Improving quality of medical education in India: The need to value and recognize academic scholarship

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We are all currently in the midst of a high tide of concern and clamor for taking urgent action to improve the standards of the medical education in the country. In this context, there have been some refreshing initiatives in the country through curricular reforms and faculty development programs taken up by the Ministry of Health, the National Accreditation Bodies, and other organizations. One such initiative is reflected in the Medical Council of India's (MCI) Vision 2015[1] for implementing curricular reforms that essentially reflect a shift from the predominantly knowledge-based education towards a competency-based education (CBE) to ensure a graduate, who is skilled and motivated and ready to meet the health care needs of the country.

To ensure that the product of the system is a competent doctor, important inputs, other than curricular reforms are needed to deliver on this paradigm shift to CBE. These include providing required facilities and learning opportunities for the learner to practice skills and receive feedback till they achieve the expected level of competencies. To implement these successfully, the most critical need is to build faculty capacity through faculty development programs so that faculty can plan and implement competency-based teaching-learning processes and are able to measure attainment of expected level of competencies by using competency-assessment tools. Currently, most faculty are not familiar with or do not have the required expertise to implement the reforms, and so the expert committee members of the MCI have rightly recommended faculty development as critical for the implementation of the reforms.

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In addition to these initiatives, there is also a need to sensitize faculty, academic leaders, and policy/decision makers that we need to move from quality-attainment to quality-improvement. Those in the industry are aware of the need for Research and Development (R and D) to ensure a better and improved product. Progressive leaders of industry generally set aside 5-10% of their budget to R and D to ensure that their product makes incremental increase in its market share. Does this market-related practice of quality improvement apply to a service or educational institution? It should, since it is vital for the users of the system delivering the product-the medical graduate. This applies to private medical colleges too since ensuring competent doctors through improved quality of training will translate into more applicants seeking out such institutions because they would stand a better chance of qualifying for post-graduate (PG) seats through all India PG entrance examinations. But how many educational institutions do that and set aside a part of their budget for research to ensure quality improvement? Even if that is done, how much of that budget is allocated for educational research directed at improving the educational processes and systems so that a better product-the competent doctor with required knowledge, skills, attitudes, and professional attributes to meet the needs of the people is produced? An important question to ask academic administrators and those who control the purse-strings or are in a position to influence those with the purse-strings, is-what is the main mandate of the academic institutions like medical colleges? Is it making new discoveries or improving the educational processes and systems to ensure quality products-namely its graduates? If it is the latter, then do the current budgetary allocations for medical education research, reflect that?

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In academic circles, we are familiar with the adage "assessment drives learning", which essentially means "what gets valued gets the focus of attention". So the question arises as to what is it that we are valuing in the medical colleges (or by the regulatory bodies that exist to ensure standards and quality improvement) for promotion of the teacher up the career-path or for giving "best teacher awards"? What type of "scholarly" activity of the medical teachers are we recognizing and rewarding in India? Is it the teachers' efforts towards improving student learning or for doing fundamental research to develop new knowledge, molecules etc? What is the ground reality? What is getting valued now at present? Is research in medical education considered research at all or is it considered "inferior" to basic research? We agree that all types of research contribute to progress. Sukhlecha[2] argued convincingly that teachers must engage in research so that they can guide students to do research, but should research to improve the educational process and system be considered inferior?

The notion that only "original" discipline-related research counts for promotion needs to be changed, since most teachers in health professions education are mainly occupied in teaching and do not have the opportunity, time, and resources to engage in full-time fundamental research. This was realized in the West when Boyer[3] in 1990 stated that they were recognizing only original research and its publication, since that was what was available to measure and reward teacher effort. This is an example of an indicator by default in the absence of appropriate indicators of teachers' engagement in academic scholarship activity. He, therefore, proposed an expanded framework beyond the traditionally recognized "scholarship of discovery" to include four types of scholarship, i.e. of discovery, of integration, of application, and of teaching. He hypothesized that this would expand the range of educationally productive scholarly work among faculty members and, thereby, enabling them to climb up the career pathway thus benefiting all stakeholders-the institution (improved learning environment and processes), the teacher (reward and recognition), and the student (improved and efficient learning). Diamond[4] observed that this expanded definition of scholarship in the West resulted in successfully motivating a vast majority of teachers to go beyond "just teaching" to get engaged in such academically productive scholarly activity compared to the earlier times when only 2-3% of the teachers were engaging in research.

In the West, to overcome the notion that scholarship other than scholarship of discovery is not research and to ensure high standards, only scholarly work of the teacher which fulfils "Scholarship Criteria" are counted as "Scholarship of Academic Scholars" for them to be eligible for promotion. In this regard, Diamond[4] proposed the scholarship criteria in the form of five Ps and this was reiterated at the Consensus Conference on Educational Scholarship[5] of American Association of Medical Colleges (AAMC) in 2007:

- Product: The scholarly Product should require high-level of expertise
- Process: The research/activity must be done in a scholarly manner
- Peer reviewed: The product must be valued outside the local context
- Publicly available: The product must be appropriately archived and retrievable for other scholars
- Platform or product that can be built upon by other scholars

As a consequence of these scholarship criteria being applied not only to scholarly work published in journals but also to other products of scholarly activity like designing and maintaining education websites/blogs, books, learning modules, tools for student assessment, etc., they have become widely and easily available. As these have been tested and proven to be effective, there is expedited diffusion of innovation across institutions via their publication in journals or their availability through publicly accessible archives.

When Industrial Institutions that exist for profit can allocate resources for R and D and reward those who contribute to improved productivity, why not we, in the academic institutions move towards rewarding academically productive scholarly work of teachers that have been peer reviewed and accepted as contributing to new knowledge and learning? MCI and other agencies involved with improving standards of medical education must re-look at the requirements for promotion so that a larger proportion of the academia in India can also engage in scholarly activity that directly contributes to continuous quality improvement in the educational processes and the products of the system (competent professionals). Currently, the latest MCI Gazette amended (2010) notification[6] stipulates two research publications in the indexed/journals of the National Associations/Societies of the respective specialty disciplines as the requirement to be the first or second author at each stage in the hierarchy of faculty positions for promotion to the next level. This amendment allowing "either first/second author" compared to the earlier 2009 amendment[7] that required the teacher to be the first author is a move towards ground reality. Perhaps the rationale for insistence on the need to be first author was to ensure that the faculty member is the principal investigator and, therefore, involved in all aspects of research (from identifying the need, the design to reporting). This is fine, but oftentimes the head of department who wields administrative control/power can impose oneself as the first author and deny the major contributor as defined by the International Committee of Medical Journal Editors (ICMJE)[8] the right to first authorship. If the purpose of the requirement for research publication is to gain competency to become a PG Research guide and to qualify as a PG Teacher, it also makes sense to include publication of education research in the non-specialty (education) journals

as well as count the products of scholarly work that meets the scholarship criteria to improve the teaching-learning processes. This will ensure that even junior faculty members are motivated to get engaged in scholarly activities, which they would otherwise think is beyond their reach to be principal investigators, and produce enduring products of academic scholarship that is peer reviewed and available in the public domain for other faculty in other institutions to replicate or improve upon. This will certainly and expeditiously help in examining the effectiveness of the current teaching-learning process as well as explore ways to improve the quality of medical education through research in medical education. Otherwise, we would be left following the discipline-based curriculum and methods inherited from the British at the time of Independence, which the British themselves gave up more than 50 years ago.

Unfortunately, we in India, still value only publications (ignoring the others products of scholarship) and that too in "indexed" Journals. Indexing[9] is just a process to ensure that the journal is in existence for a certain number of years, is peer reviewed and accessible. However, in this "Google-era", publicly accessible non-indexed journal articles that have been peer reviewed and fulfill the other Ps in the scholarship criteria should not be denied recognition of academic productivity. In fact, they are accessed more by faculty in resource poor countries since they need not pay for reading the full article. Another tool of measurement of value of contribution to scholarship often used in the scholarship of discovery is the "impact factor"[10] of the journal where that article is published. Impact factor of a journal is a measure reflecting the average number of citations to recent articles published in a journal and so is considered a proxy for the relative "importance" of the journal. Apart from the criticism that impact factor calculated may not be consistently reproduced by independent audit, surely this cannot be used as criteria for promotion of faculty who without all the resources needed for fundamental research cannot make path-breaking "original" research. Besides, we are talking about recognizing and rewarding faculty effort in a teaching institution and not in an institution which depends on R and D for its survival!

The incremental increase in the number of poster presentations at the successive National Conferences on Medical Education in India (NCME 2007-27, NCHPE 2009-68, NCHPE 2011-143, and NCHPE 2012-186) demonstrates that faculty capacity and interest in engaging in educational research (which is less resource intensive) is already increasing in India. However, despite being engaged in educational research and other academic scholarly productive work to improve student learning and improving the quality of medical education in the country, they are frustrated by their work remaining unrecognized and unrewarded as well as being denied promotion by their institution since they cite the new requirements for qualification and promotion of faculty laid by MCI. This sense of frustration and helplessness where time, facilities and opportunities needed for engaging in discipline-based scholarship of discovery that is valued by MCI is not available to all faculty is reflected in the number of emails in the Health Professionals Education Google group passionately debating this issue. Expanding the definition of scholarship and using the scholarship criteria for measuring scholarship as is universally accepted the world over, would help convert many teachers who have lost hope of being able to engage in academically productive scholarly work, to become motivated and start producing enduring products of academic scholarship that will help the students to be efficient learners and become competent doctors. This will also ensure that more and more teachers' efforts directed towards improving student learning will get rewarded and recognized within their home institution and by the accreditation bodies like MCI for something that is already being valued and rewarded all over the world.

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