Industry-University Collaboration: A Way for Innovation and Employment

Theme: Industry meets Education

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Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all.

Education for all has always been an integral part of the sustainable development agenda.

Over the years the fostering and enhancement of industry-academia collaboration has involved the establishment of many new facilities such as “technology transfer offices” and “research and development units” within universities themselves.
Since human development is a key input to the goal of inclusive and shared economic growth and poverty alleviation, policy makers, including stakeholders need to put considerable emphasis on human development.
Higher Education and Bangladesh

University Education acts as the engine of growth for economic and social development of a nation. Universities instil necessary skills and technical expertise that expedite economic and social development.
The growth trajectory of Bangladesh economy requires a highly skilled labour force equipped with the necessary technical and professional expertise. In this backdrop, formulation of strategies for higher education will be considered with these factors in mind.
Higher Education and Bangladesh (Contd…)

Growth of the Higher Education System:

Higher education was traditionally dominated by the public sector, but in recent years, private universities have proliferated. There are 117 universities in the country of which 37 are public and 80 are private universities. The University Grants Commission (UGC) is the regulatory body for both public and private universities.
Four streams of higher education are offered in Bangladesh: general education; science, technology, and engineering education; agriculture education; and medical education.
Key Strategies in University Education during the 7th FYP of Bangladesh

- Increase higher education rate from 12% to 20%
- Enhancement of standard and quality of University Education; Quantitative expansion on desired lines but no compromise with quality
- Consolidation and strengthening of existing universities
- Focus on quality, selectivity, and excellence
- Guaranteed access to computer and internet facilities
- Science & technology, business administration, teachers training to be given high priority
- Rationalization of enrolment among various disciplines
- Emphasis on research and training
- Introduce virtual education
- Emphasis on development of libraries and laboratories
- Further strengthening of University Grants Commission
- Establishment of accreditation council

*Source: Ministry of Education*
Delta Planning Learning Community

As the GoB is formulating ‘The Bangladesh Delta Plan 2100’ with a long term perspective, the plan will promote holistic delta planning using many knowledge based concepts and themes related to state of the art adaptive delta governance. Thus the delta planning ought to be knowledge based continuously.
A delta planning learning community, therefore, is needed in Bangladesh focused on international oriented knowledge creation, building a knowledge infrastructure and on application of knowledge for policy making and planning purposes.
Delta Planning Learning Community (Contd…)

A knowledge infrastructure should be established as a set of physical, informational, scientific, educational and organizational resources needed to facilitate a delta planning learning community (universities, knowledge institutions and relevant agencies, societal organizations and companies) and action toward a desired collective future.
Matching Skills and Labour Market

Skills mismatch has become more prominent in the global economic crisis. However, it is primarily a structural issue and as such existed prior to the recent global economic slowdown. For the same reason, contrary to what some commentators believe, current record-high unemployment rates cannot be attributed to skills mismatch. Indeed, there is no evidence that skill levels have collapsed during the crisis.

Skills mismatch, the gap between the skills required on the job and those possessed by individuals, raises the question of the ability of societies to capitalize on their workforces. Skills are also a critical asset for individual workers and firms in a rapidly changing and globalized world.
## Forms of Skills Mismatch

<table>
<thead>
<tr>
<th>Skill Shortage</th>
<th>Demand for a particular type of skill exceeds the supply of people with that skill at equilibrium rates of pay.</th>
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</thead>
<tbody>
<tr>
<td>Qualification Mismatch</td>
<td>The level of qualification and/or the field of qualification is different from that required to perform the job adequately.</td>
</tr>
<tr>
<td>Over-(Under-) qualification/education</td>
<td>The level of qualification/education is higher (lower) than required to perform the job adequately.</td>
</tr>
<tr>
<td>Skill Gap</td>
<td>The type or level of skills is different from that required to perform the job adequately.</td>
</tr>
<tr>
<td>Over-(Under-) Skilling</td>
<td>The level of skill is higher (lower) than required to adequately perform the job.</td>
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</tbody>
</table>

*Source: Cedefop, 2010; OECD, 2011*
Skill matching

- Skill matching requires a collaborative long-term strategy
- Effectively reducing skills mismatch requires creation of a comprehensive long-term strategy.
Industry-Academia Model

Research and Innovation from University

Demand of the Industry

Industry-Academia Collaboration:

Competency based Education Process

Business Start up

Outcome or Product
Comparing Available and Required Skills in OECD Economies
Curriculum development considering the expectations of the industry

Curriculum refers to a well-defined and prescribed course of studies, lessons and activities, which students must complete to fulfill the requirements for acquiring the degree. The curriculum plays a crucial role in achieving the mission and objectives of the university including the intended learning outcomes and overall effectiveness of the programs.
Employability of any student means the character or quality of the student for being employable which plays a significant role in meeting the gap between the expectations of demand side and resources provided by supply side.
The concept of Employability 360 degree reflects a holistic and participatory approach of enhancing the employability of students with a collaborative way. This paper strives to define the concept, initiatives taken nationally and internationally, effective procedure/approach for implementation, advantages, impact on education sector. The paper attempts to trace the development of the concept along with the role of higher education institutions in facilitating and to identify as well as develop an approach for implementing the concept with a view to enhancing employability of students both at home and abroad.
DIU Industry Academia Lecture Series on Entrepreneurship Development

• Aim to inform and motivate the youths for being entrepreneur
• Learning from taking the lesson from the struggle and challenges faced en route to success by the well-known entrepreneurs of the country
• Country’s renowned 12 successful well known Entrepreneurs to take part in these lecture series gradually in different episode and will deliver their success story.
• 9 Lecture series held so far.
DIU Industry Academia Lecture Series
Innovation and Industry Academia Collaboration

Innovation is a complex phenomenon that involves a complex series of processes to be managed towards the objectives set.

Defining and identifying strategic directions for successful collaboration between universities and industry and economic partners contribute to shaping the proposal of the proposed model. The focus is on knowledge transfer between universities and industry to attract new collaborations.
Transfer of knowledge plays an important role in innovation and growth. Therefore emphasis on culture contributes to the innovation, but the balanced way to create culture leads to better transfer and exploitation of knowledge produced by universities in order to stimulate innovation.
Publications on Entrepreneurship

Handbook of Entrepreneurship Development (2013)

Uddokta Unnoyon Nirdeshika (2014)

A Journey Towards Entrepreneurship (2016)
The Program aims at creating graduates equipped with entrepreneurial skills, knowledge, values and attitudes for their businesses. After successful completion of this program, graduates will be able to transform themselves not only as self-employed but also as creator of employment through becoming an entrepreneur.
Department of Entrepreneurship as pioneer in Bangladesh

• The Program aims at creating graduates equipped with entrepreneurial skills, knowledge, values and attitudes for their businesses.
• Graduates will be able to transform themselves not only as self-employed but also as creator of employment through becoming an entrepreneur.
• A group of country known entrepreneurs and leading academicians are offering this course through blending of both theoretical and practical exposure.
Practical Involvements of Students

- Startup Market
- Startup Fest
- Global Entrepreneurship Summer Program
- Global Youth Entrepreneurship Summit
- Get in the Ring (GITR)
- Entrepreneurship and Innovation Expo
- Entrepreneurs MeetUp
- Social Business Students Forum
- Are You the Next Startup
- DIU Social Business Design Lab
- Arranging Mega Iftar for 1500+ people
Recommendations

Measures need to be taken

- to enhance education at universities and other institutions in order to meet future needs for human resources in the industrial world (including strengthening basic academic skills, improving professional education, and cooperating with the industrial world).

- to promote job opportunities for postdoctoral personnel in enterprises.

- to formulate Action plans for the collaboration of industry, academia, and government based on the Strategy for Human Resources Development in every fields, for example, measures for elementary and lower secondary students to actually experience industry through presentations by lecturers dispatched from the industrial world.
THANK YOU!