

Essay No. 3. May 29, 2020

**RE-ENVISIONING HIGHER
EDUCATION ECOSYSTEM IN INDIA
FOSTERING ACADEMIC LEADERSHIP**

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NEW DELHI (INDIA)**

Scholarly Article from the book *REIMAGINING INDIAN UNIVERSITIES*,
Editors: Pankaj Mittal and Sista Rama Devi Pani,
Publisher: Association of Indian Universities, New Delhi (India),
2020. ISBN No. 81-7520-154-1

RE-ENVISIONING HIGHER EDUCATION ECOSYSTEM IN INDIA

FOSTERING ACADEMIC LEADERSHIP

K K AGGARWAL AND AVINASH C SHARMA

In the Indian context, our existing setup of higher education has served well in raising our post-independent generation mainly by way of establishing and nurturing an effective knowledge delivering system. The emphasis so far had been on accessibility rather than quality, knowledge creation, inventions and innovations. Time has come that we update our priorities and start working on mechanisms that generate high quality educators, scientists, engineers and researchers capable of knowledge creation; entrepreneurship and capability of handling live problems; be sensitive to local needs; and develop the education ecosystem in-phase with ever-changing global requirements. Towards this goal, we as a nation have to develop a mechanism to create/generate a pool of academic leaders with great vision and extraordinary skills to lead our education ecosystem from the front.

Prelude

World over, the higher education ecosystem is facing many unprecedented challenges. The race to restructure and reform the higher education systems is accelerating particularly among developing countries. Most countries have resorted to granting more institutional autonomy to higher education institutions (HEIs) with the hope that the increasing management flexibility will expedite the process of higher education development more appropriately. Countries have reached different stages and developed their own definitions of autonomy and reform measures due to disparities in their political and social structures as well as the backdrops of their higher education setups. Despite the differences, they share one common element, that is, the fact that the higher education sector is a strategic pre-requisite for long-term and sustainable development.

Quality education is essential for creating a sustainable human resource base upon which a country's development is based. Present day India is experiencing a growing need for highly skilled managers and professionals in a variety of fields, including that of higher education. There is no doubt that investing in higher education helps nations build high-income economies with the innovation, knowledge, and technology needed to thrive in an interconnected, competitive world.

The rapidly changing landscape of higher education requires new thinking and updated practices (Aggarwal and Sharma, 2019). A question central to the issue is: What are the strategic and operational priorities for higher education in our country?

Some of the envisioned priorities for India's preparedness for HE 4.0 (referred in the context of fourth industrial revolution-IR4.0) can be listed as:

- to accelerate manufacturing-based industries by way of 'Make in India';
- to accelerate the culture of creativity and innovation;
- to accelerate the transition from 'knowledge delivery to knowledge creation'; and
- to strengthen linkages of R&D setups to industry and society at large.

Leadership and the Higher Education Ecosystem

Standard leadership assumes employees to be robots and do as they are told. This is based on man's natural instinct that only leaders are capable of making quality decisions. This is known as the 'command-and-control' leadership. Low efficiency is caused by the disconnect between management and the frontline. Management is busy dealing with problems that affect them while ignoring problems that affect the frontline, while frontline problems are only dealt with when they explode into a major problem.

Standard leadership is based on man's instinctive desire for control, which is leadership by default. A leader's changing mood controls policy of the moment and no one knows what the priorities are – mood-changing priorities reduce efficiency. Standard leadership requires a high level of supervision. Leadership style controls the level of elementary problems, which controls workplace efficiency. The level of elementary problems is controlled, in part, by learning opportunities and leader's personal priority. Three most important traits of a leader are:

- To be courageous: there are many things one can learn in solitude, but courage is not one of them.
- To be honest and act with integrity: 'yes' means YES and 'no' means NO.
- To be fair in action.

Character forms a critical part of leadership. Many leaders fail as a results of character issues. There are too many examples where leaders have failed the people they serve. Leaders do not quit in challenging times. People have lost their faith in leadership due to many public examples of personal failures of leaders.

Not everyone who is in the position of a 'Head' is eventually a 'Leader'. The meaning of a leader is dependent upon the leadership displayed and not the position held. The person at the helm may not necessarily possess the kind of attributes which are characteristics of leadership, especially the attributes of the vision and of seeing a larger picture.

Many initiatives fail because of the confusion between what is expected of leadership and what of management (and how to align the two roles of leadership and responsibilities of management). Moreover, the primary safeguard against the corruption and financial disaster are not higher controls but making sure to identify, induct/recruit, develop and appoint people of integrity into leadership positions. This is particularly true for the education sector, which in itself is expected to generate future-ready leaders who are capable of taking the nation forward.

Leadership is about ‘thinking’ and envisioning while management is about ‘doing’ for transformational change. There is a need for a tight and secure connection to translate leader’s directions into management systems – to vision and action. Strategic planning creates this connection. We may say, broadly speaking, that visionary leadership is 70 per cent thinking/strategic planning and 30 per cent management.

Very often the term *leadership* is linked with the term *visionary*. Invariably, visionary traits are considered to be among the essentials of a leader. Talk of being a visionary goes hand-in-hand with talk of leadership. This is in fact not true in practice. Not all leaders have visionary traits and only a handful of them can be classified as visionaries.

It is said: “*The people with vision are highly motivated. For them it’s not work to follow a vision — it’s joy*”. High efficiency workplaces are based on *visionary leadership*, where workplace policies authorise decision-making responsibility in the frontline. Limited supervision is needed with worker responsibility and visionary leadership increases efficiency by moving decision-making responsibility to the frontline. Efficiency is achieved with limited supervision. To make frontline responsibility effective, leadership must give workers the opportunity to develop quality decision-making skills and learn to trust them. *The visionary leadership can be considered to be a type of transformational leadership (or the other way around). It’s rather rare though as it occurs as a natural personality trait of an individual; nevertheless, it could be cultivated to a certain extent.*

Some of the primary elements for effective leadership are:

Workplace Education: It creates a workforce of quality decision-makers. Employees at all levels have the *opportunity* to discover and develop their unique skills thereby inspiring them to become quality decision-makers. The keyword here is ‘opportunity’. Not everyone will embrace this opportunity, but the few that do will inspire others with positive attitudes. This can only be achieved with visionary leadership.

Organisation Structure: This controls decision-making responsibility. Visionary leadership allows decision-making responsibility all the way down to the ground level. Standard leadership limits decision-making to the management.

Organisation priorities: It controls leadership style. When priority is responsibility at the frontline, leadership will seek talent, and people can depend on completing tasks with limited supervision. The policy will be, ‘*do it*’. The

frontline develops quality decision-making skills that are also found in layers of management.

On the other hand, when the priority is ‘control’, leadership will be organized in a way that all decisions must have approval. The policy will be. *‘not to do anything until being told’*. Layers of management slow the final decision, while lowering efficiency.

Policies: Leadership style is controlled by workplace policies. Leaders will adapt their style to be in tune with the organisation priorities and its goals.

Today, fast growing organisations are built on leadership innovation, that is, they are not built by product visionaries but by social visionaries — those who invent entirely new ways of organising human effort. The catch word is ‘Leadership Innovation’.

General characteristics/attributes of a *visionary leader* include:

Provides direction: One puts forward a desired future and moves followers towards it.

Uses foresight: Typically considered a part of ‘wisdom’, it is sometimes said that a truly great visionary leader knows what’s going to happen before others do.

Is believed: One must be right or at least perceived to be right.

Motivates: If the message cannot energise those hearing it, then the would-be visionary leader would be better off teaching economics.

In theory, a strong and effective higher education ecosystem is expected to generate the best of leaders to lead organisations or nations or multinationals/global projects for the betterment of humanity at large. For this to happen, the higher education in itself needs visionary leaders and innovative leaderships.

Academic Leadership

Within the overall prescription of *leaders* and *leaderships*, in the following we analyse its form, role and impact in the academic world and especially in the higher education sector (www.oecd.org).

The Rationale

There exists in all institutions of higher learning, certain unique core values that define the institution in the minds and hearts of most or all of its members and the associated stakeholders. Some of these values and characteristics, which are peculiar to any institution of higher education are:

- knowledge and expertise is the basis for respect and status;
- a general tendency towards a moral superiority;

- a heightened sensitivity to individual rights;
- the necessity for the autonomy of the individual to pursue and transmit knowledge;
- a belief in the university as an idea generating platform; and
- self-discipline and reflective solitude.

The above characteristics associated with an institution of higher learning necessitate the role of academic leadership to extend far beyond the conventional leadership qualities. It is often commented on for its absence, sought out but carefully 'watched' when it is present and never to be acclaimed as a personal ambition. It completely permeates the institution. While an accepted definition or notion of leadership may be elusive, most members of the academic community recognise leadership when they see it.

It is said that no one dreams of a career as an academic administrator. It is a tough job that has only become more challenging as budgets shrink, public scrutiny rises, and responsibilities continue to grow.

Fundamental changes like increased awareness of the democratic approach of decision-making, globalisation, regionalism, caste-based-polarisation and above all the extreme pace of technology driven developments are transforming our societies. This transformation, while important and necessary, is very often painfully difficult for people and the institutions. These changes produce an array of problems, which require time, attention and often a significant change in the behaviour of members of the university community as well as very different types of leadership qualities. Problems arising from issues of size, diversity, quality, technology, resources and multifaceted roles are interrelated and not easily addressed. Academic leadership roles are changing constantly and that also too fast.

Most persons assuming leadership responsibilities, while highly knowledgeable and skilled in their own discipline, are talented amateurs in leadership and management. Most have learned 'on the job', chairing departmental and senate committees, and holding other administrative responsibilities at the level of Dean and/or Vice-President. While learning on the job (apprenticeship model) plays an important role in contributing to the general preparedness of an individual to assume an administrative post that carries expectations for leadership, it is not enough. The current, complex and often contradictory expectations and demands of peers, the institution and the society today require that academic administrators possess: a more in-depth and a broader knowledge base than that is provided by learning on the job.

Attributes of Academic Leadership

While leaders may look different and think differently, it is likely that they share the following attributes:

Vision: the ability to communicate to others what a destination may look and be like and instill the motivation in others to move towards that destination;

Voice: the ability to listen to what is said and not said by members of the group and to express those wants, needs, hopes and fears to others;

Credibility: the ability to do what one commits to do;

Commitment to action: a sustained focus over time in often very difficult circumstances.

The likelihood that a particular person will have these leadership attributes depends in large measure on who they are and the environment in which they have been raised and work. The degree to which each of these attributes has been developed depends on the person's life experience, including cultural norms and values, education and training, personality, experience and access to power.

Leadership can and does occur in the domains of teaching, research and academic administration.

Teachers define who will be taught, what will be taught, how it will be taught and the standards of evaluation of what has been learnt. *Leaders in teaching* are imbued with an extraordinary ability to know what knowledge is more critical to teach; excite students and peers about learning; know what teaching practices are most effective; and invest their considerable energies in the promotion of student learning.

Researchers define questions and seek answers. *Leaders in research* have the ability to identify and answer particularly important questions, seek connectivity and are driven to communicate their work to others.

Administrative leadership is the force that drives the institution as a whole. Administrative positions at senior levels are vested with the responsibility, whether derived by statute, charter or articles of incorporation, for ensuring that the institution and its members fulfil their educational, social and ethical mandates. *Administrative leaders* may or may not be leaders in either teaching or research but it is expected that they are respected for their judgement, institutional knowledge and predictive powers. Such individuals are usually drawn into the institutional structure through appointment to senior administrative posts.

Any person so appointed at the top position of an institution of higher learning is expected to encapsulate all the above characteristics in one place. Defining the characteristics is rather easier than identifying and nurturing personalities that possess such qualities.

In the prevalent system so far, it is generally not possible to ensure that the head of the institution has the requisite competence, as the academic and administrative head. Most of the appointed ones are too willing to give up their autonomy and stand up to the merit-based decisions.

The Process

Crucial aspects of the development of more powerful executives in higher education are the processes by which they are picked-up/appointed and the qualities of the individuals concerned. As pressure mounts to make institutions more accountable, to develop better linkages with the wider society, and to raise external funds, their leaders need to be much more than merely outstanding academics.

In many countries, the tradition has been to elect university leaders to ensure that they represent the constituency – especially the academic one – of the university. Although election of university leaders still continues in a number of countries, the trend seems to be moving towards appointment, often by a board with a majority of external members.

The change towards appointment rather than election is a crucial part of the redefinition of the relationship between the chief executive and others within the institution. An appointed rather than elected chief executive may find it easier to implement major changes that cut across vested interests. Nevertheless, the process of appointment is vital to ensure that the institutional leader has credibility within the institution.

Indicators of the changed roles and expectations of institutional leaders are found in the language of recruitment advertisements, for example:

We are looking for an outstanding individual who combines the ability to inspire and lead with a clear vision of the future direction of higher education, both nationally and internationally. The successful person will have the drive, personality and determination to develop the University to match that vision (United Kingdom University).

We need a leader who, together with me [the Chair of Council], the board and a large number of qualified staff members, can lead the activities into a new millennium. You should have good knowledge about industry, business and authorities within the [institution's] sectors of activity and a good anchorage in the science fields covered ... A wide network of contacts and experience from leading large knowledge-producing organizations are also important, as well as the ability to inspire" (Swedish University).

Nevertheless, a strong academic background continues to figure prominently in leadership appointments. A survey in four of the countries namely, Netherlands, Sweden, the United Kingdom and the United States that appoint their university leaders found that:

Despite extensive changes in university organization, key structural elements, particularly those which underpin professional autonomy, continue to circumscribe and define the powers of the Vice Chancellor; there is little evidence of broadening recruitment patterns, and those appointed to the post of Vice Chancellor continue to

come from similar, pre- dominantly academic backgrounds” (Bargh, Bocoock, Scott and Smith, 2000).

In India, a typical advertisement for appointment of Vice Chancellor of a Central University reads as:

“... The Vice Chancellor, being the academic as well as administrative head, is expected to be: • A visionary with proven leadership qualities, administrative capabilities as well as teaching and research credentials. • Having outstanding academic record throughout and a minimum of 10 years’ experience as Professor in a University or 10 years’ of experience in a reputed research and/or academic administrative organization with proof of having demonstrated academic leadership. • Preferably not more than 65 years of age”.

An overview of the practices adopted in some countries is given in Table 1.

Table 1: Appointment of Leaders of Higher Education Institutions

Country	Process for election or appointment	Government has to approve?	Typically appointed for how many years?	Renewable position?
	<i>Countries where leaders are usually Elected by:</i>			
Finland	Academic staff and heads of separate institutes	No	5	Yes
France	Board or Council	No	5	No
Japan (national)	Academic staff	Yes	4	Varies
Korea (national)	All full-time faculty members	Yes	4	Varies
Switzerland	Senate or ad hoc committee	Yes, mostly	5	Yes
Turkey	All full-time faculty members	Yes	4	Yes
	<i>Countries where leaders are usually Appointed by:</i>			
Australia	University Council (majority usually external)	No	5-7	Yes
Ireland	Governing Body (approximately 50 per cent external)	No	10	No
Netherlands	Supervisory Board: 5 external members appointed by Minister	No	4	Yes
Sweden	Government, on recommendation of mainly external Governing Board, which first consults students and employers	Yes	6	Yes, for two periods of 3 years
United Kingdom	Governing Body, of which the majority are external members	No	7	Yes

United States (public)	State government-appointed Regents or Coordinating Boards on the recommendation of Search Committee	No	Varies	Varies
	<i>Countries where reforms have been implemented in last decade:</i>			
Austria	Formerly elected by University Assembly comprising professors (25 per cent), assistant professors (25 per cent), other staff (25 per cent), and students (25 per cent) from the candidates proposed by Senate	No	4	Yes
	From 2003, appointed by University Council made up of external members, from a shortlist of three candidates nominated by Senate			
Denmark	Until July 2003, elected by: academic staff (50 per cent); other staff (25 per cent); and students (25 per cent)	No	4	Yes
	From July 2003, appointed by a Board with a majority of external members			
Norway	Formerly elected by academic and other staff, with some role for students	No	3-4	Yes
	From 2003, an Executive Board with strengthened external representation may propose to the Minister that it appoints the Rector			
India	Selected by a Search-cum-Selection Committee Constituted by the Government	Yes	3-5	Yes

Source: Survey of university governance among member institutions of the OECD's Institutional Management in Higher Education (IMHE) programme, conducted by IMHE in 2003 (www.oecd.org).

All across, an underlying thinking remains that despite an increased emphasis on general leadership skills and managerial competence, governing bodies largely continue to hold the view that universities have to be run by academics or those with academic backgrounds, because of the distinctiveness of universities as academic institutions. Thus, managerial expertise is seen as additional to a strong academic track record rather than the driving consideration in an appointment (Bargh, Boccock, Scott and Smith, 2000)

Career Trajectories of University Administrators

Career paths of university administrators in most clusters are linear. Many a time, experienced non-academics can run for a post. In other words, high-ranking administrators in most of the countries usually have academic and professional

backgrounds. More often than not, those working in HEIs for several years have the potential to be institutional leaders. Most will have to build up their administrative as well as academic experience. In some cases, national politics might influence career progression. The selection process, however, is often undertaken by a rigid selection committee.

In many countries, the career path for university administrators is nonlinear. This means that one who is appointed as a university president may come from outside the university, provided he/she meets the requirements. However, vice presidents, deans, directors, and chairs of departments must come from within the university, and anyone who is qualified in the screening process may be designated.

Broadly speaking, in principle all around the world, work experience, knowledge, and capacity remain the key criteria and characteristics in the process of university post promotion. Nonetheless, there is a certain level of discrimination in terms of use of personal connections as a tool to reach the top posts of university administrators. In the sense of political culture and practices, higher education institution administrators indicate that they must have good communication with senior officials of the university and the ministry to gain their political support.

To sum up, in most cases, university administrators have started their careers with a teaching job before taking up an administrative post. The common criteria in selecting high-level university administrators to lead higher education institutions include not only academic excellence and exceptional management skills, but also loyalty and morality. The advantage of the linear system is that the administrators are respected as academic administrators. However, the nonlinear system also opens up the opportunity for those who have experience in management and administration. The most appropriate choice depends very much on the institutional culture and background of the higher education institution.

Ensuring Academic Leadership – Some Recommendations

Accountability at the level of leadership is an extremely sensitive but an important issue. By virtue of the position itself, being in public-eye almost every decision/action is under continuous scrutiny from different stake holders. It is still desirable to have in place some robust mechanisms to ascertain the impact of the leadership qualities. Various parameters for this may involve: Overall growth of the institution in terms of (Spendlove, 2007):

- (i) national and international rankings and third party accreditations;
- (ii) proactive academic and intellectual activities, and outcomes even beyond normal functioning like classroom teaching and evaluations;
- (iii) realistic feedbacks from various stakeholders; and
- (iv) the quality of the out-products both in terms of student training as well as other tangible outcomes like research, inventions, knowledge creation, etc.

Some additional recommendations which need serious attention can be:

- The idea for establishment of Indian Education Services within the formal sector: This can generate a quality workforce of educators having a sharp national perceptiveness; and they can be nurtured to grow as a national pool of academic leaders for future.
- To develop mechanisms to recruit and retain a pool of around one lakh excellent quality STEM teachers over the next 10 years. Those can further be nurtured as ‘thinking’ innovative leaders.
- To develop quality assurance systems for higher education that is easily implementable, operationally feasible and has a large measure of credibility and acceptability.

The above framework has to be in line with the local needs and national requirements but also live to the international best practices (particularly, in the context of freedom and accountability).

All the above be appropriately integrated such that the nation can identify around 5,000—10,000 ethical visionary educators/leaders of credible stature who have:

- vision and a long-term perspective;
- have done quality research work at some stage of his/ her career;
- familiar and sensitive to ground realities;
- capable of decision-making;
- capable of team building; and
- has the capacity to lead from the front.

Conclusion

In conclusion, it is imperative that we have in place an appropriate policy for selection of academic leaders that is done on pure academic considerations, professional and ethical credibility along with provisions of stringent ‘*academic leadership performance indices*’ in place so as to ensure accountability of the same. Unless this is done, there is little hope of improving the educational standards and the management efficiency of our institutions of higher learning.

Note: (i) The article is based upon several informal discussions and is an outcome of various formal platforms of debates and deliberations including Roundtable of Vice Chancellors on STEM Education organized by Association of Indian Universities (AIU) and Vivekanand International Foundation (VIF), February 5, 2020, New Delhi.

(ii) Some of the contents are from VIF Task Force Report: ‘Towards More Effective Education: Emergence of STEM Education In India’, (2019) prepared under the Chairmanship of the lead author Prof K K Aggarwal.

References

1. K K Aggarwal and Avinash C. Sharma (2019). *Higher Education Preparedness for IR4.0: An Indian perspective*, National Security, Vivekananda International Foundation Vol II(2) (2019) ISSN 2581-9658, p 205-229.
2. www.adb.org *Administration and Governance of Higher Education in Asia*, <https://www.adb.org/sites/default/files/publication/29956/administration-governance-higher-education.pdf>
3. www.oecd.org. *Changing patterns of governance in higher education*, <https://www.oecd.org/education/skills-beyond-school/35747684.pdf>
4. Spendlove, M. (2007). Competencies for effective leadership in higher education, *International Journal of Educational Management*, Vol. 21 No. 5, pp. 407-417. ISSN: 0951-354X
5. Bargh, C., Boccock, J., Scott, P. and Smith, D. (2000). *University Leadership: The Role of the Chief Executive*, Society for Research into Higher Education and Open University Press, Buckingham.

ANNEXURE - I

Careers paths in some of the typical Asian countries are reproduced here from *Administration and Governance of Higher Education in Asia* (www.adb.org)

In Malaysia, the career paths of top university administrators, such as deputy vice chancellors (DVCs) and Vice Chancellors normally start as heads of departments, deans, directors of faculty, directors of a research center, or directors of a servicing center. Candidates are assessed on their work records, interest, openness, and the drive to take on new challenges, opportunities, and positions in a variety of areas.

In many leading public HEIs, university leaders cannot merely be academicians; they must also be notable scholars and public intellectuals. To become a university administrator, one should have a good academic history and the desire and drive for continuous learning and development. These can be demonstrated by advanced degrees and promotions, scholarships, awards, and recognition as an expert in a field. In addition, they must be strategic thinkers, capable motivators, and brave enough to make changes.

Gender and political inclination are not discriminated against for those seeking a post of a university administrator. There is a transparent procedure in place for public universities to advertise or to nominate for the positions of DVC and Vice Chancellor and to proceed with the interview process. This process is supported by a search team committee at the ministry level and a selection committee before a decision is made by the Minister of Higher Education.

In Indonesia, university administrators and leaders, such as rectors, deans, and chairs of departments, are elected by the university senate, faculty members, and lecturers within a department. The election and selection of university leaders is regulated by the laws and regulations under which the university was established. The laws also require certain qualifications for leaders such as minimum levels of education and managerial experience. Rectors may come from various disciplines, while deans and chairs of a department must be from the same or a related discipline. Individuals who apply for the position of rector should have experience in the management of faculties, departments, degree programs, or other academic units of a university.

As in Malaysia, HEI leaders and administrators are well respected in **Indonesia**. They are important resource persons to provide solutions for crucial issues – both at the community and national levels. Many university leaders continue their careers in high-level government offices either in the department of education or in departments relating to their professional fields. Many others go back to their academic career as professors. As summed up, characteristics of university leaders are as follows:

- They are reputable persons in their academic disciplines.
- They have a strong advocacy for the public interest and for disadvantaged people in the community.
- They have strong leadership.
- They have a broad perspective and are able to observe and provide solutions to social problems.

In **Philippines**, there is no discrimination in obtaining the post of university administrator. Any individual – whether from within the HEI or elsewhere – who possesses the qualifications as publicised by the governing board may apply for a university presidency. Candidates are

screened extensively by a search committee created by the BoR. The governing board appoints the president for a term of 4 years with possible reappointment for a further term. After completion of the term, but before retirement, the outgoing president has the option to join the faculty with the rank of university professor.

Vice presidents, deans, directors, department chairs, and other equivalent administrators who possess the required qualifications and pass the screening committee have tenure. A specific term for the administrative post is designated by the governing board upon the recommendation of the president. After finishing their term, they are able to return to teaching with their usual academic rank.

In **Thailand**, leadership, managerial and analytical skills, self-confidence, and high academic achievement with professional title or national or international recognition are the common characteristics of high-level university administrators in leading universities. Global vision and creative and strategic thinking are other significant elements needed for university leaders. The selection committee chooses HEI administrators, while the university council provides the final approval. A linear career path is applied to university administrators in some universities in Thailand. Nevertheless, the career path for the majority of administrators has been nonlinear.

HEI administrators from Indonesia, Philippines, and Thailand identified the following key characteristics of high-level university administrators:

- strong leadership traits and potential;
- intelligent and highly educated;
- possessing an earned doctoral degree in a relevant field;
- well-informed and recognised as an academic leader;
- visionary, with both local and global orientation;
- high level of moral integrity without any record of wrong-doing;
- extensive administrative experience in higher education;
- good community relations;
- family man or woman; and
- physically and mentally healthy.

In **Cambodia** theoretically there is no discrimination in the process of university post promotion on the grounds of gender or political inclination, as the promotion of university administrators is carried out in accordance with fixed regulations. The common characteristics of high-level university administrators in leading public HEIs in Cambodia are seniority, work experience, and non-political position. Public HEI administrators are selected from the lower level administrators and then appointed by the government.

In **Vietnam**, rectors and vice-rectors are usually selected from the faculty. However, the vice-rector position may be given to one who possesses an administrative position. As in most of the countries, the candidate has to undergo a certain process to become rector of an HEI namely trust of the faculty and staff through voting; the recommendation of the party; and appointment by MOET or a higher management unit. At the MOET level, there are no regulations to limit the nonlinear appointment of a rector. Nevertheless traditionally the potential rector has to pass linear positions such as head of department, dean of faculty, head of a support office, or vice-rector.

The Biography of the Author

K K Aggarwal

Prof. K K Aggarwal is Chairman of National Board of Accreditation, India. Earlier, he served as the Founder Vice Chancellor of GGS Indraprastha University, Delhi for a period of 10 years and Pro Vice-Chancellor, Guru Jambheshwar University, Hisar for a period of three years. He has been President – IETE from 2002-04; President – Computer Society of India for the period 2007-09; and President – South East Asia Regional Computer Confederation for two years. He is also the Academy Professor of AcSIR of CSIR. He has to his credit around 350 research papers in the reputed journals, more than 150 of those in international journals. He is invited to deliver lectures in several universities in India and abroad as also in several industrial organisations. He is widely consulted by the industry, most-notable being his contribution towards the Reliability Analysis for PSLV (Polar Satellite Launch Vehicle).

Prof. Aggarwal was declared as the Man of Decade, Man of the Century and finally Man of the Millennium by American Bibliographical Institute USA and was conferred Life Time Achievement Award by the Institute of Electronics and Tele-Communication Engineers, India as also by Computer Society of India. He was awarded 'Delhi Ratan' by the All India Conference of Intellectuals. International Biographical Centre, England has published his biography in 'The First Five Hundred – At the New Millennium'.

The Report brought out by him in 2019 as Chairman of National Level VIF Task Force on 'Towards More Effective Education: Emergence of Stem Education in India', is proving as a lead document for the academicians and policy makers.

The Biography of the Author

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Prof Avinash C Sharma is Professor of Physics and Director, Research & Consultancy at Guru Govind Singh Indraprastha University, New Delhi. Earlier, he worked in the University in various capacities such as Dean; Director, Academic Affairs; Director, Co-ordination; etc. and has been the member of Academic Council, Board of Management and Court of the University. He was an active Member of National Level VIF Task Force on 'Towards More Effective Education : Emergence of Stem Education In India' which came out with its Report in 2019. He is an Associate at Inter-University Centre for Astronomy & Astrophysics, Pune; Visiting Fellow, Nihon University, Tokyo; and Senior Speaker: Theoretical Physics Seminar Circuit (TPSC)SN Bose National Centre for Basic Sciences, Kolkata. He delivered a large number of invited talks on subject matters as diverse as relic neutrinos, quantum computations, quarks, matter & mind, science & spirituality, IR4.0 and HE 4.0, Stem Education etc. He has over 50 highly cited research papers and a number of collaborative reports and articles on higher education policy to his credit.

He is recipient of a number of awards such as Hari Om Ashram Research Endowment Prize and ICSC World Laboratory Fello, Geneva & LNF__INFN, Frascati, (Rome).