



ENTREPRENEURSHIP TRAINING COLLABORATION BETWEEN ACADEMIA AND INDUSTRY IN THE GULF REGION

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Historically academia and industry have benefitted from each other's collaboration. Most of the inventions and discoveries made in the halls of universities and workbenches of laboratories have been exploited by the industry for commercial gains (Scharfe, 2002). The discovery of penicillin in the laboratory by Louis Pasteur in 1928, leading to widespread commercial production of the antibiotic by the pharmaceutical industry is a vivid example of this collaboration (Sadashiv, 1965). We have come a long way in the academic industry collaboration.

Academia has woven research into its fabric to make it inseparable from each other. Classically researchers state that academia role is three fold (DeNeef & Goodwin, 1995):

- a. Teaching – which is their bread and butter
- b. Research – which is mandatory to remain current
- c. Community Service – the ultimate goal of the system

Understandably teaching is the main role of Higher Education Institutions. It is through teaching that graduates are prepared to become responsible and productive citizens. Contributing to the development of the nation as well as arming them with skills to make a livelihood. Teaching is not limited to technical or scientific knowledge only. Skills and Attitude are also developed in the graduates. In addition soft skills are taught these days to make the students better suited for the work environment (DeNeef & Goodwin, 1995).

As far as research is concerned, it is an integral part of education. Teachers have to carry out research, both to keep abreast with latest developments in their fields, as well as probing to discover the unknown. However, research needs money, and funding is not forthcoming. Therefore most research is conducted in theoretical areas rather than applied research, for the sheer lack of a sponsor.



Community service is the ultimate goal of the Higher Education Institutions. The educated youth enter the society and bring about a change in the community. One of the roles of Higher Education Institutions' is to assist organizations in day to day challenges faced by them. The Academia can help the industry overcome these bottle necks and improve their productivity through process re-engineering and efficiency strategies (Donald, 1996).

Relating this to Nizwa College of Technology, we include all these elements in our Strategic Plan. Our Strategic Goals include (NCT, 2013):

- a. offering quality programs that promote entrepreneurial skills and respond to the changing market needs and developments in technology
- b. ensuring that our graduates develop into responsible citizens, positively affecting the socio economic development
- c. encourage opportunities for applied research and consultancy
- d. fostering mutually beneficial constructive partnerships with public and private sector organizations, local, professional bodies and international communities that benefit the community at large

Furthermore, we expect our graduates to have certain attributes after they leave our institution. Some of the Graduate Attributes pertinent to the industry collaboration are, that we expect our graduates to (NCT, 2013):

- a. effectively demonstrate and apply good interpersonal skills in team work and leadership roles
- b. they are committed to self-development through lifelong learning
- c. are socially responsible citizens aware of contemporary issues in contributing to national development,
- d. and most importantly we expect them to be able to demonstrate and apply their entrepreneurial skills

Historical background of HEI and Research:

Historically Higher Education Institution involvement in using research for commercial exploitation has been low over the ages.



Most faculty and researchers seek to discover and explore new phenomena, with the ultimate goal of winning a Nobel Prize. Their work to be listed on the Stock market is not on their agenda. This same attitude is reflected in the students. They too are not motivated to support commercial ventures through applied research. Thus the bulk of Research and Development is carried out by commercial organizations which is costly and adds to the cost of production which is passed on to the consumers (Torjman& Sherri, 1998).

The not so distant, dotcom boom heralded a new approach in the academia-industry relationship. Academia worked closely with the booming IT industry and set new standards in this partnership. Silicon Valleys started growing around the hubs of academic learning. This trend became a worldwide phenomenon and Silicon Somethings emerged the world over. In the Cambridge Business Cluster in the UK it was The Silicon Fen, in Penang in Malaysia it was the Silicon Island, in Suntec City in Singapore it was the Vertical Silicon Valley and likewise in India the Silicon Valley developed in Bangalore and Hyderabad, where entrepreneurs started latching onto the bandwagon (HRDC, 1997).

The dotcom boom also heralded a new phenomenon. The transfer of technology and the concept of incubators was introduced. Successful alumni entrepreneurs in USA and elsewhere returned to their homelands and set up funds and seed money to help their alma maters establish new businesses. This concept was quickly adapted by many governments and the incubator culture was born.

In Oman too the government has embraced the concept of incubators. There are many interventions that the government has initiated to help, support and launch entrepreneurs. In these incubators the fresh entrepreneur is nurtured during the difficult teething stages of a new business. Financial support is offered and the entrepreneur is provided with requisite skills to set up their own businesses. Sanad, Rafid, Intilaaqah, Injaz, Cell and Sas programs are just to name a few of these initiatives of the government (Al-Ghassani, 2010)

Nizwa College of Technology also supports this intervention. A Sanad incubator is located on the campus to facilitate the students and entrepreneurs seeking government support and help.

Students Psyche:



Despite the best efforts of the powers that be, we have to study the trends in the students' attitude and beliefs (DeNeef& Goodwin, 1995)). The students' psyche has been, and to some extent, still is to get a salaried job preferably in the government sector, a Multi-National Company, the corporate sector or in a worst case scenario, in the private sector upon graduation. Few students are willing to take the risk of embarking on entrepreneurship, and setting up their own business.

The success stories of entrepreneurial giants like Bill Gates, Steve Jobs and the fairytale stories of developers of Napster, Hotmail, Google, and Facebook have inspired many students to set up their own businesses.

Background of entrepreneurship

Till almost 30 years ago, society in general and media in particular were unaware of entrepreneurship. Business schools focused on Fortune 500 companies. Small and medium businesses were ignored by one and all. So much so that in late 1970s no business school outside USA offered entrepreneurship as a course. Even in USA there were very few schools offering the subject (Khan, Ghosh and Myers, 2005).

Partly this was due to the fact that traditionally people prefer natural sciences like physics, chemistry and biology. Business studies are usually relegated as an alternative choice. This is substantiated by the fact that to provide academic respectability to subjects like economics and accounts, the term social sciences was coined. In this context, Turner states "...we can say that entrepreneurship was an illegitimate offspring of an illegitimate parent so to speak...." Many people still ask, "what will you teach in entrepreneurship?"

Entrepreneurship in business studies:

Whatever the criticism, entrepreneurship is here to stay. It is the only way forward, in this job deprived economy, with the booming educated youth workforce. It offers opportunities to the educated youth to earn a livelihood, on their own terms and conditions. The process also opens more opportunities to the creation of more jobs for the lesser risk takers (Ziming, 2008).

The contribution of academia especially business schools in establishing and supporting entrepreneurship can be listed under the following six headings:



- 1. Contributing to poles of attraction for clusters:** Silicon Valley grew around Stanford and Berkley and along route 128 around MIT. Similarly in the UK the Silicon Fen developed around the Cambridge Cluster. In India the Silicon Valley was established around educational institutions in Hyderabad and Bangalore. Singapore designed a knowledge based hub and drew world renowned institutions. Similarly the Knowledge Oasis in Muscat, attracts entrepreneurs and businesses (Ziming, 2005).

These hubs attract investment and support from the industry for applied research and developments of Nizwa College of Technology has also attracted the Corporate Sector to invest and support R&D through a modest but significant quarter million (250,000) Omani Riyals contribution by LNG for three projects;

1. Establishment of a Business Centre
 2. Oil and Gas laboratory facility for Engineering Department
 3. Support for alternative energy project
- 2. Bringing management know how:** Research scientists typically know a great deal about their particular field of research, but not that much about the commercial implications of the ground they are breaking and the new horizons they are opening up (CCH, 1992).

Business schools can be of valuable help in this sort of situation, bringing management know-how and experience to complement the purely scientific expertise.

If I may quote my colleges' example we have helped the industry and community in management skills and some examples are:

- Nizwa Hospital
 - Supporting them with quality assurance issues, satisfaction surveys and studies to improve their facilities
- Nizwa Directorate of Health
 - Improving their secretarial skills base and office operations
- Nizwa Industrial Estate
 - Interpersonal skills, communication, decision making and other soft skills
- Badar as Sama Hospitals
 - Communication, interpersonal skills and office management
- Hungry Bunny
 - Advertising campaigns and marketing strategies



- 3. Training and mentoring:** Business schools can also play a training and mentoring role in the formation of future entrepreneurs, and this is by no means restricted to their own students.

To take an example, the Oxford University business plan competition run in the UK, is open to entrants outside the university itself, inviting entries from entrepreneurs, scientists, students and new companies. It has certain entry criteria, specifying that entrants should make significant use of science, technology or design (CCH, 1992).

The 'value proposition' of this competition is –

- High-level feedback on the business idea
- The chance to learn more about processes of business
- Highly-prestigious platform for successful new venture creation
- Access to networks, training and valuable contacts
- Further understanding of the investment process and what constitutes a realistic marketable idea

An example from NCT on similar lines is as follows,

Annual Business Fests, Engineering and IT Expos showcase the students' projects and marketable ideas. The industry and community are invited to attend and gain from the work of the students. Alumni and local industry are also invited to participate and network with the fertile and innovatively imaginative ideas of the students.

The students in NCT are offered a capstone course on Entrepreneurship. The pedagogical method used is to ensure that each student works on his or her own business plan. So by the end of the course, they have a feasible and marketable ready to use business plan.

Similarly training and mentoring courses have been organized for:

- College of Applied Sciences
 - Pedagogical methods, empathy and soft skills
- Higher College of Technology
 - Curriculum development, stress management, and interpersonal skills
- Badar as Sama Hospitals
 - Office routines, interpersonal and communication skills



4. **Nurturing:** By 'nurturing' I mean the provision of an incubator facility for emerging new ventures, for example, the business incubator run by the Indian Institute of Technology in Bombay. The pilot IIT Business Incubator started in 1999 in a makeshift facility. The current incubator was formally inaugurated January 2002 with capacity for eight companies, restricted to IT. It offered typical incubator facilities: about 300 sq. ft. of office space, PCs, Internet connection, phone, common facilities such as laser printer, fax machine, coffee machine etc, as well as mentoring support and business networking. In return for space, companies pledged a specified percentage of equity for the services provided to them (Sanad, 2011).

As of May 2004, 13 companies had been incubated. Of these, three had succeeded in obtaining venture capital finance, one had reached commercial viability without venture finance, whilst three companies had closed down.

In the Nizwa College of Technology, we have a newly created Business Centre based upon the same concept. We started formal operations in September 2013, but already we are gaining momentum. Here we provide the budding entrepreneurs with a large office space, computer facilities, internet, telephone, fax, printers etc. We also provide them with technical support and help from the faculty and academic departments. We have a wide array of expertise to bank upon. A strong Engineering Department with well-equipped labs and facilities. An efficient IT Department for automation and IT solutions. A Business Studies Department offering expertise for marketing, accounting, human resource management and entrepreneurship solutions.

Currently we have five entrepreneurs registered with the Business Centre. Two are actively working and utilizing the facility, while the others are in the process of setting up their ventures

5. **Financing ventures:** Globally many business schools have funds for investment into new ventures launched by alumni. Like the London School of Business scheme is known as Sussex Place Ventures, which has two funds for 2 million and 20 million pounds respectively (Sanad, 2011).

In case of Nizwa College of Technology, we rely on the Government sponsored schemes like Sanad, Rafid, Intilaaqah, Injaz, Cell and Sas programs. Our role is to guide



the entrepreneurs to seek financial support from the relevant authority and facilitate them in documentation and feasibility studies.

1. Helping young business professionals to develop an entrepreneurial vocation:

There is today a great deal of interest among young people in the possibility of ‘doing their own thing’. Whilst some of this is undoubtedly due to the backwash of the dotcom/new economy phenomenon, other factors are also at work (Flo and Smith, 2000).

One of these has been a very difficult job market over the past few years. This has had a double effect – forcing young people to consider other career options, but also driving home the point that although there are certainly some risks attached to being an entrepreneur, working with a large company is not without its risks either, as anyone who has been laid off during a restructuring can attest. In addition, there has been a lot more public interest focused on entrepreneurship, and many countries, including Oman, have developed schemes to encourage young people to consider becoming an entrepreneur.

NCT experience

- Counseling
- Entrepreneurial skills support

As you all know that the Omani government has placed entrepreneurship very high on its agenda. To be realistic it is the way forward to ensure prosperity, and rapid development of any country. Most of the Higher Educational Institutions have included entrepreneurship in their curriculum and made it part of their strategic plans.

Business Centre: The Business Centre was recently established at Nizwa College of Technology. This project was conceptualized in 2005, and finally inaugurated in 2013. The basic idea was that you need labs for physics and chemistry for practical teaching, computer labs for imparting IT skills, workshops for giving engineering skills, but no such facility exists for practical training for business students. On job training or placement was an option, but no business is willing to let students learn their secrets or ruin them financially by making blunders in the learning process. So we planned to build our own Business Centre. This concept will help our students learn managing business without any risk.

The three functions of the Business Centre are:



a. Practical skills teaching of business concepts

- i. Human Resource Management
- ii. Accounting
- iii. Marketing
- iv. E-Business Administration

b. Training function for external customers

- i. Problem solving
- ii. Skills development
- iii. Mentoring and training

c. Incubators for entrepreneur

The Teaching Function of Business Centre:The BC is used for teaching the practical skills to students by involving them in potential entrepreneurs meetings and discussions. The students benefit from an actual business development scenario. The entrepreneur benefits from out of the box and innovative ideas of students and staff.

Step 1: Potential Entrepreneur + Brainstorming with Entrepreneurship students and staff

- Vision, Mission, Goals, Objectives
- Business Plan

Step 2: Brainstorming with HRM students and staff

- Manpower plan
- Recruitment and Selection etc

Step 3: Brainstorming with Accounting students and staff

- Budgeting, book keeping
- Tally

Step 4: Brainstorming with Marketing and E-Business Administration students and staff

- Advertisement campaign
- E Business solutions

Step 5: Information Technology Support and solutions



Step 6: Engineering Support and Solutions

Training function of the Business Centre: The training or mentoring component of the BC process is as follows

- Entrepreneur or SME approaches with problem
 - Brainstorming and problem identification
 - Needs analysis
- Tailoring training program
 - Resource identification
 - Material and methods development
- Execution of training program
 - Feedback
 - Report and improvement

Incubator role of Business Centre: The process of utilizing the Business Centre as an incubator is as follows:

- a. Application for support
- b. Assessment by Board of Management
- c. Approval of the application
- d. Signing of a TOR and Contract following laid down guidelines
- e. Monitoring and review of the work of the client
- f. Exit strategy for the client

As our Business Centre is recently established, however, we have a reasonable trail of success stories. Many of our graduates are successful businessmen. We need to check how many can sustain themselves in the business world after the lapse of 5 years at least. That only time will tell.

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