



## **A Mutually Inclusive Model Of Entrepreneurship And Education**

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*The effect on youth and its development in Pakistan*

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*November 2014*

This paper aims to analyze and propose a mutually inclusive model of entrepreneurship & education that subsequently has a positive effect on the youth and its development in Pakistan.

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## **Disclaimer**

*This paper has been developed by the external Contributing Author, Mr. Nabeel Akmal Qadeer. The opinions, statements and advice contained within this paper do not necessarily represent those of the UN, UNDP nor NHDR.*

## **Introduction**

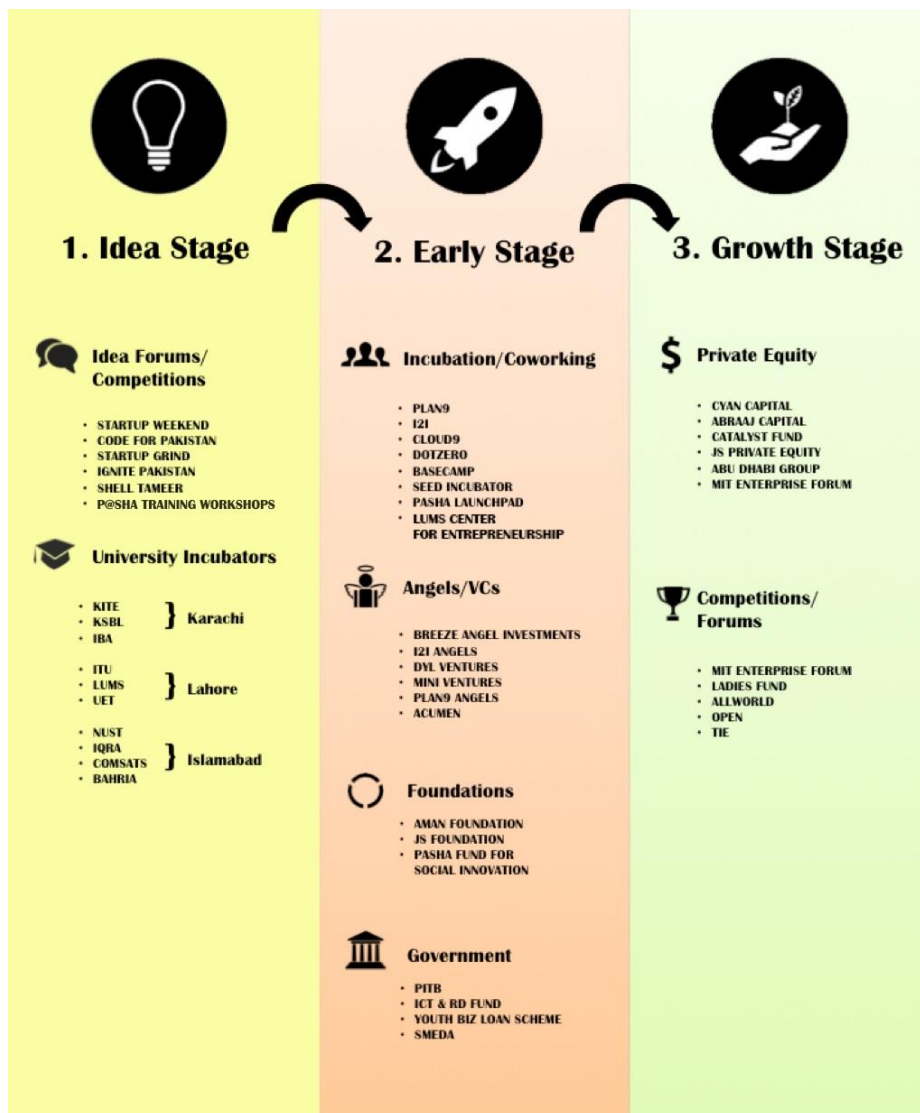
Entrepreneurship, as defined by Schumpeter (1934) means carrying out new combinations with old being washed away by the new (Haque/Pakistan Institute of Development Economics, 2007, p. 3). This was later termed ‘innovation’ through the process of ‘creative destruction’. In simple words, it means undertaking a new venture, often at a small scale, with the intent of making profit by innovating and realizing all entailing risks.

As a concept, entrepreneurship is strengthening in Pakistan; social acceptance of entrepreneurship as a profession and the number of entrants in the domain is increasing. The number of platforms facilitating entrepreneurship, both academic and non-academic, has grown in the last three years in Pakistan. This is a core factor associated with the notable change in this trend.

The establishment of new organizations, funds and institutions to support entrepreneurial activity in Pakistan is, as highlighted in Pakistan Entrepreneurship Ecosystem Report 2014, a response to the global trend of entrepreneurship (Invest2Innovate, 2014). On the other hand, increased social media usage and access to technology has resulted in Pakistanis being more connected to global entrepreneurial and technology trends as well as higher quality learning than before. In short, market forces of demand and supply are both changing in favor of entrepreneurship.

The local entrepreneurial eco-system is growing; introduction of the concept of business incubation centers, accelerators and co-working spaces is providing a coherent structure to the developing system. Presence of local chapters of competitions including Startup Cup and Startup Weekend provide aspiring entrepreneurs an opportunity to participate in entrepreneurial activity from a young age, primarily as college students.

The following infographic maps the ecosystem of entrepreneurship in Pakistan:



**Infographic 1** Courtesy: Pakistan Entrepreneurship Ecosystem Report

To add to the information provided in the figure above, two new platforms have been established to support entrepreneurs; Plan9 TechHub is a co-working space for freelancers and PlanX, a technology accelerator, have been launched as projects of Punjab Information Technology Board (PITB) in 2014.

In an attempt to understand the participating cohort better, data analysis of 65 startups incubated at Plan9, Pakistan’s largest technology incubator operating under PITB was conducted. The results show that 158 of 193 co-founders i.e. 81.9% had attained an undergraduate degree in the duration 0-5 years of applying for incubation at the facility. It can therefore be deduced that they belong to the age category of 22-26. The group can be termed as ‘youth’ as per the classification by the Commonwealth Secretariat that defines youth as individuals aged between 15-29 (Commonwealth Youth Programme, 2013).

Education, besides other factors such as domestic upbringing and personal aptitude, contribute to decisions about professional career and field to be pursued. Is there then a correlation between entrepreneurship and education in terms of its effect on the youth and the segment’s development?

*This paper aims to analyze and propose a mutually inclusive model of entrepreneurship & education that subsequently has a positive effect on the youth and its development in Pakistan.*

By qualitatively analyzing the present status of interplay of the two domains i.e. entrepreneurship and education and highlighting the variables that have an effect on this correlation, a mutually inclusive model of entrepreneurship and education will be proposed. In addition, policy suggestions that have an impact on the youth and its development in Pakistan will be made.

## **The Interplay of Entrepreneurship and Education:**

### **Overview of the Present Status**

The significance of entrepreneurship as a driver of economic growth has been established globally. In recognition of this trend, entrepreneurship education has gained momentum. In the United States, 2,200 courses are being offered at over 1,600 schools and 44 refereed academic journals, mainstream management journals are devoting more issues to entrepreneurship (Khan, 2008).

Advancements in information technology and enhanced communication channels have played a role in spreading the global trend of entrepreneurship to other regions of the world including Pakistan. This has affected entrepreneurship education as well. The effect can be divided in two domains for analysis i.e. e-learning and classroom teaching.

Emergence of e-learning platforms such as Khan Academy, Coursera, Udacity, and other Massive Open Online Courses (MOOC) has allowed users across the globe including Pakistan access to specialized higher learning and skills development. Pakistan Entrepreneurship Ecosystem Report assesses the impact of this as:

According to EdX, the MOOC platform of Harvard and MIT, Pakistan is in the top 10 countries based on the number of participants in courses, while both Khan Academy and Coursera report high participation rates in Pakistan (Invest2Innovate, 2014).

The interplay of education and entrepreneurship on a university level can be assessed using variables including classroom teaching and non-academic activities.

The status of entrepreneurship in classroom theatrics is reflective in the growing number of universities recognized by the Higher Education Commission, an organization of the federal government that aims to facilitate institutes of higher learning to serve as an engine of growth for the socio-economic growth of Pakistan, offering entrepreneurship as an academic course. The extent of specialization varies from a semester course to a degree program.

The scope of non-academic activities pertaining to entrepreneurship extends from establishment of student-run entrepreneurship societies, events by local chapters of competitions e.g. Startup Weekend, establishment of university business incubation centers and Office of Research, Innovation and Commercialization (ORIC).

Student-run entrepreneurship societies have been formed in universities with the aim of on-campus promotion of entrepreneurial activity and organizing inter-university events. An example of this would be LUMS Entrepreneurial Society (LES); the Young Leaders and Entrepreneurs Summit, held annually by LES, is a 4-day event that brought forward 600+ participants from across Pakistan in 2014 with 127 teams participating in the Idea Junction Competition (Lahore University of Management Sciences, 2014). The number of universities that have an entrepreneurship society is increasing with the Beaconhouse National University (BNU) as the latest addition to the list.

The BNU Entrepreneurship Society was launched as a collaborative effort with Plan9. Mr. Shahid Hafiz Kardar, Vice Chancellor of the university said that entrepreneurship is not limited to students of business management but is for a student of any discipline who has an extraordinary idea. He added that the newly established entrepreneurship society at the campus is an opportunity for students to develop and enhance their entrepreneurial skills (personal communication, October 28, 2014).

The efforts of entrepreneurship societies of local high schools and universities are complimented by franchises of international competitions such as Startup Cup and Startup Weekend. As platforms of business idea competitions and hackathons, these events provide an opportunity to network, encourage innovation and validate business ideas. The link between educational institutes and these events strengthens for multiple factors; first, as according to local trends, a significant part of the participants are students and second, these events are affiliated with an educational institute. For example, Startup Weekend 2014 had LUMS and NUST as sponsors for the Lahore and Islamabad events respectively.

The trend of university business incubation centers is gaining strength; twelve universities have their incubation centers in Pakistan with 4 in Lahore, Karachi and Islamabad each (Invest2Innovate, 2014). The number is likely to increase under the Network Partnership Initiative of Plan9. The initiative aims to replicate the validated model of incubation in partner universities and therefore, strengthen the ecosystem. Acting as a pipeline, the university incubators will produce post-idea stage startups. As of October 2014, there are nine university partners of Plan9.

Realizing the need to organize research efforts by universities so that it promotes innovation and commercialization of ideas, the HEC is encouraging establishment of ORIC at its recognized universities. The centers will “provide strategic and operational support to the University’s research activities/program, and will have a central role in facilitating the University Industry linkages for commercialization of research” (Higher Education Commission, 2010). As a result, it will lead to transfer of knowledge and encouragement of innovation in the domain of entrepreneurship.

## **Interplay of Entrepreneurship and Education: Measure of Effectiveness**

The last section provided an overview of the role played by academic institutions in promoting entrepreneurship in Pakistan. However, the extent of effectiveness of these efforts and the impact of each variable discussed needs to be studied. This section will critically analyze each variable and highlight policy gaps, which when addressed can lead to an inclusive model of entrepreneurship and education.

First, entrepreneurship education is taking shape in Pakistan. However, the non-academic impact of academic offerings from the entrepreneurship field needs to be assessed. The variables include the average percentage of a typical class size of entrepreneurship pursuing the same as a career and the qualitative extent of entrepreneurial skills and values that have been added to a student during a course/program on entrepreneurship. In other words, does entrepreneurship education have an effect beyond classroom theatrics and on selection of entrepreneurship as a profession?

Second, the number of local chapters of international platforms arranging business idea competitions and hackathons is increasing. As a result, entrepreneurial activity has accelerated; an increased number of aspiring entrepreneurs get an opportunity to participate at a basic level for validation of business ideas.



On a general note, the winning entry is awarded a cash-prize. The next step is converting the business idea to a commercially viable product/service.

However, the facilitation process for post-event steps needs to be analyzed and debated. The two foremost points of concern are the feasibility of the winning entry being converted to a business and the potential of non-winning entries, either on an individual or team level, to pursue entrepreneurship as a career. The underlying question then is about these events gauging the medium-term potential and viability of participating teams.

Third, the growing trend of business incubation centers is encouraging students to form startups and pursue entrepreneurship. As a measure of effectiveness, the quality of the incubation programs offered by these centers needs to be analyzed. A higher quality program is marked by a higher number of successful graduate startups; the same acts as a factor of motivation for the university’s student body to apply for the program and therefore, pursue entrepreneurship. Considering the nascent stage of university business incubation in Pakistan, the variables to be analyzed are the degree of training of the incubation management, the status of startups at the end of the program, the average percentage of cohort continuing with entrepreneurship post-incubation program and the operational identity of the incubation center.

Fourth, establishment of ORIC at thirty-six universities have organized research efforts by universities to promote innovation and entrepreneurship. However, the factor to be analyzed is the extent of involvement of the student body in the affiliated research projects and the focus ‘entrepreneurship’ has in activities of the center. In addition, do the activities of the center promote entrepreneurship? On an average, what number of students is inspired by ORIC to opt entrepreneurship as a career?

## **Policy Proposal: Call for Action – Effect on the Youth’s Development**

In the previous sections, the interplay of entrepreneurship and education has been discussed. It can be deduced that planned efforts by educational institutes are promoting the concept of entrepreneurship among the student body and therefore, contributing towards the development of the entrepreneurial eco-system at large and among the youth in particular. The effect a mutually inclusive model has on the latter will be discussed in this section. In addition, policy measures will be proposed, implementation of which will have a positive effect on the development of the youth in Pakistan.

The Human Development Index (HDI) is a summary measure of average achievement in key dimensions of human development: a long and healthy life, being knowledgeable and have a decent standard of living. The assessment variables for each are life expectancy at birth, mean of years of schooling for adults aged 25 years & expected years of schooling for children of school entering age and gross national income per capita respectively (United Nations Development Programme, n.d.).

For scope of this paper, the variable ‘decent standard of living’ with the gross national income per capita as a measure will be analyzed; it will reflect the effect a mutually inclusive model of entrepreneurship and education has on the development of youth in Pakistan.

For increased understanding of the subject, sub-variables are considered. These include employment opportunities, average annual income and standard of living. For real-life relevance, Plan9 is taken as a case; since November 2012 when the incubation facility was launched, 65 startups have been incubated over four program cycles. The employment opportunities created as a result number to 350.

The Network Partnership Initiative of Plan9 assists in the program design, execution and startups’ evaluation. As the program quality enhances and the number of successful startups increase, a higher number of employment opportunities are created. In addition, the university incubators act as a pipeline for idea-stage startups to become a part of Plan9, the country’s largest such facility. Enrolment as an incubated startup promises facilities including financial assistance for the duration of the program that helps in expanding human resources and therefore, creates more jobs.

As entrepreneurs or members of a startup, the initial remuneration is lower than the average corporate salary package offered for the skill set. However, entrepreneurship lets one be in the ‘driving seat’; it offers flexibility in terms of work-style and decision-making. Unlike the corporate world, the work-hours are not always defined; however, passion reflects in work.

Muazzam Ali, founder of Technolabz, a startup incubated at Plan9 for the second cycle said:

I relocated to Lahore from Karachi when my startup was selected for incubation at Plan9. I had a limited budget and was sort of still surviving on the pocket money my parents used to give me – my initial team members who were also my friends left during the first week of the program and I was left behind to struggle alone! I practically lived at the incubation premises, formed a new team, worked 18 hours with the only break being for Eid when I visited my family and yes, did successfully launch the product (personal communication, September 21, 2014).

The interplay between education and entrepreneurship has been summarized above with its current effects on the development of the youth. Effective policy measures need to be taken at a state level to direct efforts by different platforms including educational institutions to promote entrepreneurship. Organized and directed efforts will result in powerful results and therefore, benefit the youth more strongly.

Proposed policies have been categorized according to the level of their operations i.e. macro-level and micro-level; the former need to be drafted at a state-level and implemented at a larger scale for the desired impact whereas, the latter will have a domino effect with educational institutes and respective student groups as the point of initiation.

Firstly, a national entrepreneurship network is to be formed. It will act as a collaborative platform resulting in focused efforts at large. The community profile will include representatives of the government, entrepreneurship institutions including schools offering the subject, business incubation and acceleration centers, entrepreneurs, mentors, industry representatives and investors. As a platform, it will hold organized conventions for all stakeholders to exchange ideas and highlight problems in the field; in this manner, entrepreneurs especially the youth will get a voice.

At present, though the underlying intention of all efforts is to promote entrepreneurship and contribute towards developing a strong eco-system, they are not synchronized. As a result, the outcomes do not match the maximum potential at all times. For example:

Laws pertaining to investments including venture capitalism need to be redefined in favor of entrepreneurs and new small-scale ventures. Efforts in this regard are being made by different sectors including schools in form of awareness seminars and incubation centers as conferences to discuss the matter and explore different solutions. The Plan9 Angel Investors Club held a meeting in July 2014 to discuss establishment of a venture capital fund in Pakistan; the Estonian and American model of investments were presented for a better understanding with legal consultants suggesting a localized model. However, the process is at a standstill mainly due to non-representation of all segments.

The academia-industry linkage needs to be strengthened; the current gap reflects in limited mentorship opportunities available to students cum aspiring entrepreneurs who participate in business idea competitions for idea-validation and confidence building. A joint platform will allow access to a mentors resource pool and possible collaboration with other stakeholders including incubation centers that will act as a direction for university startups and entrepreneurs.

In addition, the national entrepreneurship network will have outreach centers to facilitate entrepreneurs in non-metropolitan cities including home-based entrepreneurs. In this manner, metropolitan cities can act as an entrepreneurial hub or nucleus. Local universities/colleges can, as members of the network, be premises for the outreach center. With introduction of entrepreneurship education in these colleges, trained academic staff can provide guidance to these entrepreneurs when required and assist in making market connections. In short, the network will facilitate grass-root entrepreneurial activity with the help of educational institutes as centers.

At present, Small and Medium Enterprises Development Authority (SMEDA), operates Women Business Development Centre in Karachi, Swat, Peshawar and Quetta under its Women Entrepreneurship Initiatives (Small and Medium Enterprises Development Authority, n.d.). The aim of these centers is to encourage and facilitate women entrepreneurs. The limitations of these centers are the gender and regional barriers.

Under the operations of the network, events can be organized for connecting startups to mentors, make elevated pitches to potential investors and interact with market leads and target market.

A reference model for this could be the National Entrepreneurship Network (NEN), India that was established by Wadhvani Foundation in 2003 in partnership with educational institutes including IIT Bombay and SP Jain Institute of Management & Research. The aim of the initiative is to build institutional capacity for entrepreneur support and a robust entrepreneurial eco-system; it achieves this by developing curriculum for entrepreneurship education, developing and training a premium network of educators and mentors and expanding entrepreneurs’ access to capital, technology and expert networks (National Entrepreneurship Network, 2014).

Secondly, a method of ranking university business incubators should be devised to adjust for local measures and implemented by the HEC. With this, best incubation practices can be identified and implemented by other centers. Additionally, it would be a motivating factor for universities to invest in the human resource management of the incubation staff, which in turn would enhance the quality of the program offered.

The UBI Index provides a benchmark for business incubators globally and the services offered include annual ranking of university business incubators, UBI network (by membership only) and publication of global best practices of business incubation (UBI Index, n.d.). The top rated university incubator according to local rankings by HEC can apply for UBI Index ranking; the membership fee for the UBI

network and publications fee can be sponsored. This would act as an incentive for university incubators to follow global key performance indicators of incubation and in addition, would validate the program internationally.

Thirdly, to encourage students practicing entrepreneurship, credit hours can be awarded for running startups that are a part of the university business incubation facility. With this, the time invested by entrepreneurs will be compensated academically.

As educational institutes and academic background play a vital role in the decision making process about career options and shaping narratives about the suitability of career options, it is precisely this avenue that needs to play a role in strengthening the mutual inclusiveness of education and entrepreneurship. Academic institutions need to be the catalyst for inspiring the youth to opt for entrepreneurship. Therefore, micro-level policies need to be devised at an institutional level to achieve that position; in response to effectiveness gaps identified in the previous section, policy measures are proposed below.

First, to enhance the impact of entrepreneurship beyond classroom theatrics, the curriculum and the involved pedagogy need to be revised. As highlighted by Khan (2011):

It is a fast increasing discipline of education that has taken the lead and central place in the education policy. That is one of the reason that it evolved a learning process – a pedagogy of teaching entrepreneurship from a didactical mode to an entrepreneurial mode. The paradigm shift is towards mutual learning and learning by doing, opening up space for error.

To ensure an impact beyond classroom theatrics, it is essential that a shift in mindset from traditional job orientation to entrepreneurship takes place. Therefore, it is pertinent that entrepreneurial values be imparted during the course of the degree or program. For that to happen, a shift from conventional theory-based teaching to practice-based teaching is required; entrepreneurship students need to be involved in practical experience so that they learn those values. The National Entrepreneurship Network proposed above can facilitate the process of designing curriculum and training faculty.

Additionally, as part of the work experience requirement by universities, entrepreneurship students can be made to intern with selected startups for a pre-defined period that in a usual case is eight weeks during the summer break. The university career office can be involved in the placement of students.

Second, to facilitate participating startups post-business idea competitions so that they have an increased probability of succeeding as entrepreneurs in the future, the following steps can be taken:

Partnership with a business incubation facility with a clause of the winning entry being fast-tracked for the program admission will act as a practice-based motivation for entrepreneurs. The present trend is a cash award for the winning entry that may facilitate in setting up an office; however, in reality, mentorship and access to a peer network add more value to a startup.

Limitations with high recurrence rate among entries can be discussed in a seminar/post-event session at the partner university; this would give non-winning startup entrants a chance to identify their shortcomings and learn to overcome them. The categories can include technical strength of the product, market viability and team strength – ideas can be pivoted to respond to market needs; the team strength plays a vital role in the success of a startup.

Third, the efforts of ORIC at universities can be directed towards creating an impact on entrepreneurship among the student body and aspiring entrepreneurs in general. At present, the scope of operations of the center differs by universities. For example, at NED-UET (Karachi), entrepreneurship activity is still nascent with organization of business-idea competition in collaboration with the university’s entrepreneurship society. Whereas, COMSATS (Islamabad) is at a further stage with organization of entrepreneurial events such as Pak-China Business Forum 2012. However, the extent of transfer of knowledge needs to be developed for effectiveness of ORIC in respect to facilitation of entrepreneurship among the youth; in absence of abundant literature focusing on entrepreneurship in Pakistan, an increased number of research publications highlighting the requirements of entrepreneurs in the local context would contribute to the development process.

## **Conclusion**

The growing trend of entrepreneurship education and increased entrepreneurial activity that overlaps with the education industry, is overcoming limitations of the past that had created education and entrepreneurship as two mutually exclusive domains. The increasing interplay between the two is shifting the narrative towards a mutually inclusive model where conscious policymaking will strengthen the resulting opportunities for youth and contribute to the segment’s development in Pakistan.

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