Postgraduate Programmes in Design: Creating New Horizons for Design Graduates in India.

Shashank Mehta

Faculty of Industrial Design, National Institute of Design, Ahmedabad. India

Tel: +91 79 2662 3692 Fax: +91 79 2662 1167 email: shashank@nid.edu

Abstract:

Application of novel design concepts and enterprising design practitioners are the need of the hour in contemporary India. As it is emerging as one of Asia's most prosperous economies, India must acquire a competitive edge over other nations by introducing specialised design inputs that cater to specific domains. However, India must also endeavour to nurture the skills of its design graduates, as the latter do not have enough opportunities to undertake specialisation in a particular design area of their choice. The present study focuses on arriving at suitable directions for establishing a comprehensive postgraduate programme in design. This programme would be at par with international standards. It must also offer design graduates in India, varied opportunities of specialisation. Such a postgraduate programme, would create a corpus of new knowledge in the field of design, design practice and design research; that is specific to the Indian context. It will help refine, improve and update a design student's problem solving capabilities, support design processes and help develop design tools and methods accordingly. Ultimately, this would elevate the standards of design education and design practice in India.

Key Words: post graduate programmes in design, approach, structure

1 Introduction

Presently in India, postgraduate programmes in design are offered at various design institutes across the country. These programmes are of two or two and half years duration (four to five semesters). Generally, the graduates in Engineering, Architecture, Interior Design, Fine Arts or equivalent, apply for these postgraduate programmes [1]. The students qualify for these courses through design aptitude tests which are conducted across the country. As the students joining these programmes are novices to the field of design, these programmes initially focus on developing the much needed design attitude, skills and design techniques in the students. The first two to three semesters of these programmes are devoted towards providing prerequisite skills and experience, after which the students embark on various design related projects of increasing complexity. Thus, the post graduate programmes offer students an opportunity to explore new design disciplines, thus facilitating the horizontal growth of their skills and capabilities. The approach is to enable the students to bring about versatility in their design methodology and remedy those problems that are specific to the industrial, social and government sectors.

Thus, there is little difference in terms of the objectives, approaches and the curriculum delivery methods between both the graduate and postgraduate programmes. Education at both these levels focuses on training the students as future practitioners of design, emphasising largely on the student's problem solving ability. This shows that there is very little demarcation in terms of design skills, techniques and capabilities to handle design problems; which a student accumulates at the end of a graduate or postgraduate design programme in India. This leads to undue competition in this miniscule group of design students. This also limits the scope of design, largely to the aesthetic aspects and the students' problem solving ability. Therefore, these aspirants have to explore their options for further studies with other institutes/universities outside the country. Design being largely based on contextual inquiry, these students would face difficulty in terms of adjusting to a new culture, while at the same time; India as a country also looses the opportunity to undertake further in-depth design research in its own culture and context.

2 Postgraduate Programmes in Design: The Imperatives for Specialisation

The Indian economy is presently going through a phase of robust growth. The industrial sector, including the small and medium enterprises and the services sector have seen phenomenal growth during the past decade. Liberalisation has enabled Indian industries to benefit tremendously from its forays into the global market, while

the emerging global 'knowledge economy' has forced businesses to develop new approaches to design, product innovations and their marketing. The latter are influenced by their intellectual capital, integrated product development processes and collaborations. It has been acknowledged that new-age economies would be driven by design and innovation in the future. Thus, the designers' challenges and responsibilities have increased manifold.

The Government of India, on realising the increasing importance of design in the country's economic and social development, announced its National Design Policy in the year 2007. The policy envisages raising Indian design education to global standards of excellence, and it also aims at making India a major hub for exporting and outsourcing of designs [2]. The policy also takes stock of the yawning gap between the demands for, and the supply of design practitioners in India. In this context, it has envisioned a roadmap for introducing design at multitered levels of education. The policy clearly acknowledges that, if technology and management were the driving tenets of business and industry in the past, the future clearly belongs to design-led innovation. Therefore, the India's design education would need to keep pace with the changing times and update its curriculum to meet the present demands for accelerating the nation's progress.

Formal design education in India began with the setting up of the National Institute of Design (NID) in the year 1961, under the aegis of the Ministry of Commerce and Industry, Government of India [3]. NID's approach, evolved from the traditions of Bauhaus and the Ulm schools of design education (especially its product design curriculum), has today matured and developed a unique design methodology most suitable to India and other developing countries with similar socio-economic conditions. The other design institutes/departments subsequently set up in the country, have developed their own curriculum and design methodologies that are most appropriate to India's present economic status.

These time tested design methodologies have been put to effective use by their students, faculty members and alumni to address a host of problems faced by various sectors like crafts, rural sector, NGOs, and small and medium scale industries to large scale industries.

There has been an increased demand for innovative designs and design practitioners in India. This has necessitated the establishment of new design institutes and more importantly the need for well-qualified design educators. The industries also need design managers and design strategists who can help them manage and plan future directions for their products and businesses. Only a designer, who is competent to undertake in-depth design research, can understand the increasingly complex user needs, aspirations, cultures and contexts. Therefore, the nation requires designers having refined skills, sensitivity, and the capability to undertake complex design tasks with a broader perspective and global outlook. Coupled with this, their ability to articulate and present, to critique and develop new knowledge are some of the vital attributes expected from these designers.

The postgraduate programme in design should be such that it offers opportunities for design graduates to refine and develop their skills, capabilities and knowledge in their respective design disciplines. India's existing design institutes have the requisite infrastructure and vast experience for offering specialised postgraduate programmes. However, a suitable framework for the programme needs to be developed keeping in mind the curriculum, content and teaching methodology. The programme should offer adequate flexibility, opportunities and challenges for the students. In this era of globalisation, it is imperative to frame a curriculum that matches international standards. At this stage it is important to know what kind of postgraduate programmes in design are being offered by some of the renowned design institutes across the world.

3 Post graduate Programmes in Design: The Approach

The Royal College of Art, London; UK, is the world's only postgraduate university of Art and Design and it offers postgraduate programmes of two years duration (six quarters). Its prospectus interestingly says, "Postgraduateness is primarily and constantly about deep learning." The postgraduate courses here, lead to MA, with either theory/course or projects as options.

"The successful student..." defines the RCA prospectus, "...should not only be capable of applying the skills and knowledge of today, but also of thinking and practicing beyond these in substantial and demonstrable ways." For this, the RCA prospectus recommends, "Education at postgraduate level must be advanced, focused and independent. By combining these three, students demonstrate what is known as 'mastery' – i.e. demonstrable skill, appropriate knowledge and maturity of practice."

The postgraduate programmes at the Art Center College of Design, one of the top three design institutes for postgraduate programmes in USA, lays greater emphasis on critical thinking, theory and research. It also emphasises on recognising the importance of art and design in the world today. The postgraduate programmes here are distinguished by their application of theoretical, conceptual and research-based thinking to realistic problems in art and design.

"The combination of discipline-based professionalism and critical investigation..." states the college's prospectus, "... produces entrepreneurial and creative leaders who will redefine the landscape of art and design in the 21st century" [4].

"Graduates of the Master of Design will have enchanted, highly developed capabilities, which will place them at the forefront of their field of design practice", states the Monash University, Australia prospectus. It also states, "Through the completion of sustained design projects, students are required to demonstrate high-level planning, resourcing, implementation, completion and evaluation, culminating in an expert understanding of the professional design process." Monash University offers M.Des. programmes for a duration of one and half years, and is one of the leading universities of Australia [5].

The Design School, Stanford; USA, now famous as the 'd.school', believes that, in this era of innovation-driven economies, "Design thinking is a catalyst for innovation and bringing new things into the world". In order to accomplish its vision of being the best design school, its postgraduate programme aims to prepare "...future innovators to be breakthrough thinkers and doers, use design thinking to inspire multidisciplinary teams, foster radical collaboration between students, faculty and industry and tackle big projects and use prototyping to discover new solutions." "Being good design thinkers..." believes the d.school, "...means being human centered, prototype driven, and mindful of process in everything we do." The d.school offers postgraduate programmes which has a duration of one and a half year [6].

These programmes are delivered to offer maximum flexibility to students. They are offered both, in full time as well as part time mode, and have a flexible duration within which students have to complete the course. Thus, students can regulate the pace of their studies and if he/she has a compelling reason for taking a break from studies, the student in question has the liberty to rejoin the course at a later stage. The content of each programme concentrates around key research areas or themes such as user-centered design and sustainability, and design as a service. Each of these domains is discussed elaborately and thorough learning is imparted in the same. As Prof. Christopher Frayling, former rector; Royal College of Art recommends, "The Art, Design and Communication at the postgraduate level should be taught through 'project-based education'; face-to-face teaching' and 'professional orientation' "[7]. Depending upon the nature of these programmes, they may aim at the development of strong vocational focus, or aim at the development of knowledge and understanding of a specific subject, discipline or interdisciplinary field. There can be postgraduate programmes that can encourage students to take up doctoral research.

4 Post graduate Programmes in Design: Aims and Objectives

Some of the basic aims and objectives are common to the postgraduate programmes in design offered in various institutes across the world. They are also relevant to the Indian context. The aims and objectives are enlisted as under:

- To enable students to engage in a deeper understanding of individual disciplines.
- To refine students' design skills and expand their core knowledge to a superior level.
- To help designers sharpen their professional practice and thereby improve their effectiveness within the industry.
- To keep the students updated with the current developments in design, design practice and design research.
- To undertake original research in the field of design and design related issues.
- To enhance the students' critical ability so that they can analyse and synthesise information from a holistic perspective.
- To enable students to develop their own methods and techniques for design research and design practice.
- To conduct discourses on design and encourage students to participate in debates on design research.
- To enable students to produce a balanced portfolio of high quality designs.
- To develop knowledge that enables future designers to cope with the increasing design complexities.

5 Postgraduate Programmes in Design: Structure

The duration of these full time programmes ranges from one year to two years, whereas the part time programmes can extend up to four years. The Master of Design (M.Des.) programme at the Illinois Institute of Technology, Chicago; USA is a two-year, 54-credit-hour degree programme that concludes with a project demonstrating the application of new theories and processes to given design problems [8]. The Domus Academy at Milan, is Italy's premier design school which offers postgraduate programmes of one year duration. The University of Art and Design, Helsinki; Finland offers an integrated programme, MA (design) that takes five years. The Master in European Design, (M.EDes.) is the postgraduate programme formed by the collaboration of the seven best design universities in Europe. It provides students an opportunity to travel and experience reality from an individual perspective. This programme is conducted in three different design schools, and it provides students a wider perspective on the design profession, along with a deep cultural understanding of different design contexts [9].

The UK today offers over 350 postgraduate programmes in the field of art and design. Most of these MA programmes are usually of 48 weeks duration, and are divided into three quarters. The part time MA courses are of 96 weeks duration [10]. The programmes at the Royal College of Art are of two years duration. The courses offer a large number of group projects / platforms where both the first year and the second year students are provided an opportunity of working together. The courses, lectures, seminars, workshops and visits are interconnected with these projects. The programme gives importance to original contributions and expects the students to undertake substantial amount of research. This gives the students an exhaustive knowledge of their subject. Similarly, at the Art Center College of Design, USA, the postgraduate programmes encourage dynamic collaboration and exchange amongst the students from various postgraduate and undergraduate programmes on design.

Depending upon industry requirements, the needs and aspirations of the students, and the institute's willingness and capabilities; some of these programmes are also offered as postgraduate diploma (PG Dip) of two quarters, or as postgraduate certificate programmes (PG Cert) of one quarter duration. The Domus Academy, Milan offers a series of short courses of two to six weeks duration. These courses provide opportunities for the practicing/working professionals/designers to update their knowledge and capabilities. These programmes are offered during their winter and summer breaks. Though of short duration, these programmes, give ample opportunities to students to enrich their experience, enhance their creative ability and in the process update their knowledge. The courses, both full time and part time, are structured as modules of block timings. The course has clearly demarcated the duration for each course, but it is left to the discretion of students, who can decide when to discontinue the course and when to rejoin the same. The emphasis, while developing these programmes, would be on "fitting around the learner's need."

The post graduate programmes offer the students a focused period of study, in order to develop their personal project ideas to a mature level. Such a project must also have complete relevance to their respective disciplines. This would provide the students an opportunity to experiment, reflect and rethink; an opportunity to improve and learn new skills and approaches, and lastly an opportunity for professionally updating their knowledge. "The key to a successful postgraduate course..." mentions the RCA prospectus "...is the balance between the scaffolding and independent learning." The postgraduate courses should thus be structured with an objective of providing the student with ample freedom and flexibility; while choosing the course of his/her interest. This would provide the student time for internalisation and experimentation. This can be facilitated even further, through an environment that encourages experimentation, risk-taking (failure included) and the breeding of new affinity groups for cross-fertilisation of ideas. Careful scaffolding through right balance between the students' initiative and academic/faculty support would enable the former to become independent learners. The regular pattern of study would involve tutorials, seminars, lectures, real life exposures and research built around the student's personal project. Students will be encouraged to take up group projects that strengthen their autonomy and also provide insights into real life experiences.

The postgraduates of design must equip themselves with skills, which would make them experts in their professional practice. For this, they need to possess a minute understanding of their chosen subject area. They must have an ability to initiate research and confidently solve the problems in the context of design. A high level of motivation and commitment, along with the capability of undertaking distinctive design practices that challenge the established parameters, can elevate the quality of their works. The Royal College of Art prospectus says, "Students should complete their postgraduate studies displaying and defending what is known as 'mastery' – as in 'Master of Art'."

6 Postgraduate Programmes in Design: Student Candidates

It is mentioned in the University of Central Lancashire (UCL) prospectus (2002) that, "Teaching and learning techniques in postgraduate programmes are more student oriented than in most undergraduate courses." The prospectus further states, "The students are expected to take responsibility for their own learning and to carry out independent study and research which will be intellectually demanding and contribute to personal development" [11]. The candidates are selected mainly through interviews and the portfolio of their work experience. Apart from the creative attitude and analytical ability, an important criterion for selection is the maturity and readiness to undertake postgraduate study. Talent, ambition and the potential to include new dimensions to the discipline of design are the other qualities students must possess. The underlining objective of these postgraduate programmes is to enable the students to explore the discipline by themselves and arrive at a confident definition of their own. Institutes therefore ask the students to define and write about the project of their interest, in the application form itself (generally for the one year postgraduate programmes). This point is discussed at length with the student during the interview process.

7 Postgraduate Programmes in Design: Faculty and Staff

The faculty member, in this kind of an open and flexible learning system, plays a crucial role both as an advisor and as a facilitator. Through the faculty's constant guidance and support, the student can understand his/her weaknesses, set his/her own goals and groom himself/herself to become an independent learner [12].

The emphasis here is on enabling the students to develop an identity of their own. Since the learners would be from diverse cultural and social backgrounds, the faculty members must refrain from imposing any particular design identity or specific style. In such a scenario, the relationship between the faculty and the student can no longer be one of giver/teacher and taker/learner, the students should be encouraged to grasp and learn from his/her environment and through various other modes.

The personal/social skills of designers are equally important for their effectiveness within the design team. Therefore, the students should be constantly encouraged to work in a group and learn from one another. The faculty member's role here is, to engage the students in constant debate and discussions on various aspects of design. The faculty contact time, particularly at the postgraduate level, is normally kept at minimum, so as to give the required space to the student for his/her self-directed research and learning, explorations and the time for internalisation. The faculty inputs and guidance to the students, therefore, needs to be crisp and focused. As the assessment criteria at the postgraduate level are usually lenient, it mainly depends upon the faculty members' ability and experience to recognise original thinking and creativity.

Generally, upon joining the postgraduate programme, each student is assigned a faculty member who acts as a mentor. The mentor constantly monitors the growth and progress of the student and helps the latter in selecting the courses of his/her interest. The faculty therefore, should comprise of a good mix of academicians, design practitioners and design research experts.

The studio/workshop support staff also plays an equally important role in the success of the postgraduate programmes. At the post graduate level, the student needs to conceptualise such projects that can demonstrate their skills and originality of thinking. They must spend considerable time in the studios/workshops for experimenting with new ideas and for creating modifications and testing the final outcomes. This sharpens the risk-taking ability of students. The positive and active support, guidance and encouragement from the studio/workshop staff members becomes essential here. At the postgraduate level, the emphasis is always on self-learning, so the students are encouraged to take their own decisions. As the students are enthused with a 'can do it' attitude, it becomes essential for the staff members to extend their encouragement to the students' learning process. With the flexible and elective based structure of the postgraduate programmes, studios/workshops have to be kept open and ready at all times. The staff members must be well trained and well informed about the latest developments in the field of design. This is because, most of the students at the postgraduate level have an awareness about the basic skills, and many of them are equipped with professional experience.

8 Conclusions

Design is now recognised as an indispensable part of any successful business. Today, design is no longer seen as a service industry that has evolved from craft based specialisations, but as an integrating and guiding intelligence within the innovation process. New design disciplines are powered by ubiquitous technologies, growing interests in collaborative practices, and increasing awareness of the need to preserve the local while

embracing the global [13]. The role of the designer has also changed from that of creative artist to that of a strategic innovator.

Given the alarming rate of unemployment in our country, design in India's cultural context can endeavour to preserve the values and traditions, and help generate new employment opportunities. Design can help the large crafts, small and medium enterprises and service sectors of the country that are typically characterised by their constraints of skills and resources. It can improve the quality of their products, systems and services.

The demand for designers trained as design managers, design strategists, design researchers and/or as design educators has increased in the current economic scenario of India. Therefore, there is a need to develop comprehensive postgraduate programmes for design, which can enable design graduates to take up further study in their field.

The postgraduate programmes in design are targeted specifically at designers, and a programme that offers enough flexibility would open up major options for the Indian designers of all genres; irrespective of whether they are new entrants in to the field of design or designers with considerable amount of work experience. These programmes should enable students to evolve into designers of a very high calibre. The proposed postgraduate programmes in design can be categorised as below:

- Type I: Postgraduate programmes as offered at present, wherein graduates from disciplines other than design are allowed to take up the course. However, these programmes should particularly focus on specific domain areas, instead of only providing training at the generic level.
- Type II: Postgraduate programmes that provide opportunities to designers to undertake further study.
- Type III: Integrated postgraduate programmes for the undergraduate students to continue their study and complete their post graduation at a stretch.

It is proposed that, while the duration of the existing postgraduate programmes (Type I) is of two to two and half years and may be retained as same, postgraduate programmes offered to designers (Type II) could be of one to one and half years duration, whereas the integrated postgraduate programmes (Type III) may be of five to five and half years duration.

The postgraduate programmes should offer maximum flexibility for the students to opt for either full time or part time study mode. To begin with, the PG programmes for the designers (Type II) should be offered both through full time as well as part time mode. The students of the integrated PG programmes could also be offered similar flexibility of part time study, during the later part of their programme (last one to one and half years). These PG programmes should be offered with both the options of either project based study or research based study.

It is essential that the research-based postgraduate programmes be built around the institute/department initiated research projects, so as to take up cutting edge, futuristic research in the newer domains relevant to the department, institute and the country as a whole. Crafts and design, design for social communication, digital technology and design, design for agriculture, design for small and medium enterprises, design trends in the Indian rural consumer markets; are some of the research domains appropriate to the Indian context. The postgraduate programmes can centre around research in such domains.

The postgraduate programmes should encourage the student to undertake a major research project during the period of his/her study. This research can finally culminate into a thesis or a document of the entire work. Lectures, workshops and minor projects can help the student to work more efficiently on his/her main project. The project/field of study should thus be decided in the beginning, preferably during the interview itself. The student should be put under the guidance of a mentor, who will constantly monitor the student's progress.

The emphasis should also be on the documentation of the entire study as the department can use the documentation as case studies for undergraduate or postgraduate students. The project should also give due emphasis on the documentation of the present scenario, culture and trends that could be explored while undertaking future research projects.

Depending upon the nature of the projects, the financial help and time available and student's inclination; the duration of the study may vary and the department can accordingly offer the same as short duration certificate programme.

As far as possible, the programme should be linked to real life/ research projects either sponsored by government or industry. The designer working with a particular industry, may develop a project around the same and take up further study on a part time basis, while still working within the same industry. Therefore, the industry could sponsor the study and also benefit from the findings. Also, the practicing designers could develop a proposal based on their on going project, and undertake study that will benefit both the student and the institute. The full time student designer of the postgraduate programme may also be involved in teaching the undergraduate students and/or assisting the faculty members for developing course work and other modules for the subject.

Sponsorships, stipend or financial assistance should be arranged for the student designers who have undertaken fulltime study.

The postgraduate students should be actively involved in institutional and organisational tasks such as organising conferences, seminars and workshops. The institute, while providing required support and facilities to undertake the study, should set a benchmark and maintain excellence in terms of the outcome of the study and the programme as a whole.

The students can study user behaviour and analyse emerging trends. Strong empathy with the user will help them understand the cultural sentiments that revolve around design contexts. The students can gain a wider perspective on the design profession and create an appropriate balance between user aspirations and manufacturing constraints. With their refined skills, they can create high quality design solutions. Strong entrepreneurial and managerial skills would enable these postgraduates, set up their own design studios, take up challenging design projects, set up a successful business of their own products/designs. They can also work as design managers, project coordinators, motivate the team members and collaborate with other partners and industries for successful design developments and their implementation.

The proposed postgraduate programmes in design, would help cater to the diverse design needs of the country's industry, government and social sectors. The postgraduate programmes of the three categories already discussed, would help generate diverse design talents in the country. The graduates and postgraduates of each of these programmes, with their unique strengths, would complement each other and work towards promoting design within the industry and the Indian economy as a whole. If all the proposed ideas are initiated in the right spirit, elevated standards of design practice in India can become a reality.

References

- Disciplines. Design in India. http://www.designinindia.net/everywhere/disciplines/product-design/institutions/schools-india.html, accessed 26.03.08.
- National Design Policy, National Institute of Design, www.nid.edu/ national design policy.pdf, accessed 24.03.08.
- 3 Katiyar, Vijai Singh, Mehta Shashank (eds): 2007 Design Education Tradition and Modernity, National Institute of Design, Ahmedabad.
- 4 Programs. Art Center College of Design. www.artcenter.edu/accd/programs/graduate/graduate.jsp, accessed 24.03.08.
- Art and Design. Monash University. www.artdes.monash.edu.au/study/course/pgdesign-coursework.html, accessed 24.03.08
- 6 Our Vision. Institute of Design at Stanford. www.stanford.edu/group/dschool/big_picture/our_vision.html, accessed 24.03.08.
- 7 Royal College of Art. Postgraduate Art and Design Prospectus 2002-2003: 2002 Royal College of Art, London.
- 8 Degrees and Programmes. Illinois Institute of Technology. www.id.iit.edu/310/, accessed 05.03.08.
- 9 Studies. University of Art and Design, Helsinki, http://www.tail.fi/en/osastot/muotoilu/muotoilun osaston koulutusohjelmat.html, accessed 24.03.08.
- Design. Goldsmiths, University of London. www.goldsmiths.ac.uk, accessed 05.03.08
- 11 University of Central Lancashire, <u>Prospectus:</u> 2002 University of Central Lancashire, Lancashire.
- Shashank Mehta, Proposal for Introduction of Four year Graduate Degree Programme in Product Design: 2007 Rept. Delhi.
- 13 Katiyar, Vijai Singh, Mehta Shashank (eds): 2007 Design Education Tradition and Modernity, National Institute of Design, Ahmedabad.