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UGC-HRDCs: Engine for Academic Excellence of Teachers and Academic Administrators in Higher Education

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ABSTRACT: Education has a profound impact on the personality and potential of an individual, directly impacting the standards of living of society and the growth and development of nation. Skilled human resource is an invaluable asset of the country. The knowledge and education has been recognized as an engine of growth and development, and hence the apex organization of higher education in country the University Grants Commission (UGC) has taken a strategic and visionary step by setting up of centres like HRDCs in various regions of the country. In order to achieve the academic excellence the faculty education with emerging development in science and technology, humanities, management etc, and the advances in research and developments are the crucial requirements. The HRDCs are devoted to provide an innovative and holistic approach to the knowledge enrichment of the faculty/researchers as well as the students by various creative, innovative programmes. The aim of the present review is to provide the information regarding the origin of HRDCs, role played by them in academic excellence with particular emphasis on the education of faculty/teachers of science, technology and research and development related fields, along with the organization structure of HRDC required for the successful functioning.

KEYWORDS: UGC, HRDCs, Academic excellence, Faculty education, Science & Technology

I. INTRODUCTION

The University Grants Commission (UGC) is the apex organization for higher education in the country and is devoted to achieve the highest quality and world class standards in education throughout the country, for the betterment of the country and the society at large, one of the stepping stone towards this step is the establishment of Regional Centre of Capacity Building (RCCB) and the Human Resource Development Centre (HRDC) in various regions of the country. The HRDCs are involved in creation of a motivated, confidant and skilled human resource by providing the academic staffs/researches/students a platform for the creative participation and interaction. The HRDCs are providing the same by organizing different programmes with innovative and holistic approach to achieve academic excellence. The various programmes organized by the HRDCs are distributed evenly throughout the academic calendar and thus provides sufficient time duration for participation. Universities are the centers of knowledge generation and distribution and can be seen as the engines of growth and development of society. A university is a place where new ideas germinate, strike roots and grow tall and sturdy. It is a unique space, which covers the entire universe of knowledge. It is a place where creative minds converge, interact with each other and construct visions of new realities. Established notions of truth are challenged in the pursuit of knowledge (Source: Yash Pal Committee Report, 2009). Universities have a social duty to provide excellent environment and resources for the public that are required to move ahead towards educational excellence and a flourishing society. The HRDCs functions in association with the universities in various regions and is providing an instrument for channelizing the resources as well as the energy in academic staffs/students/researchers.



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II. THE NEED FOR INSTITUTION LIKE HRDC: A MOVE TOWARDS THE ACADEMIC EXCELLENCE

The National Policy on Education 1986, pointed out the urgent need for creating effective systems that provide an opportunity for the professional and career development of teachers so that they can accept the challenges arising from the exponential knowledge and the fast growing trends of cross discipline teaching and research. Therefore it was proposed to enhance the motivational skill and knowledge through systematic orientation in specific subjects, techniques as well as the methodology, eventually inculcating in them the right kind of values that would in turn encourage them to take the initiatives for innovative and creative work, apart from accepting the challenges related to the educational field. In the light of NPE 1986, the UGC started Academic Staff Colleges (ASCs) in 1986 in 66 different locations all across the country in different universities. The state-wise distribution of ASC has been shown below.

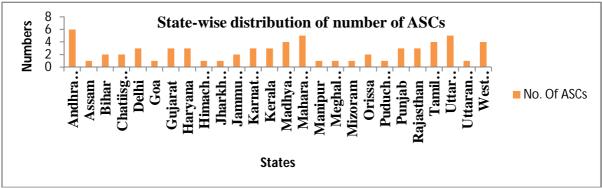


Figure1: State-wise distribution of number of ASCs.

2.1 The performance analysis of ASCs in a decade work

In spite of the presence of 66 ASCs throughout the country a limited success was obtained in terms of the courses conducted and the number of participants. A graphical analysis of the performance of ASCs in 10 years period from 2003-2013 has been presented in graph. The data label has been shown above the graph to make it clearer.

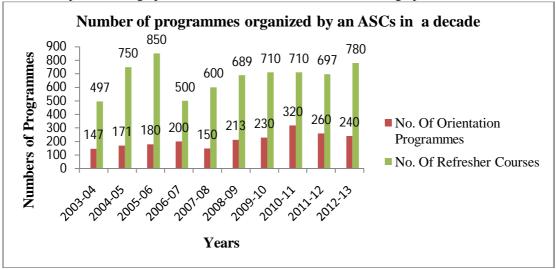


Figure 2: Number of programmes organized by an ASCs in a decade.



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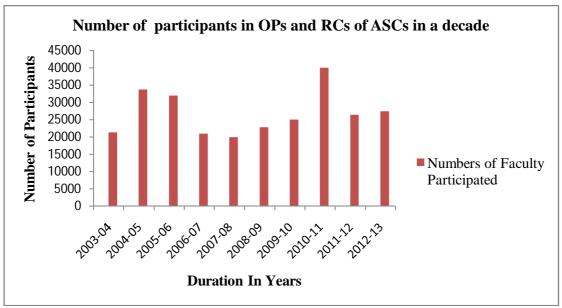


Figure 3: Number of participants in OPs and RCs of ASCs in a decade.

III. ABOUT HRDCS AND RCCBS

The above graphical analysis indicates that in country like India the performance of the academic institutions must be increased to fulfil the needs and the requirements of the country. The Planning Commission Government of India in its XII Five Year Plan has recognized the Education as a single most important instrument of social and economic transformation. The Yash Pal Committee Report- March, 2009 (YCR-2009) pointed out that it is necessary to enhance the quality of teacher education within the higher education in our country. The UGC since its establishment is working for the advancement and academic excellence in university and centres of higher learning. The start of institutions like HRDCs is a firm step towards this. The skilful training of the individual academic staffs are must to achieve the standard system of education.

The limited success in the capacity building and continuous knowledge up-gradation demands for a new innovative and holistic approach, hence to cater the needs the ASCs were renamed and converted to HRDCs and a few are made RCCB (w.e.f. 1st April, 2015) depending upon their performance or the regional distribution. The broad plan of action taken up by the UGC to cope up the needs and requirements of present education system for ensuring the academic excellence in the country are as follows-

- A. To organize specially designed orientation programmes (OPs) in pedagogy, educational psychology and philosophy, and socio-economic and political concerns for all new entrants at the level of Assistant Professor.
- B. To organize advanced level and more discipline oriented Refresher Courses (RCs), for capacity enhancement and continuous knowledge up-gradation and exposure to emerging developments to the faculty involved in teaching in institutions of higher education.
- C. To ensure that every teacher in higher education system of our country is exposed to an OP and a RC at least once to the first three to five years of his/her career.
- D. To organize specially designed OPs/RCs to enable the faculty involved in teaching and research in institutions of higher education to utilize fast growing information and Communication Technology support to teaching and research.

3.1 The main target groups identified by UGC

In order to achieve the motive of academic excellence by capacity building, knowledge advancement and similar other important programmes in the centres of higher learning the UGC has identified the main target groups, this is to ensure an overall development and progress including the key governance functionaries. A holistic approach has been taken to



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transform the academic environment and make it more conducive to innovation, creativity, quality advanced learning and the research. A pictorial representation of main target groups has been presented below.

IV. OBJECTIVES AND THE ROLE OF HRDCS IN ACADEMIC EXCELLENCE

The HRDCs institutes has been strategically designed with a broader vision to achieve the quality assured system for capacity building, continuous knowledge enhancement, the new strategies of governance for promotion of innovations and creativity. The HRDCs will function in collaboration with concerned RCCB on broad guidelines as suggested by the Local Programme Planning and Management Committee (LPPMC). In particular the HRDCs will have to ensure following functions-

- 1. To achieve highest standards of quality and effectiveness of programme delivery, by actively collaborating and cooperating with the RCCB.
- 2. To actively utilize the online systems for interactive connectivity with RCCB and all the HRDCs for fast and effective functional operations and e-content delivery using National Mission of Education through ICT(NMEICT) resources, adoption of emerging technologies and Massive Open Online Courses (MOOCs).
- 3. To contribute and share the repository of experts maintained by RCCB for conduction of programmes in HRDCs.
- 4. The multimedia repository of RCCB and other sources as indicated of some of the best content delivered in the HRDCs is to be contributed and shared.
- 5. To set up a documentation-IT enabled centre-cum library for reference and source materials necessary for the programmes.
- 6. To communicate and manage the display of advisories to the participants in advance giving them theme, focus and other details about the programmes.
- 7. To actively cooperate with RCCB in maintenance of an information portal giving all the details about programmes planned in the region with names and brief CVs of resource persons and preferably full text or at least PPTs with abstract and references of the contents proposed to be delivered.
- 8. To analyse the feedback from participants on programme delivered in the HRDC for consistent review for quality enhancement and communicating the same to RCCB through online mode within 15 days from completion of a programme.

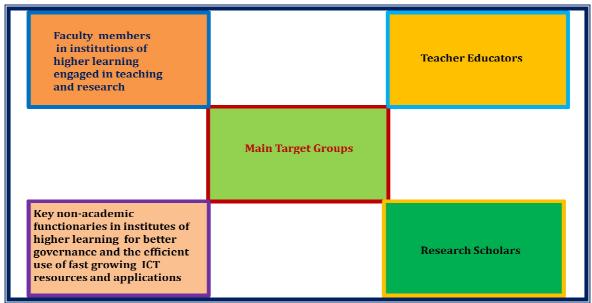


Figure 4: Main target groups identified by UGC.

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V. THE CHALLENGES AND REQUIREMENTS TO BE A WORLD CLASS UNIVERSITY

With the fast pace of development in international arena the generation of talent pools has become an imperative to cater the needs of the society and progress with the world in various fields of science and technology along with the research and development. India is endowed with a very large human resource pool, that if given proper guidance, training, creative and growing environment may result in a talented and highly skilled invaluable resource for the country. In order to achieve the world class standard in an organization like university and the centres of higher learning, the needs is to focus on various primary elements like concentration of talents, well talented leadership, centres of excellence, research output, strategic vision etc. The various key factors needed for the university to be a World Class University has been depicted in the following figure.

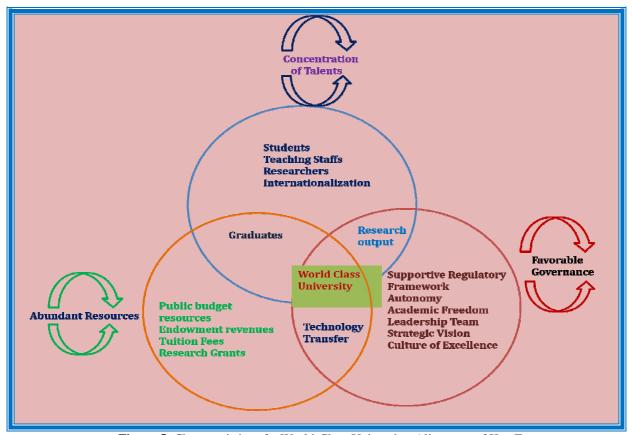


Figure 5: Characteristics of a World-Class University: Alignment of Key Factors.

Source: The Challenge of Establishing a World Class Universities, Washington, DC: World Bank, Salmi 2009. The academic institutions in the world are growing at very fast pace, as evident by a global study on patent generation, it shows that the universities and research institutes more than the firms, drives scientific advances in biotechnology (Cookson, 2007).

Recent studies have indicated that the research universities are the central institution of the 21st century knowledge economies, presented in two important books- *World Class Worldwide: Transforming Research Universities in Asia and Latin America* (Altbach and Balán, 2007) and *The Challenge of Establishing World Class Universities* (Salmi, 2009). This book examines the recent experience of 11 universities in nine countries that were struggling with the challenges of building successful institution under difficult circumstances and their experiences



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VI. THE ORGANIZATION STRUCTURE OF HRDCS

In order to achieve the motive of skilled human resource development HRDCs are started in a well organized form, that are important not only in providing the training but to gather the feedback and monitor the progress achieved. The functioning and success of the HRDCs are monitored by higher authorities. The organization structure has been shown in following figure.



Figure 6: The organization structure showing the position of the HRDC.

6.1. The Cluster Structure of HRDCs

The HRDCs has been organized in the forms of cluster by combining different HRDCs (Previous ASCs) in one culture for better control, co-ordination and functioning. A total of Eight clusters were formed the list has been presented below in table.

Table 1: The cluster structure of HRDCs.

Clusters	States	Total numbers	of
		ASCs (HRDCs)	
Cluster 1	Jammu & Kashmir, Himachal Pradesh, Punjab, and Haryana	9 ASCs	
Cluster 2	Delhi, Uttar Pradesh, and Uttarakhand	9 ASCs	
Cluster 3	Gujarat, Maharashtra, and Goa	9 ASCs	
Cluster 4	Karnataka and Andhra Pradesh	9 ASCs	
Cluster 5	Tamil Nadu, Pondicherry, and Kerala	8 ASCs	
Cluster 6	Madhya Pradesh and Rajasthan	7 ASCs	
Cluster 7	Assam, Manipur, Mizoram, Meghalaya and West Bengal	8 ASCs	
Cluster 8	Orissa, Bihar, Jharkhand and Chhattisgarh	7 ASCs	_



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6.2. The Standard Operating Procedures of HRDC Clusters

The Standard Operating Procedures (SOPs) for HRDC clusters has been given by the UGC. This is to ensure a better functioning of the institutes (HRDCs). The UGC will appoint a Nodal Officer for each cluster for coordinating the activities of cluster. It is enumerated as follows:

- 1. It is to be ensured that there is no clash of dates in Orientation courses organized by HRDCs in each cluster.
- 2. It is to ensure that Refresher courses in the cluster are organized by HRDCs on rotational basis. There would be no repetition of courses within the HRDCs.
- 3. The entire cluster system will be co-ordinated by eminent resource persons.
- **4.** The e-content lecture library would be created in the cluster on sharing basis in HRDCs.
- **5.** The complete academic schedule of the whole cluster along with details of HRDCs would be provided by the nodal officer to the UGC by 1st December of the year for approval by the Programme Planning and Management Standing Committee constituted at the level of the UGC.
- **6.** The nodal officer will coordinate amongst all the Directors of HRDCs in the Cluster by e-mail/Electronic media to reduce the operation cost and then finalize the activities of the Cluster in (1) to (5).

The UGC will not provide any financial assistance to the Nodal Officer for coordination the activities of HRDC clusters. The cluster system started working from year 2015.

VII. STRENGTH OF THE NEWLY FORMED HRDCS AND RCCBS

The HRDCs and RCCBs are functionally advanced and well equipped in comparison to the previous Academic Staff Colleges (ASCs). It has a better developed infrastructure, equipment facilities, better human resources deployment, advanced ICT (Information and Communication Technology) capabilities etc. The HRDCs and RCCBs share their facilities to provide a best teaching and learning environment for the human resource development and capacity building, playing a role model in the region. The strengths of HRDCs and RCCBs can be summarised as below.

- 1. The HRDCs and RCCBs are more power-packed with state of art facilities.
- 2. The courses and programmes conducted are of holistic and innovative in nature and based on the needs and requirement.
- **3.** The professional experts take part in the programmes and make them focused, realistic, beneficial and enriched for the learners.
- **4.** The hands on training experience provided, give a direct experience and thus help in skill improvement.
- 5. The advanced ICT facilities provide modern tools to have world class learning environment and materials.
- **6.** A relationship build during the course provides long term benefits to the participant in professional career advancement.
- **7.** Recent advances in the field of science and technology or others are taken into view while designing the courses and the programmes.
- **8.** The HRDC clusters work in a coordinated manner to ensure optimum performance of the HRDCs and the RCCBs.
- **9.** A feedback and assessment of the participant in the programmes are taken to check the progress and improvements after the course.

7.1 Progress assessment of the participant in Orientation Programmes/ Refresher Courses

The assessment of the progress of the participant will be done according to the UGC rules, those who secure grade D in the assessment test will have to repeat the programme after the gap of one year without the financial assistance of UGC. The structure of test conducted, as prescribed by UGC: A test of total 100 marks will be conducted with following contents.



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Table-2: Structure of the assessment test.

SN	Contents	Marks allotted
1	Multiple -choice objective test	30
2	Seminars/Participant presentation	15
3	Project/survey/others	20
4	Micro-teaching/participation	10
5	Holistic response*	25

^{*} Punctuality, regularity, initiative, conduct, responsiveness etc.

The result will be given in four grades, which are as follows:

Table 3: Assessment test grading system.

Grade	Value
A	75% and above
В	60% to less than 75%
C	50% to less than 60%
D	Below 50 %

VIII. EVOLUTION OF ACADEMIC STAFFS AND THE ACADEMICS OF SCIENCE, TECHNOLOGY, RESEARCH AND DEVELOPMENT AND THE GROWTH OF NATION

The science and technology in today's world is changing very fast, the novel findings by the research and development are contributing to the advancement of existing technology and scientific concepts. In this scenario of growth, the continuous knowledge up gradation is a most important requirement for the development of a skilled pool. Teachers are the builders of the nation they are responsible for the mass transformation of the society, so in order to achieve the goal of nation building, improvements in the academic staffs are very important. An academic staff should have a creative thinking, positive attitude, subject expertise, up-to-date knowledge of their field of knowledge, a motivational skill, a good character, and supportive nature towards students etc. There is an intimate relationship between the student and a teacher, for exchange of knowledge between them it is very necessary to have a good relationship, but in today's society lack of above qualities as well as the relationship is being observed. The HRDCs are working in this direction also by organizing various programmes like seminars on the motivational skill and stress management, in order to improve the relationship and have better life for faculty and the students both.

The technological and scientific developments have roots in reasoning, it is due to the documentation and distribution of gathered knowledge through the academics, the base knowledge is expanding vastly and quickly and hence the new is becoming old. Thus it can be seen that, there is an intimate relationship between the technology development and the academics. The academics provide the raw material for the technological growth. The following figure shows the academics in relation to technology.



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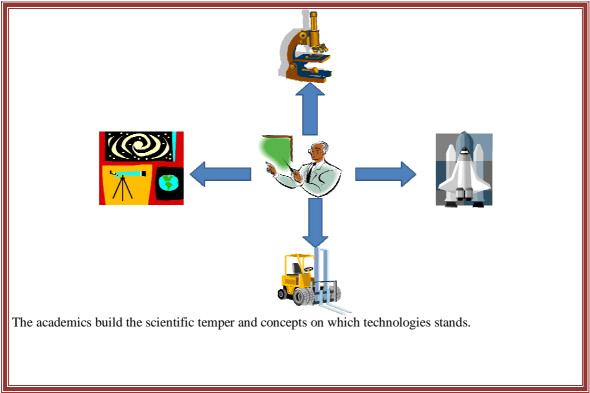


Figure-7: The relationship between the academics and technology development.

8.1 Technology for academics and research:

In the modern times, the technology enable learning has grown fast and is an integrated component of higher education since the launch of satellite dedicated for the education i.e. Education Satellite (EDUSAT). The National Knowledge Network is in the process to connect 26000 colleges, most of the universities, research laboratories through econnectivity for academic transactions. The National Mission of Education through ICT (NMEICT), is in the process of developing 50 DTH channels, R&D for low cost devices, the adoption of emerging technologies and the facilities like e-content for undergraduate and postgraduate level courses, as well as the Massive Open Online Courses (MOOCs).

8.2. Tools of HRDCs for academic excellence of science faculties along with the research and developments.

The HRDCs are equipped with many tools to combat the needs of faculties of all fields including the science and technology, and to distribute the nectar of research and developments. The tools are the various innovative programmes that are being organized to stimulate the knowledge and skills to a higher level.

The various main categories of programmes organized by the HRDCs throughout the year have been illustrated in the following figure.



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Figure-8: The various main categories of programmes organized by HRDCs.

The direct benefits provided by the HRDCs to the faculties in relation to the science, technologies, research and developments are:

- **1.** The orientation programmes conducted from time to time provides a platform of learning to the new entrants in the academics.
- **2.** The orientation programmes helps in relation building between the participants and the organiser that can be beneficial in long run.
- **3.** The orientation programmes enhances the experience of the new entrant .This enriching experience motivates and develops the skills. The objective of the orientation programmes is to make the teachers a new instrument of socio-economic change, and then put them in the centre stage of development of nation.
- **4.** The orientation programmes covers the broad areas of knowledge.
- 5. The refresher programmes are discipline specific and covers the advanced developments in the selected area under the concerned broad area. The refresher programmes are for the staffs who already participated in the orientation programme anytime earlier.
- **6.** The refresher programmes also covers the areas of cross discipline and related to the new knowledge of industrial field and the socio-economic field.
- 7. The various workshops organized from time to time provides a stage of creative thinking and hands on training experience to the participating staffs such as the academician, administrators or any stakeholder.
- **8.** The short term courses are an important element of knowledge sharing and include the research methodology and other specialized themes of interest.
- **9.** The various programmes that are based on the important suggestive areas are organized in order to fulfil the needs and requirements of the institution. For example a seminar based on the Knowledge up-gradation for effective teaching and research.
- **10.** The programmes organised by the HRDCs enhances the energy and activity levels of the participants. An active life is important for the progress, as aptly said in English, "A rolling stone gathers no moss".



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It can be observed that the HRDCs are going to be an instrument of change by providing a platform for innovation, creativity and enriching experience to the teacher's researchers and other participants. The direct experience has a profound impact on the personality development and knowledge gain. It motivates and pushes the individual to a higher realm of life.

In order to provide a pace to the development of nation, the strategic decision to start the HRDCs in various regions of the country is a crucial and powerful step taken by the University Grants Commission (UGC) and the apex leadership of the country. It is a visionary step that will have a long term benefit on the society, particularly the academician, such as the teachers/students/researchers of the country.

IX. CONCLUSION

The knowledge transforms the life of an individual and the society at large. In modern world the needs and requirements are changing very fast, with quick change in science, technology of production and utilization, this is due to the fast pace of research and development activities throughout the world. In this scenario of growth and development, a strategic, visionary and innovative approach in education and academics is an imperative need. The University Grants Commission (UGC) is the apex organization for higher education in the country and is working for the advancement and academic excellence in university and centres of higher learning since its establishment. In order to achieve objectives of quality assured system for capacity building, continuous knowledge enhancement, the new strategies of governance for promotion of innovations and creativity, the RCCB and HRDCs are started in various regions of the country.

The HRDCs are well equipped with state of art facilities needed for advanced learning and are providing a platform for creative participation to the intellectuals like teachers /student/researchers etc of the society and enriching the knowledge base by various programmes of innovative and holistic in nature. Ultimately the HRDCs are transforming the human resource base into motivated, confident and skilled invaluable resources and striding the country towards the excellence in education and the growth and development of the nation.

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