

Chapter 5 Recommendation and Policy Implication

The improvement of productivity and living standards is closely linked to and dependent on the adaptation of scientific and technological methods of production. Graduates should build up right attitudes on how to live with complex production methods and automated services system to enhance their employment opportunity. We are living in an age of unprecedented technological change. The phenomenon of technological innovation has fastened the process of obsolescence. Everyday hundreds of new products and processes trickle down from the laboratories to the market place. This demands new orientation of existing technical manpower. It also affects the supply of graduates as well as creates market for new jobs and skill. Hence, higher education plays an important role to produce manpower or graduates to meet development needs. There is a high demand for multi-skilled workers and technicians as they can adapt to new task and technologies and are capable of contributing towards creating new product and manufacturing designs. Therefore, the supply of graduates with technical skills is crucial in making the efforts of technology transplanted in the industry a success.

Besides this, there is a need to look into the whole system of educating and utilizing highly trained graduates. Therefore, we might have a better understanding on how the various facets are interrelated, how the supply and demand adjustment mechanisms work, and how to help the whole system to work more effectively.

The government already strongly influences both the supply and the demand for graduates, and its influence can be expected to increase. Inevitably, the government must conduct studies of manpower problems and formulate manpower policies. Simultaneously, educators, scholars, scientists, professional and graduates ought to claim the right to make their own assessments of the labor market demand and their own judgements as to how its human resources can best nurtured and given optimal opportunities for development. It is believes that continue to review and appraise the finding and policies of official agencies and of unofficial special interest groups is necessary. Where necessary, it will undertake its own inquiries, untrammled by considerations of political expediency, or of the self-interests of particular professions. Private financial support without strings attached is indispensable to the effective performance of such a role.

The quality of the higher education is its ability to produce a steady flow of people with high intelligence and advancement of knowledge. To the government, a high quality system is one that supply or produces trained scientists, engineers, architects, doctors and so on in numbers to meet the demand of the society. To an industrialist, a high quality educational institution may be one that turns out graduates with wide-ranging, flexible minds, readily able to acquire skills, and adapt to new method and needs (Reynolds, 1990)³⁶.

³⁶ REYNOLDS, P. (1990) Is an external examiner system an adequate guarantee of academic standards? In: C.P. J. LODGER (Ed.) *Quality Assurance and Accountability in Higher Education*. London: Institute of Education, University of London, Kogan Page.

The development of the economy will continue to increase the demand for labor force with more than a secondary school education, and reduce the size and number of the occupations that cater for labor with lower education. However, the demand for higher education will increase beyond what is 'required' by the occupational structure. The chief characteristic of higher education is that it gives its recipients a capacity to adapt and to change; it will continue to be one of the few advantages parents can give to their children in a rapidly changing world, and more and more people will be aware of that. The technical upgrading of jobs, and the link between the success of a business and the training and skill of its labor force will accelerate the interest of industry in supporting and continuing the education of their employees. A good deal of advanced education has already taken place in private firms. This will grow rapidly. The creation and development of 'learning centres' inside and outside of industry, will serve the growing demand for the labor force with higher education qualification and better skills.

In order to reduce the problems of graduates' demand and supply mismatch, there are some suggestions for the changing role of higher education. Firstly, higher education institutions should be exposed and take the efforts to reorganize the connection between higher education and the job market. The traditional university adapted the role of preparing students for traditional professions in line with its 'ivory tower' understanding. Today, many institutions specialized in professional preparation, and many vocational institutions were upgraded to institutions of higher education in the process of higher education expansion. For example Institute Technology of MARA (ITM) was upgraded as University of Institute Technology MARA (UITM) in the year 1997.

Secondly, Institutions of higher education should seek cooperation with the job market and actually do so. The more higher education expands, the more knowledge becomes a key factor of productivity, and the more global competition intensifies, the more institutions of higher education are expected to regard communication and cooperation with the job market as a mean of improving the education provided as well as the potential employment opportunities for graduates.

Thirdly, higher education institutions should emphasize on student practical experience. Comprehensive 'experiential learning' is viewed as a powerful instrument in supplementing the prevailing educationally designed cognitive learning processes. This will enhance the employment opportunity for graduates. Internship in professional work that provides practical experience during the course of study should become an integral part of the programmes and be promoted as additional activities. Accordingly, communication outside class and services for students will prepare students for subsequent careers. Professional counseling, supports for internships in enterprises, training for job seeking and directs support in the job-search process will reduce graduates unemployment. Institutions of higher education should reconsider their role in the context of the extended use of modern technological media for instruction and learning as well as for exchanging academic information. Students have more options in obtaining information outside the courses and this will help student in the process of job seeking.

Besides this, institutions of higher education should build up strong connections with the academic responsibility and the labor market. It is difficult for higher education to strike a balance between appropriate links to and distance from the labor market. In the process of mass access to higher education an increasing number of graduates end up in posts where 'applied' knowledge is expected. The more knowledge becomes a productive force, the more higher education is expected to contribute visibly to the economy and society. Hence, teaching and learning in higher education should be geared to immediate market need and provided graduates to fill the demand. Higher education has the task of preparing students to be able to call in question the prevailing rules and tools in employment, to take on indeterminate job tasks and to be agents of innovation. In line with this, it has to translate the expectation raised from outside, and must define its own proactive role with regard to the job tasks and employment patterns of graduates (Nowotny, 1995).

In order to face the future challenges, there is a need of improved information on employment and the work of graduates; on the impact of study provisions and conditions of future employment and work; and on indications for long-term technological, economic and social changes. Observations of labor market trends and graduate employment, however, are often too narrowly interpreted in the search for recipes. One has to be aware that signals from the job market and the world of work are often biased and incomplete, short-term oriented and prone to underestimating the active and innovative role the graduates have to play in future. In the process of expansion of higher education and of increased relevance of knowledge, higher education has to

accommodate the fact that students become more diverse not only in their motivations and capabilities, but also in their assignments and roles after graduation.

Higher education is also challenged to diversify in order to respond to the broadening spectrum of graduate employment and work. They are expected to help students improve their social and communicative skills, inform them about the labor market and graduates work. Furthermore, they are expected to address the tensions between academic approaches and professional problem solving and reinforce students' understanding of the social conditions of work and career and thus, strengthening their potential for taking initiative vis-à-vis the world of work.

In conclusion, as Malaysia gears towards vision 2020 to be developed country, it will continue to increase the demand for graduates. The demand for low skilled and routine jobs will reduced through automation. On the other hand, the demand for higher education will increase beyond what is 'required' by the occupational structure. Graduates have to equip themselves with a strong base in education and training as well as posses a range of generic skills and superior thinking skills. This will enhance their capacity to adapt the challenges as well as will enhance their employment opportunities. Malaysia has to develop workforce with strong ethical and moral values and commitment to excellence. Higher education will be pivotal in the creation of knowledge manpower to support the new industries, economic activities, and to develop an information rich society.