

Position Paper 2 *AIPSN Higher Education Desk*

Draft Guidelines for Engaging Professor of Practice in Universities and Colleges

Towards a Peoples' Science Movement (PSM) Perspective

Introduction

To tackle the practitioner-academic gap the policymaking community has been tackling the issues and concerns with a non-systemic approach to innovation system building for almost now four decades in India. Comparatively speaking, this time the proposed guidelines for the appointment of Professors of Practice (PoPs) are seeking to link the academic institutions with the industry to bridge the practitioner-academic gap by changing the nature of faculty appointments itself. But even now poor outcomes of their past attempts to collaborate with the industry remain unattended in the formulation of draft guidelines for PoP appointments.

Past experience indicates that private sector industry has a tendency to approach the task of bridging the gap with a short term outlook towards innovation system building. Private sector industry does not have the attitude of a patient investor ready to join hands with academics for meeting the requirements of innovation system building. The private sector, private corporate sector in particular, has been using academic institutions for certification, testing and consultancy work rather than for any kind of joint investment in knowledge production for developing solutions that are economically, socially and ecologically sustainable.

In the case of private sector, their own contribution to the development of in-house facilities for research and development is still quite low. Import dependence has grown. There has been a decline of manufacturing. Trader orientation has grown. Presently the industry is geared to undertaking only the production of CKD/SKD type of assemblies in the name of manufacturing. There are not too many engineers left in the private sector. Capabilities required for engineering and design activity are unavailable. Training and consultancy remain the predominant form of activities getting support from the industry.

The NEP cannot transform the spaces in making for the institutionalization of practical application of knowledge available in higher education institutions (HEIs) without transforming the systems of governance and actually investing in the revitalization of knowledge generation structures required for knowledge and technology transfer in academic settings. Success has eluded the efforts undertaken for bridging the practitioner-academic gap because the government has not been putting enough money in to HEIs for research and technology for development. Similarly the industry has also not been ready to put money into on account of the industry failing to put money into collaborative activities meant to boost R&D, engineering and design efforts.

Attempts to connect the historically formed institutional structures for essentially very different purposes have mostly followed a linear approach to the building of linkages with no substantive benefit to HEIs in respect of capability building. Continuing with the linear approach and industry oriented framing the draft guidelines have fallen into the same old policymaking practice. The PoPs appointment is being seen by the UGC as a new cure to deal with the prevailing practitioner-academic gap. The focus is only on the needs of industry.

Purpose and directions

Speaking for the PSM perspective, our reading of the draft UGC guidelines indicates that the purpose of PoPs recruitment is itself not appropriate. These guidelines explicitly state that “for skilling of youth at optimum level, learners are required to think like employers and employers are to think like learners”. The UGC is only thinking of industrial employers, as if the PoPs can only come from among the persons working in industry. There are a large number of persons available for PoPs recruitment at the grassroots. PoPs are available in the civil society and in the spheres of administration. PoPs involved in the activities of policymaking and social transformation can also provide good candidates for the creation of transformative spaces for Interdisciplinary and Transdisciplinary education, research and outreach activities of HEIs. To us, it is well apparent that the guidelines have not taken a systemic approach to the development of transformative spaces within universities and colleges for the bridging of academic-practitioner gaps in all the relevant spheres. The UGC has not explicitly thought of the purpose and eligibility conditions for the recruitment of PoPs.

The scheme formulated for the appointment of Professor of Practice is guided by the big business driven approach to the redirection of academic institutions. Essentially the draft guidelines have gone by the perspective of the big business that higher education institutions (HEIs) need to produce industry ready graduates and stop the freebies and free lunches accorded to higher education institutions in India. HEIs are producing unemployable graduates. Post graduates and faculties of universities and colleges are pursuing esoteric research. HEIs courses should be integrated with the needs of industry. Take the aspect of how the guidelines have chosen the skilling gap to approach the issue of duties and responsibilities of Professors of Practice. The guidelines imitate very much the approach taken to the making of research and software parks or the export processing zones. We know that how these spaces have been reduced over the period to estate building providing only cheap space to the big business without giving much to the society in terms of exports, technology upgrading and capability building.

Directionality is guided by the short term outlook. The money spent on higher education from the public exchequer is a waste and should be therefore plugged into their service. The recommendation is that ten (10) per cent vacancies shall be reserved in the university and college faculties for the appointment of practitioners as Professors of Practice. Higher education institutions (HEIs) have been asked to invest in these posts and appointments using their own resources as well as by seeking sponsorships from the industry in order to bridge the practitioner-academic gaps.

The draft guidelines seem to ensure that big business will be actually given a free hand in the shaping of interaction of the academics with the practitioners. The big business will be in position to transfer many of their own duties and responsibilities. For example, the industry would also be able to pass on the burden of training needs to the academics working in higher education institutions. If possible, the industry would even like to take up short term oriented industrial R&D projects to university and college faculties in the sphere of technical education. Apparently the NEP is only seeking to reduce the waste of graduates in the economy.

Since there exists the issue of lack of relevant jobs facing the graduate engineers and science graduates it is apparent that the government wants to put the blame of growing joblessness on practitioner-academic gap. The draft guidelines want the higher education institutions to relinquish their current control over the faculty development plans to the extent of ten per cent of vacancies.

These guidelines have effectively passed on the control to industry without any kind of restrictions and safeguards to the employers operating in the industrial sphere. The proposed mechanisms of resource mobilization, eligibility, selection of fields of practice and purpose of PoPs appointments would end up leaving the recruitment process in the hands of the powerful industry players or international donors and philanthropies.

Doubt, challenge and solution

It is obvious that among academics there are apprehensions and fear of losing the control of the academic world to the big players in industry through these guidelines. If implemented, it is true that the big players in business will determine the nature and directions of the placement of PoPs within university and college faculties. As framed the existing draft guidelines are virtually absolving the employers of their obligation to invest in the facilities for training of the students for specific skills required by the concerned industrialists to make them job ready. The PoPs will now be able to influence the development and design of courses and curriculum due to the stated purpose of skilling in the draft guidelines. Although we know this unpalatable truth very well that even the students graduating from technical education have been compelled to abandon their own technology domains and serve the industry in the IT enabled services sector where there is a possibility of higher profits for the industry during the last three decades.

It will not be wrong to state that the problem of growing joblessness of graduates of science, engineering, management and arts cannot be attributed to the reason of graduates possessing unemployable skills. HEIs are expected to equip the graduates with generic capabilities. Job ready specific skills required by the firms are essentially the responsibility of industry. It is not appropriate to put the burden of industry specific skills on the HEIs. Jobs have been available mainly in the area of IT enabled services at Bangalore, Hyderabad, Chennai and Gurgaon. IT enabled services offered to the Silicon Valley have not been able to graduate even to the stage of development of software products that can find market in India. IT enabled services industry was given tax exemption for more than one and half decade. The IT industry did not have to pay taxes paid by other industries.

With the free market approach the draft guidelines would not be able to encourage the much needed collaboration of industry with higher education institutes (HEIs) for R&D. As things stand the university and college faculty will have to negotiate individually with the powerful sponsors. Even this will end up misdirecting the PoPs and other faculty members into more of training and consultancies. The gaps are specific; the academics must have a say in the determination of how to fill these gaps. It is being forgotten that the academics have been able to impart a wide range of generic capabilities to the students, and their graduates are still able to find jobs abroad. Their students are not worthless. Universities and colleges have been able to make the students to move to a wide variety of employment spheres. A botany student may become a teacher, researcher, bank employee, police, etc.

HEIs have just funds to maintain themselves; the guidelines expect individual HEIs to generate funds for the recruitment of PoPs to meet the 10% target. The government is not giving funds to support students and faculty for even field work. Students have not been offered the required opportunities to gain skills through the job/task based learning and work experience through internships. Occupation based training opportunities offered through work places are lacking due to the focus of employers on their profit and only on capital accumulation. It is the needs of HEIs that must be the

basis of collaboration between academics and practitioners. Academic institutions should not be burdened to fill in the training gap. This will undermine the missions for which the HEIs are actually required to perform. The national interest / public interest demands that the UGC is made to abandon the free market approach and makes the PoPs appointment programme and need based.

Not only engineering even medicine story is not very different. Private hospitals are commercially driven rather than research driven. The Indian industry has a short term outlook. Since the commercial entities do not have the required outlook and capabilities the PoP scheme will be a failure and harm the system of innovation far more than doing good. Industry has not looked at the institutes of higher education as equal partners; their contribution to the promotion of joint research projects is quite small. There has existed an approach of extracting rather than collaborating for the development of a mature national system of innovation in the case of manufacturing, hospitals, developmental administration and public services management. As this past experience has created apprehensions, there is justifiably suspicion among the academics of the calls for bridging the academic-practitioner gap on account of the guidelines asking HEIs to individually obtain sponsorships from the industry on the terms to be dictated by the private sector rather than public interest.

Publicness of research institutes and higher education has not been respected. Publicness of higher education resides in the academic contribution which has a longer term horizon on knowledge production, dissemination and utilization. Trust is earned and the industry cannot buy trust, it must respect the challenge facing those academics that are mindful of the higher education institutional mandates. There is certainly the need to bridge the practitioner-academic gap. Academics also need to invest far more of their time and energy in the development, dissemination and utilization of knowledge needed for the societal needs related development of human resources and research and development activities. Publicness of HEIs should be made to rise and not fall.

University and college faculties should not be individually through sponsorships to perform vis-a-vis the duties and responsibilities identified in the draft guidelines engaging Professors of Practice. The draft guidelines expect the academics to mobilize individually sponsorships from industrial and philanthropy for the appointment of Professors of Practice. The guidelines need to ensure that the proposals will not be misused and abused to help the pseudo-scientists and pseudo-sciences to enter into HEIs and gain academic credibility by getting appointed as Professors of Practice. The PSMs are of the view that it is not prudent to burden the academics with the responsibility to mobilize funds from the industry for the PoPs.

University and college faculties will be better empowered if the guidelines ensured that the proposed industry sponsorships were pooled through a collective mechanism which would be accessible to all on the basis of the merit of the proposals and the portfolios to be developed for building the partnerships of academics and practitioners. The Union and State governments are allocated the funds collected through these sponsorships and the government also puts in money between 50 to 70 percent to increase the amount of funds available to HEIs for their involvement in practical world.

Certainly as the industry has not cared to invest in the development of human resources **required for meeting the “societal missions”, “grand challenges” and “regional development” related practical application gaps and needs arising out of the key challenges today facing the nation in**

respect of employment generation, rural industrialization, public health, waste management, environmental protection, climate change, sustainable urban development it is important that the funding is also obtained through sponsorships and philanthropy for the recruitment of PoPs. And this funding is channelized to the academic institutions through a collective mechanism capable of protecting publicness of HEIs.

The All India Peoples Science Network (AIPSN) takes this experience into account while making its recommendations on the draft guidelines for engaging Professor (s) of Practice in the Indian Universities.

Recommendation

The UGC should withdraw existing guidelines. The draft UGC guidelines need to be radically amended. The Union Government should embark upon the challenge of setting up a collaborative mechanism which presumably the NRF was also meant to create. The State S&T councils, State Higher Education Councils (HEC) and the DST, DSIR, DARE, DHR, ICSSR, ICCR and the economic and social ministries should be involved in the creation of a collective mechanism for the above stated purposes. The AIPSN demands that the Union Government and State Governments should take steps to create at the Centre and States such a collective mechanism independently to permit the development and distribution of facility support and programme fund support for the benefit of participation of HEIs in the programmes devoted to societal needs related R&D and education.

The university and college faculties capable of functioning at the state as well as the central level should be mobilized to enable the academics and practitioners to develop their collaborative activity and partnerships for real world experimentation. Experience of the internationally acclaimed proven approaches (for example, Sand Box approach wherein solution development is isolated from immediate practical world in order to test the solutions) need to be tried to formulate the new Indian approach to bring together the academics and practitioners working with their loci not only in industry but also in society for undertaking multi-sectoral, multi-disciplinary, interdisciplinary and Transdisciplinary collaborations through networked programmes and PoPs are appointed for non-tenure track appointments in HEIs. There are examples available from UK, USA, Germany, China and Netherlands.

Such collective mechanisms need to be set up as a set of diverse and distributed schemes to pool the funds available at the state and central level to generate pluralism and diverse direction through the funding nodes to be built for the approval of proposals for partnerships at the level of the States and Union governments. These funding nodes should undertake the efforts to catalyse the programme based collaborations. The need / programme based proposals for the appointment of the Professors of Practice is the way to go forward. Faculty participation needs to focus on the challenges arising out of longer term industrial needs as well as societal needs. Publicness should not be compromised. Narrow sectional interests should not determine the direction of partnerships.

The NRF mechanism should be utilized in a similar manner to pool the funds and develop the programmatic support for the portfolios of complementary proposals to be evolved jointly by academics and practitioners for the benefit of HEIs to augment their own capabilities for the mandate of strategic research, basic research and multidisciplinary, interdisciplinary and Transdisciplinary research work and education.