Written by : **Madhulika Kaushik**

Designed & Printed by : **Mensa Computers Pvt. Ltd., New Delhi**

Published by : **Dr. Usha Vyasulu Reddi**

for and on behalf of **Commonwealth Educational Media Centre for Asia (CEMCA), New Delhi**

The opinions expressed in this document are those of the author and not necessarily that the Publisher. All products mentioned in the document are the property of the respective Trademark holders. References to these products are only for illustrations, example and information. These do not mean endorsement in any way by CEMCA or COL.

In consonance with the mission of the Commonwealth of Learning, the Commonwealth Educational Media Centre for Asia promotes the meaningful, relevant, and appropriate use of information and communication technologies to serve the educational and training needs of Commonwealth member states of Asia.



COMMONWEALTH *of* LEARNING

**Commonwealth Educational
Media Centre for Asia**

C-5/4 Safdarjung Development Area, New Delhi 110016, INDIA

Tele. : +91-11-2653 7146 +91-11-2653 7148 Fax: +91-11-2653 7147

E-mail : cemca@nda.vsnl.net.in Website : <http://www.cemca.org>