Broadening Impact to Create Our Future

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A great university is committed to organizational excellence at all levels and departments, so as to provide professional support to sustaining excellence in teaching, research, and professional service to society. Through its research and educational programs, as well as various campus-based activities, a great university must also develop leaders for all sectors of the society and prepare them to address the challenges facing the community and nation.

The task of the university”, according to philosopher Alfred North Whitehead, “is the creation of the future, so far as rational thought and civilized modes of appreciation, can affect the issue”. One may also recall another famous saying in 1943 by Winston Churchill that “the empires of the future are the empires of the mind”.

The activities that comprise campus life should be designed appropriately to create a dynamic energy that enriches students’ lives and provides the benefit to the entire University community in their learning and discovery endeavours, as they create and invent new futures.

For undergraduates, the notion of completing Junior College or the Polytechnics and then going on to a university for, if not life-long learning, at least one degree and some postgraduate study, shapes the aspirations of the vast majority of youths.

For some, their aspirations are limited by a merely pragmatic, instrumentalist view of university education, provides a meal ticket, a narrowly prescribed set of skills, a higher salary, on average, than non-graduates earn, and a powerful hedge against joblessness. For them, a brief and silent “pass” mark may mean that, in their pursuit of success, all a university may represent. Such naivety clearly benefits no one.

Today’s undergraduates devote no time for thinking about any future other than their own.

The emergent realities of a rapidly-evolving, knowledge-based future accelerated by globalization to a more competitive and challenging world will demand a radical re-think about the value of higher education.

The university has become a key institutional pillar most capable to build the new competitive advantage founded on intellectual infrastructure and the public value of the human intellectual assets. Universities will need to respond to the challenges of the knowledge era by re-examining and strengthening their roles in the areas of knowledge dissemination, creation, and application.

University graduates in the knowledge era have to be flexible and adaptable to a constantly dynamic environment; the only constant; they have to become life-long learners to be able to adapt to the fast pace of change and constantly upgrade their skills and knowledge. They will confront the reality where their knowledge and skills rapidly become obsolete as knowledge and product cycles become increasingly smaller.

An effective university graduate will need analytical and problem-solving skills, and interpersonal and communication skills that will enable them to work with others. Leveraging and synergizing with the competencies of others increasingly make sense at a time where no one person has the ability to quickly identify and engage the subtle changes in the strategic operating environment for decisive actions.

They must also be creative and entrepreneurial, able to invent new ideas and products that will create and capture new markets.

Given the explosion of knowledge and technology, it is no longer possible for universities to teach its students all there is to know in order to be ready for the workplace. Universities can only teach their graduates to “learn to learn” and develop new social competencies conducive for personal and professional.

University education must also prepare students for a world where there will be new jobs which have yet to be invented and challenges that are unimaginable today.

Learning how to face the future is best achieved in a cross-disciplinary and multi-disciplinary mode within the knowledge structure and mode of inquiry of the respective disciplines.

In short, universities have to expose undergraduates to a broader range of skills, in order to prepare them for workplaces that need a multi-disciplinary and systems approach to problem-solving.

Universities cannot any longer just focus their students to solve past problems which most likely will never recur. Faculty members likewise must reach out beyond their hitherto comfortable “ivory towers” to immerge with industry, businesses, community and society so as to maintain their continuous relevance with regard to the context of knowledge applications.

A broad curriculum also means that faculty should employ thoughtful and creative pedagogy that is challenging, rigorous, and features learning experiences that especially characterize the specific field of discipline.

Professors can introduce students to characteristic ways of thinking, distinctive methods of inquiry, and fundamental conceptual frameworks as well as major achievements in the field. They should increase intellectual curiosity and initiate continuing interest in the subject matter.

Research impact refers to the evidence of relentless breakthroughs in new areas of scientific discovery and the applications of knowledge for the benefits of business, industry, community and society. While publications output and citation rates reflect well on the quality of university researchers, they are however measures of personal achievements instead of being measures of research impact.

It has often been said that there are no useless discoveries; there are only those whose usefulness has yet to be discovered.

But is it one thing to claim that all this research activity is generally useful, and quite another thing to prove that it makes any impact? Does (Can?) university research produce any real social benefit?

Consider the impact of just one Research University: the Massachusetts Institute of Technology (MIT). A 1997 study by the Bank of Boston Economics Department, the first to measure the job impact of a single research university, is based on an intensive study of MIT. It concludes, “If the companies founded by MIT graduates and faculty formed an independent nation, the revenues produced by the companies would make that nation the 24th largest economy in the world. The 4,000 MIT-related companies employ 1.1 million people and have annual world sales of $232 billion. That is roughly equal to a gross domestic product of $116 billion, which is a little less than the GDP of South Africa and more than the GDP of Thailand.

Eighty percent of the jobs in MIT-related firms are in manufacturing (compared to 16 percent nationally) and a high percentage of products are exported ... The MIT-related companies have more than 8,500 plants in 50 states.”