

INCUBATION CENTRES: IMPACT ON RESEARCH AND ENTREPRENEURSHIP ASPIRANTS

*Manoj Varghese**

ABSTRACT

An Incubation leverages upon the youth to spur greater innovation led start-ups for generating more value to society and economy by creating globally competitive products and services. As a pilot project, 11 Incubation Centres were set up providing a platform for collaboration with agencies to have extensive gainful job opportunities and exciting career growth opportunities leading to a start-up culture in NCT Delhi. It helped in creating a culture of entrepreneurship, start-ups and Intellectual Property that can lead to value creation, jobs and employment and do social and economic good. The Delhi Government came up with a unique Incubation project for the students pursuing higher studies and aspiring with their brilliant ideas looking for a hand holding to explore their research work and establish themselves with their business set up. To accomplish the task, students were encouraged for startups, the mindset of faculty were changed and inculcated an aspiration of entrepreneurship among parents. The host institutions made all efforts recommending alliances for incubators with experts from technology, marketing, financing domains so that start-ups can be guided. Although, with the advance of time, only a few incubators could take off on a sustainable business model. Some fell short of the execution of basic idea, a few switched over to better opportunities, some of them wondered as to how to use the seed money, several of them were trapped in the nitty-gritty of setting up the company and paper work, quite a few dropped in between as they exhausted the funds beforehand and a number of them evaded with the seed money received. The project could not yield the desired result for want of expertise in the field, paper work and the mode of financial loans imparted. Overall, targeting the number of incubates became the criteria rather than developing a unique sustainable model of technology for many of the institutes. Despite these concerns, it is considered to be a good start and a platform for those scientific minds that would have otherwise missed the opportunity of innovation.

Keywords: Incubation centres, incubatees, incubators, start-ups.

* **Manoj Varghese** is a Science Communicator and PhD Scholar. He works at the CSIR-National Institute of Science Communication and Information Resources, Dr. K.S. Krishnan Marg, New Delhi-110012, India. He is also associated with the Academy of Scientific and Innovative Research (AcSIR), Ghaziabad- 201002, India

INTRODUCTION

World over Universities like Stanford, MIT, Harvard have a culture of student startups that go on to become leading global companies like Google, Facebook, Yahoo, and so on, whereas, most of the Indian Universities focus on academics and research, with a little success on startups, and thus a gap was inevitable.

Delhi Government in its endeavor to enhance the quality of research, in the financial year 2015-16, earmarked over Rs 20 crore for the setting up of six Incubation Centres in Delhi, and a seed money of Rs 1.5 crore was allocated to each of the Centre. In the second phase, 2016-17, same amount was granted for establishing five more Incubation Centres. The Incubation Centres were expected to bridge the gap between academic and real-life practice by transforming ideas and concepts into reality. Experience gained at such a Centre was expected to be a motivational force for those aspiring to work and find suitable career opportunities in unexplored and challenging areas, besides encouraging Entrepreneurship and Innovation.

Proposals were sought from the interested educational institutes functioning under the Directorate of Higher Education and Directorate of Training and Technical Education (DTTE) to set up Incubation Centres. Based on the interest and magnitude of research work, the institutes were selected. These selected institutes were asked to form a society and register under the Societies Registration Act and a committee of experts was to look into the day to day activities. These Centres are accessible to the current students, alumni, faculty/staff including retired person and any other person as per merit and space availability.

In the first phase in 2016, six incubation Centres were set up namely; Indira Gandhi Delhi Technical University for Women (IGDTUW), Netaji Subhas University of Technology (NSUT), Shaheed Sukdev College of Business Studies (SSCBS), Indraprastha Institute of Information Technology and Development (IIITD), Ambedkar University of Delhi and Delhi Technical University (DTU). In the second phase in 2017, five more Incubation Centres were launched; Acharya Narendra Dev College (ANDC), Bhai Parmanand Institute of Business Studies (BPIBS), Delhi Pharmaceutical Science & Research University (DPSRU), Delhi Institute of Tool Engineering (DITE), which replaced College of Arts from the original list and Ambedkar Institute of Advanced Communication technologies and Research (AIACTR).¹⁻¹¹

An all out effort was made for the capacity building of stakeholders associated with the Incubators. Standardized operational documents along with the checklist needed for incubators CEO/rent/service/shareholding agreements were prepared and shared. Periodic meetings, knowledge and problem sharing amongst institutions, handholding by TiE led to vibrant collaborations across institutions. Entrepreneurship development activities like ECells, academic programs, workshops, alumni engagement, mentoring, ideathons, workshops, alumni engagement, boot camps etc were organized across all institutions. Operational skills now supplement theoretical knowledge in the institutions.

LITERATURE REVIEW

Startup India is a flagship initiative of the Government of India, intended to build a strong eco-system for nurturing innovation and Startups in the country that will drive sustainable

economic growth and generate large scale employment opportunities. The objective is that India must become a nation of job creators instead of being a nation of job seekers. The Government through this initiative aims to empower Startups to grow through innovation and design.¹²

The entrepreneur has been identified as being disproportionately more important to the success of a firm than their manager counterparts because of the unique challenges they face (and overcome) when engaging innovation (Ensley, Pearson *et al.* 2002). At the same time, business incubation is seen as an effective means of educating and supporting high growth, innovative ventures because “*the desire for individuals to become an entrepreneur and start a business often exceeds their management capabilities*” (Osborne 2000, p.125). Therefore, the business incubator is considered an ideal means of imparting knowledge and skills in an environment that is relevant and immediately effective (the individual learns how to be entrepreneurial and is supported while he or she develops the enterprise) and can be considered as one model of entrepreneurship education. However, there is a lack of consensus, particularly in the higher education environment, about what constitutes a good practice model of entrepreneurship education (Holmgren & From 2005; Matlay & Carey 2007). Further, there are a number of approaches to education which differ in intent and practice (Bérchard & Grégoire 2005). Hindle (2007) suggests that education (at least in the higher education context) should be about philosophy, subject critique and self-critique and this would seem at odds with education that is about solving and overcoming immediate and time pressured challenges and problems associated with new venture formation. A cursory glance at a dictionary definition of the key terms, incubation and education, reveal an underlying difference in meaning that is at the heart of the conflict: to educate is to mentally and morally train while to incubate is to *cause to develop*.¹³

According to the Department of Science and Technology (DST), India has nurtured over 40,000 startups in the last few years and 31 have achieved the Unicorn status. Global Incubation Services (GINSERV) is a state-of-art Technology Business Incubator. It has been promoted by JSS Mahavidyapeetha, Mysore, one of India’s largest educational organizations, with the support of National Science & Technology Entrepreneurship Development Board (NSTEDB), Department of Science & Technology, Government of India. Soft-Landing Companies are promoted by NRIs or a foreigner and bring new technologies with an India centric focus. It helps to train Indian manpower in new technology, enable collaborations with local entrepreneurs and bring new knowledge of start-ups to the Incubator.

The components under the scheme include mentoring support in business and technology, networking with other businesses, seed capital assistance, professional assistance to make the enterprise successful and achieve higher growth. Technology based new enterprises are typically characterized as high risk and high growth ventures, and as such, they require an enabling environment like BI to enhance the prospects of success.¹⁴

India is home to one of the most vibrant startup ecosystems with close to 8000 tech startups, making it the 2nd largest startup ecosystem in the world. Hence, innovation and entrepreneurship is the emerging focus area that is being aggressively promoted to give fillip to the Indian economy. Ministry of Electronics & Information Technology (MeitY), Government

of India is leading and facilitating a gamut of Innovation and IPR related activities across the country towards expansion of this ecosystem. In order to facilitate MeitY's vision of promoting technology innovation, start-ups and creation of Intellectual Properties, a nodal entity called 'MeitY Start-up Hub' (MSH) has been setup under its aegis. MSH will act as a national coordination, facilitation and monitoring centre that will integrate all the incubation centres, start-ups and innovation related activities of MeitY.¹⁵

METHODOLOGY AND MISSING LINKS OBSERVED

A sincere effort was made to physically visit these Incubation Centres, interact and interview various stakeholders like students, faculty members, incubates, CEOs, companies and their business partners to understand its functioning. Detailed reports were collected to authenticate the claims mentioned on the official websites. The data collected were collated in a tabulated format and analyzed before making an interpretation and coming to conclusions. Some of the observations include:

- *Incubation Fund* – Every host institute received a Government fund through DTTE of Rs 1.5 crore and was to utilize it under Capital Expenditure (Cap Ex), Operation expenditure (Op Ex) and Seed funding. There has been no clarity on what proportion to be used under which head. Some spent over a crore rupees only on infrastructure and found dearth of funds for the operations. The centres had no clarity of funds to be utilized on the promotions, workshops and orientations. In the eventuality, one of the IC procured a grant of over Rs 25 lakhs from GIZ under Indo-German agreement to conduct such events.
- The Government bodies, DSIIDC and PWD were to carry out the infrastructure work which took its own time and charged arbitrary rates. The limited suppliers led to the hike in cost and time factor.
- No fixed yardsticks were framed in allotting the seed fund to the incubatees and it ranged between 1 lakh to Rs 7.5 lakh. Recently, around 15 lakh was given out to one incubate at SSSBS. A seed money of approximately Rs 8.5 lakh was granted to three incubatees, all pass outs from BPIBS.
- Head of the Institute had the decisive power to allot money (incubatees and all expenses), engage manpower (incubatees and recruit staff and board members) and choose the programme (ideas and workshops). This free hand gave room for suspicion and compromise on quality services and appointments.
- Although the incubatees were limited to be a student, alumni, faculty and staff, several outsiders were registered owing to the acquaintance with host institutes. No guidelines have been issued for the engagement of outsiders.
- Incubatees were to capture the market but in the process made a dent inside the institute itself. For example, one of the Incubation Centres imparting training through influence made it compulsory for the students of host institute to undergo training by paying a registration amount of Rs 10,000.
- Board of Directors or Board of Governors were formed to run the Incubation Centres, which is against the company law and had no prior set criteria.

- The salary of CEO varied from 1 lakh to 2.5 lakh and was totally in the hands of Head of the Institute. The Incubation centres would have made a real impact if the CEOs had the subject expertise and a successful business model of their own.
- With no Standard Operating Procedures (SOPs) in place, all the CEOs derived at their conclusions as per their need and convenience.
- No Nodal CEO or an officer was appointed by the Government to facilitate the Incubation Centres collectively. Only for financial applications, they reported to a Joint Director at DTTE. Thus, a guiding factor was missing at the overall functioning of the Incubation Project.
- With the advance of time, the focus drifted from quality to the quantity. The priority of inventing a new product or a new technology shifted towards the number of incubatees engaged. One of the incubation centre considered all the applicants who applied to the tune of 40 as incubatees, although after screening only 8 were registered. The large number had all praises and enabled them to procure the seed money on a priority.

CONCLUSION

The Incubation Centres strive to provide a great opportunity and platform to innovative minds and give right directions to channelize their efforts to succeed further with their business idea. But the lags in Indian ecosystem belie the great objectives of Startup India, these include:

- India's low ranking in '*Ease of Doing Business*';
- Lack of Incubation or startup/seed money to build business in initial phase;
- Lack of infrastructure for new business ventures;
- IPR issues and costs and lack of mentorship and industrial exposure of the graduates and post-graduates.

The new concept of hands on approach over the traditional theoretical study took time to be absorbed against the culture of a practical work for procuring the marks. In the beginning, several faculty members opposed the concept owing to their own job mentality and lack of creativity within themselves. As a result of the mounting pressure and inability to adjust with the changing scenario, the College of Arts which was designated for the IC had to withdraw and instead DITE was listed.

The Incubation centres turned out to be a viable platform for those brilliant ideas which otherwise would not have seen the light of the day. It provided a means for the students pursuing higher studies with a scientific temper to explore their hypothesis and convert their research work into technologies worth for the society. The seed money enabled many of the incubatees to start off on a higher note bypassing the queue and struggle for Bank loans. The hand holding exercise by experts and the industries acted as a lubricant in establishing the ventures by the upcoming entrepreneurs. Entrepreneurship curriculum in Delhi government schools came as a booster for the student community in changing the mindset of the general public. At some places, the seed money was mistaken as loans and the gravity of work was compromised. Revising the course curriculum in accordance with UGC/AICTE being a herculean task, no serious effort was made to be in tune with emerging technologies, latest

business innovations' practices and align to requirement of industries and to introduce course on entrepreneurship development through incubators. Industry experts need to be engaged to teach such frequently updated courses was missing. At times, suitable mentors were not available to help budding entrepreneurs along every step of this application process. Emphasis for mandatory apprenticeship or entrepreneurship could not be put in place and placements played the crucial role for the institutions credibility.

With all these limitations, some of the institutes like DPSRU, IIIT-D and DTU are making all efforts to establish their ICs at the International level with their quality of research work and collaborations. Institutes like DPSRU is harnessing on its unique strengths and capabilities in the research and scientific realm through the development of phytopharmaceutical drugs, cosmeceutics and nano-formulations for various diseases.

The ICs will go a long way with the roping in of more experts, introducing measurable indicators, proper monitoring and above all encouraging the upcoming research fraternity to procure more on the technology as well as business model.

REFERENCES

1. Home page of Acharya Narendra Dev College (ANDC). <https://andcinstartfoundation.in/>
2. Home page of Bhai Parmanand Institute of Business Studies (BPIBS)
3. Home page of Delhi Pharmaceutical Science & Research University (DPSRU)
4. Home page of Delhi Institute of Tool Engineering (DITE)
5. Home page of Indira Gandhi Delhi Technical University for Women (IGDTUW). <http://www.anveshanfoundation.org/>
6. Home page of Netaji Subhas University of Technology (NSUT)
7. Home page of Shaheed Sukdev College of Business Studies (SSCBS). <http://www.siif.in/>
8. Home page of Indraprastha Institute of Information Technology and Development (IIITD). <https://www.iiitdic.in/>
9. Home page of Ambedkar University of Delhi (AUD). <https://aciie.in/>
10. Home page of Delhi Technical University (DTU). <https://dtuif.co.in/>
11. Home page of Ambedkar Institute of Advanced Communication technologies and Research (AIACR)
12. Home page of Startup India - <https://www.startupindia.gov.in>
13. Home page of Incubation program at the University of Adelaide, Australia - swinburne.edu.au/file/1a114e88-c671
14. https://my.msme.gov.in/MyMsme/Reg/COM_IncubationForm.aspx
15. <https://meitystartuphub.in>
16. Arora V. K. (2018), '*Potential Entrepreneurs: Gear-up for Start-up*' Book Chapter 'Entrepreneurship & Other Contemporary Issues', pp. 36-43

ANNEXURE I

Table1: Policy Framework

<ul style="list-style-type: none">• Each institution to create Section 8 Company and run it professionally with a financially sustainable model;• Accessible to students, staff, faculty and alumni of the institution;• Seed funding via debt/equity for registered enterprises set up by incubate after rigorous evaluation;• Incubation centres to provide shared infrastructure, administrative, legal and technical services and mentoring to all incubates;• Institutions to foster a culture for innovation, entrepreneurial thinking and enterprise building;• Institutions to create a dynamic network towards collective problem-solving, collaboration and complementary activity;• Academic interventions to encourage a culture of entrepreneurship in institutions;• Updated curriculum including entrepreneurship courses, mandatory apprenticeship and projects;• Faculty training for promotion of business innovation and start up culture;• Deferred placements;• Gap year concept – drop a year for startup.
--

Table 2: Operationalizing Incubators

<ul style="list-style-type: none">• Shaheed Sukdev College of Business Studies• Netaji Subash University of Technology• Indira Gandhi Delhi Technical University for Women• Delhi Technological University• Indraprastha Institute of Information Technology• Ambedkar University of Delhi• Delhi Pharmaceutical Sciences and Research University• Acharya Narendra Dev College• Bhai Parmanand Institute of Business Studies• Delhi Institute of Tools and Engineering• Ambedkar Institute of Advanced Communication Technology and Research

Table 3: Highlights

<ul style="list-style-type: none"> • 11 Incubators – largest density of student incubators in the country; • 43 start-ups initiated, ranging from social entrepreneurship (10), business enterprises (10) to high end technology (23); • Many incubatee from weaker economic segment; • Some of the remarkable incubatees include: <ul style="list-style-type: none"> ○ Khass – Travel Agency employing visually impaired and physically challenged women. ○ Kinara – Roof top framing services managed by displaced farmers from Yamuna belt. • AirZen – Air quality index monitoring device and analytics platform; • Movenze EN – Creates next-gen 3 D motion photography technology; • ETI Labs – Internet of Things, Embedded system, Wireless sensor network, Education technology and Automation; • NatureFab – Sustainable clothing using organic and eco friendly bamboo fabric. • Steamedu Learning – Fostering curiosity, creativity and imagination in young minds and inculcate 21st century skills and training through S.T.E.A.M.; • Brand Logos: India, Zenatix, Backpack, Academic, Coursify, Fasta pesta among many others.
--

Table 4: Key Activities/Services provided by parent Institute to Incubatees is as follows:

<ul style="list-style-type: none"> • Mentors support-Workshops/seminars and direct guidance; • Infrastructural/Facility based services like –office spaces, internet etc.; • Skill trainings; • Networking activities; • Financing/Seed Funds/Access to Venture Capitalists etc.; • Education/Access to Knowledge related to ideation to concept to validation of product to commercialization; • Entrepreneurship trainings; • IPR related support; • Secretarial Services; • Hands on working at Entrepreneur Cell.

Table 5: Support system at NSUT IIF

NSUT's internal support system	Intervention taken
Outreach/Sensitization/Culture Development	Electives in entrepreneurship, business conclave, e-summit, technical societies.
Support at Idea generation stage	Lab equipment, mentorship, industry partnership
Support for IPR awareness and Patent Filing	patent support and guidance, government support
Support for Proof of Concept (PoC)	industry partnership for prototyping and feedback
Support for access to existing R & D infrastructure	Labs have the desired equipment and network facility
Exposure to Innovators and Student Startups	Peer to peer guidance available
Collaboration and tie-up with external expert/ organizations	Business conclave, industry seminars, NSIT IIF mentorship and evaluation
Capacity building of stake holders	Peer to peer guidance, industry support

Table 6: Guidelines To Establish Incubation Centres In Educational Institutions

Building the Business Case	Building a strong business case for internal approval and attracting partners and funders is an absolutely crucial step. While long-term financial returns are possibility, it is also useful to highlight the earlier impact and community benefits that can come from accelerating start-ups.
Business retention and job creation	Successful incubator ventures are likely to remain in the local ecosystem, creating opportunities for new job creation as well as channels for university-industry interaction
Increased Tax revenue	A report by the NBIA found that in the US, every 1\$ of public investment in incubator translated into \$30 in local tax revenue.
Increased Impact Figures	University start-up incubators serve as a pipeline for new student ventures that may not be exploited by traditional technology transfer channels.
Student Recruitment and career Enhancement	Entrepreneurship is increasingly considered an attractive career choice for students. A 2012 survey found that 1/3 of the respondents from the millennial generation were interested in launching their own business.
Alumni Engagement	A software incubator has to have potential to attract both donations from and engagement with alumni. A 2014 QAA report noted that "Entrepreneurial alumni are the main source of donations to universities and are more likely to be inclined to donate if they believe that heir time at University had a material influence on their subsequent entrepreneurial success.

CREATING A CULTURE OF ENTREPRENEURSHIP, START-UPS AND INTELLECTUAL PROPERTY CREATION

- Promote start-ups by creating incubation infrastructure, friendly guidelines for start-up funding, helpful labour law reforms, liberalized guidelines allowing overseas partnering, use of start-up products in government sector, start-up spaces and marketing support programs for start-ups on the basis of preferred Market Access (PMA);
- Changes to current curricula with the aim of developing entrepreneurship in students from schooling days (class X onwards) – “*Catch Them Young*”;
- Include entrepreneurship as a subject/add-on course/ elective in Institutions;
- Conduct entrepreneurship boot camps during summer to encourage students participate in entrepreneurial activities;
- Offer start-up founders the option to participate in placement in the year after graduation to increase risk-taking ability;
- Offer incentives to faculty for risk-taking and start-up incubation commercialization of technology;
- Conduct Boot camps for start—ups, Business plan competition etc. where the winners get a chance to utilize the incubation centres being set-up;
- Create entrepreneurship challenges based upon existing problems to foster Innovation;
- Develop a mentorship body to provide support to entrepreneurs; partner with ecosystem players as possible;
- Create entrepreneurship clubs amongst the student and alumni (global/national/local) community.

FACILITATE CREATION OF INCUBATION CENTRES WITHIN THE EDUCATIONAL INSTITUTIONS

- Create a Section 25 company that will act as the holding company for incubators to be created under these guidelines. Multiple companies can be created, Institute/Organisation wise to cover the city/state;
- The holding company will employ professional staff and maintain a small secretariat to support its activities. This will be funded by the government, as per prescribed guidelines issued from time to time;
- The Section 25 (holding) company shall have the budget to create the incubation infrastructure, computing and specialized equipment as needed etc.;
- The holding company shall also create the plans for start-up on boarding, mentoring, growth, fund-raising and exit processes;
- A set of operational guidelines for incubators shall be prepared and each holding company shall be provided the same as best practices.

INFRASTRUCTURE FOR ESTABLISHING AND OPERATING INCUBATORS

- The holding company will enter into an MoU with the participating institute to facilitate setting-up of an incubation centre within the campus.
- The incubator centres in institutions should have a broad based specialization. There could be some natural selection based by the special infrastructure, labs, machines and resources available at the institutions.
- The Institutions that enroll for this program will provide dedicated space to each incubate within their existing buildings and or in the new buildings. A minimum of 5000 sq feet of space is required (10000 sq ft is recommended)
- Each incubator shall have space for meeting rooms, conference facility, open sitting plan offices and limited number of office rooms.
- Infrastructure for tea/coffee/snacks can be created with the pantry/kitchen supplies coming from authorized vendors.
- Incubators should be based on a modular plug and play model with essential infrastructure such as 24 x 7 access, 24 x 7 electricity and back up, internet, LAN, desk tops, telephone connection and instrument, printers, scanners, tea/coffee and rest room facilities, conference/discussion rooms.
- The furniture needs shall be modern, light and functional in keeping with trends at other incubators/accelerators.
- Specialised labs can be made available to incubate companies at terms that can be decided by the management.
- Selected specialist support agencies like advertising, PR, logistics, facilities management can be common for start-ups using this incubation facility to cut operational costs.

SHARED SERVICES TO BE PROVIDED BY INCUBATORS

- Provide a platform where incubatees can easily access services such as accounting, legal services, administrative services, marketing and sales support, etc.
- Incubators should create a panel for regular mentors to provide mentoring and assistance.
- Incubators should establish a panel of visiting guests and experts who can visit once a month/quarter and provide vision and direction to the incubates.

ELIGIBILITY

The incubation centres should be accessible to the current students, Alumni, Faculty/staff including retired person and any other person not belonging to any of the above category may be considered as per merit and space availability, after giving preference to Serial number 1 to 3 categories. On rare to rare case basis, the students of other institutions may also be considered eligible.

SELECTION PROCESS/CRITERIA

- An evaluation process should be put in place to select relevant incubatees for the program;
- Ideas should be assessed through a written application and interview process including detailed technical and financial due diligence. Applications may be shortlisted on certain criteria such as strength and novelty, strength of core business team, funds needed, and time to market. The final selection should be through interview (including a presentation of the business case) by an expert panel consisting of MDs/CEOs of successful start-ups, technical and legal experts along with faculty and investor representatives;
- Special preference and encouragement shall be given to women entrepreneurs and specially-abled entrepreneurs business startups focusing on rural/weaker communities' welfare/transformation under these guidelines. This may include advisory services to create plans to meet the business plan requirements, relaxed conditions for appraisal of business plans and preferred seed funding access subject to availability of resources;
- Mentors may be available to help budding entrepreneurs along every step of this application process.

TRACKING PERFORMANCE

- Create and oversee a reporting mechanism to track performance and success (job creation, revenue, number of incubatees in a year of such centres);
- Tracking of success and failure as the factors leading to both, will help in understanding the usefulness of the centres and provide a knowledge base to up-coming entrepreneurs;
- Business plan evaluation should be done at different stages of the incubation programme.

MENTORSHIP

- A systematic proactive mentorship program must be provided;
- Workshop on mentorship to be conducted;
- Both technical and business mentoring will form part of the incubation program;
- MoUs/tie-ups with the leading trade and industry associations like FICCI, ASSOCHAM, HDCCI, CII and All India Management Association to strengthen the institution-industry interface and access to industry mentors;
- Alumni networks of the institutions and specialist government institutions like bans will be leveraged to act as mentors and business evangelist for the start-ups being incubated;
- Successful ventures will also act as mentors to other start-ups in the same field;
- Provide access to some training workshops aimed at specific business skills such as strategy planning, finance, intellectual property, marketing, HR, operations' innovations,

raising debt and equity finance, etc.;

- Mentors are usually not compensated. If however, the mentorship moves to regular advisory services, the incubatee and the mentor can setup commensurate arrangements including equity, fees, bonus, etc.

ACADEMIC INTERVENTIONS TO FOSTER A CULTURE OF ENTREPRENEURSHIP IN INSTITUTIONS

- Update syllabus :- the institution to revise course curriculum to be in tune with emerging technologies, latest business innovations' practices and align to requirement of industries and to introduce course on entrepreneurship development through incubators. Industry experts need to be engaged to teach such frequently updated courses.
- Faculty training: - A scheme to be developed to train faculty for promotion of business innovation and startup culture.
- Mandatory Apprenticeship: - If apprenticeship is presently part of syllabus and it may also be carried out in any start up including his/her start up.
- Gap year concept: - the institutions to create the concept of student entrepreneur in residence. The outstanding students to be allowed maximum two years of break to pursue entrepreneurship fulltime and this period will not be counted for the time for the maximum time for graduation.
- Innovative and original idea for final year projects:- The nodal incubator to create an online portal with details of all such projects so that student can post their projects on line to avoid duplication.
- Relaxation in academic performance of students:- Relaxation in attendance up to 20% and grace marks of 5 % may be allowed to student start up teams.
- Deferred placement may be allowed to final year students up to 2 years.
- Boot Camps:- Institution entrepreneurship club to be established through incubators to foster innovation and entrepreneurial spirit at Institution level.
- Conductance of seminar / workshop:- Weekend training workshop may be conducted in partnership with leading academies.
- Attracting incubating / startup training institutions International mentors:-The funding provided by Govt may be used for this purpose.
- International start-up culture and exchange program:- Tie up with institutions across globe to be made to encourage start up culture. The world class institutions like Stanford, MIT and Harvard may be approached.
- Networking among Institutions:- A state wide network of institutions to be created with incubator s so that innovators can commercialize their Intellectual property.

FUNDING SUPPORT RECOMMENDATIONS

- The holding company shall have access to grants /soft loans from the Government (state and central) – government to provide seed funding to the start-up in the incubation centres.
- The holding company shall arrange access to SME Micro loan schemes available for state-owned or private banks.
- The holding companies shall provide the funds to create the infrastructure at the educational institutes.
- The holding companies shall pay for the operating expenses of the incubators from the annual budget.
- The institute can approach alumni to create a start-up incubation fund and deploy the funds into the incubate companies.
- The incubator shall organize “Demo days” and VC/funding agency visits aimed at raising investment finance and providing feedback to incubators.
- Most start-ups need seed capital to get off the prototype stage. Many non IT start-ups may need larger seed capital and perhaps even later stage capital to commercialize the idea. The start-up incubation guidelines strongly recommends creation of a seed fund to support early stage investments needed to bootstrap this ecosystem. The fund may be used to acquire minority equity in the venture with reasonable exit clauses that makes the scheme self-sustainable by ploughing back any gains into the program to compensate for investments that may not yield any returns (in keeping with high –risk nature of start-ups)

EXIT

- Entrepreneurs should be allowed to buy back shares at a specified internal rate of return as decided by the institutions and the holding company. If the start-up has risen external funding at some valuation and the external funding agency wants to acquire the incubator shares in addition to the investment, the shares held by the incubator can be acquired at the same value as the investment or at the IRR whichever is higher.
- Exit money should be utilized as per prescribed guidelines of institution. For the holding company, the funds should be ploughed back into the seed fund. The aim of the holding company should be achieved financial break-even through accrued sources in 5-10 years.
- Exit criterion: The incubate companies should leave the incubator, if,
- They have completed the maximum tenure. An extension of 2 months can be given at the end of the 24 months period based on review by the managing board as exceptional case. No extension after 36 months is permitted.
- The growth of the incubate company exceeds the maximum space that is available to be allocated to an incubate.
- Underperformance or un-viability of the business case .

- Incubate meets any of the following criteria
- Enters into an acquisition, merger or amalgamation deal or reorganization deal resulting substantially a change in the profile of the company, its promoters, directors, shareholders, products or business plans, or when a company plans for a public issue.
- Change in promoters /founders team without approval from the centre management.
- Gross indiscipline or unacceptable behaviour towards other incubates companies, incubator staff/officials, service providers or mentors/advisors. Such cases should be reviewed and decided by the holding company management with careful attention to detail.

Table 7: Step by step progress of setting up the Incubation centre

- | |
|--|
| <ul style="list-style-type: none">• Creation of Section 8 Company• Appointment of Board, CEO and other staff in company• 3. Advertisement to be released and promotional workshops.• 4. Adequate space made available• 5. Infrastructure developed• Interviews for the incubatees appointment and selection• Expenditure incurred and utilization certificate issued |
|--|