JUGAAD-AN OUT-OF-THE-BOX APPROACH IN DESIGN PROCESS

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ABSTRACT:

It is often said by members of design community that design isn't just about making a product look attractive also about its functionality, purpose and sustainability of design. A functional and a purposeful design communicates well with the audience and showcases its ability to fulfil the need for which it is created. In India, we often use the term "JUGAAD" to either fix a problem or to improvise the functionality and the purpose of design.

This approach is basically used with local and   low cost resources within one's reach and hence the constraints. Use of minimalist available resources to maximise the impact.

 Creativity may be limitless but design is dependent on constraints. To generate and raise curiosity and sustain interest levels we need to create unique solutions rather than offer standard solutions. Every aspect has its own pros and cons. Though in most cases "JUGAAD" is the answer to temporary situational issues and crises, it also has its own set of benefits. It focuses mainly on fixing of a problem to create a usable and an effective timely experience. It could very well possibly lead to product innovation in future.

 The approach of "Jugaad" is used in every aspect of design, may it be architectural, interiors, advertising, fashion, events, crafts etc .Design process and its execution is dependent on various ancillary services and fabricators, and a good fabricator is a skilled craftsperson.

 A craftsperson understands the effect of "JUGAAD" because of the availability of limited resources around him and he happen to recycle certain objects to make the best use of it and hence making it environment friendly. This is a challenge for a design educator to blend the spontaneity, hand craft and technology for the future designers. The paper discusses

an approach in which inputs on design concepts, process including prototyping and cost effective can be brought back in design education at the time when the usage of technology is overpowering the utilisation and workability factor of an effective and purposeful design.

As a design consultant and an a design educator this paper describes the experience of past 18 years of teaching UG and PG students of design and communication in premier design institutions in New Delhi. It also discusses the understanding of the process, the usage and importance of "Jugaad" to students in their studio assignments as well as market assignments and also make them understand the usage of the available material, :time constraints and the acceptability of the challenge of the brief provided by the client including his constraints.

KEYWORDS: Jugaad; Innovation; Constraints

INTRODUCTION

Design is an art with expectations, patterns and consistency .It is the space where art meets science and yes it can be limiting. As a good designer the thought, the process and the execution has to be interactive, accessible consistent.

The limitations need to be understood by designer right from the introductory stage when they enter a professional design school to study design. It is easy for a design student to get into the habit of working with the tools, materials and processes as directed by his mentor or studio guide.

This is the transition of the student from the higher secondary level to a university level. After four years of bachelors level and maybe two years at the masters level, the design students enter the real world of design where they have to interact with many other professionals, craftsperson, skilled and/ or unskilled labour including fabricators, clients etc., take their own decisions, meet strenuous deadlines, work under financial constraints or budgets, think of spontaneous or alternative ideas etc. This situation at times poses a real challenge for the young designer to cope up with and it limits the thoughts and execution process.

As a design student and a teacher of design, I feel that there has to be more to be informed to the students. Their resources, surroundings, materials, innovative thinking and spontaneity has to be explored.

A good design needs to speak well not only because of its good looks and appearance but also because of its function, its movement and even the kind of material which has been used for its construction. Right from the brain storming, prototyping and execution stage, design needs to speak of its attributes.

A design student at times may not realise that the materials, different techniques or elements surrounding him can actually help him out from the limitations which are actually curbing him to move beyond.

Students in design school come from various social strata and economic backgrounds. Most of the time they are unprepared and do not think of the expenses they are going to incur. They tend to spend more than what they expected and are unable to save for further learning processes. On the other hand, there are times they limit their resources and thinking processes and then get stuck with ideas. They believe that more the money they spend on their studio assignments the more marks they will get and the assignments will look fancier. This restricts them from innovating

and using simple ideas to execute effective communication. They also like to furnish themselves with the luxury of different tools and ideas. The complex the design thinking process and its execution is, the more chaotic it is. The simple, observational or well thought   design process makes the student more consistent and a sensible designer in the trade.

As a design educator, I feel that the freedom creates chaos and a constraint helps us to understand the complexity. Basic understanding of the boundaries and critical variables in the environment that we are operating in is the key to intervening   successfully in any complex system. So with no constraint innovation does not happen and innovation is a dialogue between people and things.

JUGAAD: AN INSTANT FIX

While teaching design modules, an educator needs to inculcate the awareness about challenges involved to make a great design and find a practical way of adapting various approaches which are economical, sustainable and effective. This kind of approach can be termed as "Jugaad ". Guiding the students to work with constraints in execution and making them understand the "Jugaad" approach is what the design   schools need to incorporate and build up in the teaching process.

"Jugaad" approach does not only provide an instant quick fix for a problem but also builds up the observational skills and makes the designers understand the importance of spontaneity, availability of tools and the existing infrastructure or the elements around them. "Jugaad" according to its definition is a local hindi word commonly used in India which talks about an instant fix using whatever is best available at that point in time. According to my experience as a design

educator it is an innovative fix. It is an improvised solution born from ingenuity and cleverness. Working on a solution with a "Jugaad" approach does not require lots of resources and it is not a fad.
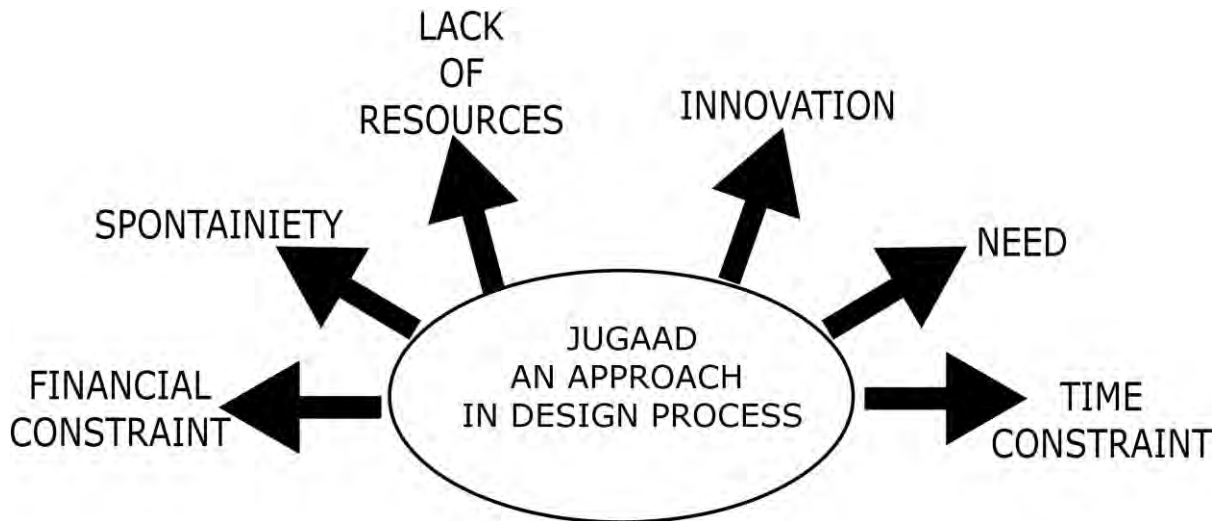

Figure 1:The main reasons for using Jugaad as an approach in design process.

"Jugaad" even though has been recognized internationally in last decade, but it is used at large only when anyone is in a problem or encounters a roadblock. In design community, be it in an institution, a design studio set up or a printing unit a "Jugaad" approach can be viewed as a quality of a genius, an alert spontaneous mind and a quick thinking approach. It even reflects the sensitivity of the designer, how he can value time limits and even handle challenges with limited or lack of resources. But on the other hand, a client can possibly reject it on grounds of an improper fix.

"Jugaad" is an out-of-the-box approach which can be taught to the design students to effectively apply it in order to serve the desired objectives of a design. Making them understand about such an approach can make them observe well, understand their surroundings well and even know about different and alternative materials. The use can range from different tools, accessories, flaws in the executed design, financial block, recycling of materials and even help them understand the concept of deadline.

THE "JUGAAD" LANGUAGE

The methods to be taught to the students in a manner that they can deal with the local fabricators in the language, the style or the technique they understand. For instance, whether it is a measurement to be shown with a piece of a rope {easily available with the fabricators} or hand creasing for a book etc. Technology is still not overpowering the units of the fabricators so if the design students understand the blend of technology and handcrafted approach then they would be able to bring out an effective and a satisfying design. The fabricators do not understand the technically crafted design till it is interpreted in their own style. In the classroom scenario if the design student is unable to imagine and not able to apply his mind, say for an example as to how to project or raise or highlight the main element in the design then he can be guided to use a double sided foam tape to do the needful because such an object is easily available with the student.

IMPORTANCE OF PROTOTYPING

Design students do not understand the importance of prototyping. They go to the final stage for creating a design. They miss certain in-between stages and ultimately the final design becomes a failure and it is difficult to make changes as it takes a lot of time and the result is not satisfactory.

The "Jugaad" approach can also be used in there are any constraints from the client. Most of the times the clients love to see a prototype but do not want to pay for it. So, if in a design school such an approach is not complex can become a guiding source for the students then they can understand the

Importance of costing and billing to the client when they actually enter the trade. During   the process, the prototype poses a lot of questions and demand answers. The questions can be related

To the materials, techniques and thoughts. The answers can come from our surroundings, our observations and sometimes a creative fix can become an innovative process.

WORKSHOP ON JUGAAD

During the process of writing my paper , I gave my students some constraints and had a one day workshop to make them understand as to how to work with "Jugaad" approach. They varied from different specializations and came out with different kind of innovative fix. Three examples are shown here and the rest will be shown in the digital presentation.
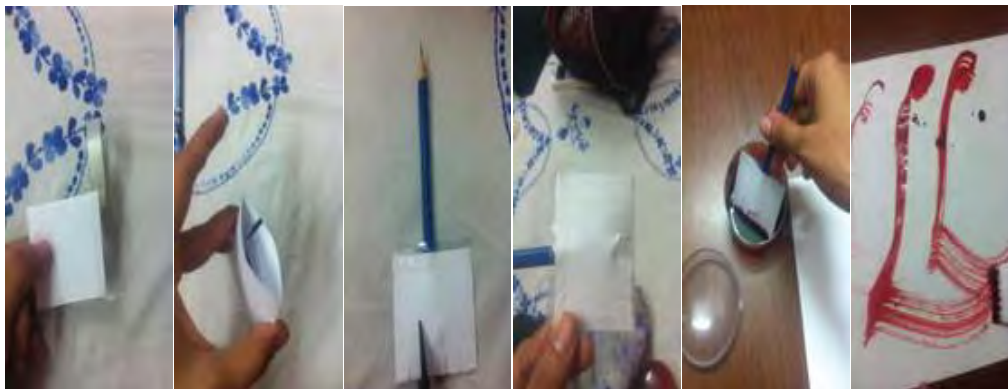

Figure 2: Making of a flat calligraphy tool.

(Calligraphy nibs and flat brushes are expensive. Making of a flat calligraphy tool for writing on bigger surface, such as poste etc. using pencil , cello tape, paper etc.)

PHOTOGRAPHY JUGAAD
"JUGAAD FOR SNOOT"

Use of metal "SNOOT" i.e, a cone in shape which is used to concentrate the lights.

Figure 3:The original metal Snoot

Purpose: It is used to concentrate light. Use to light the surface or subject to a certain area or to give a spot light effect on subject.

Figure 4: Snoot made from paste paper

Jugaad: If a metal snoot is not available the student can use pastel paper. Made cones which is kind of similar to the metal cone which gives the same kind of lighting effect but with a corner or edge softening.

SOFT FILTER

Figure 5: Soft Filter

Use of Soft Filter to soften the image:
Purpose: It is used to soften the image, mostly used in portraits when we want to soften the face.

Figure 6: The difference in the picture when soft filter is used

Jugaad : Use of black netted stockings instead of soft filter , because it also works as a softening agent in terms of lights. It can be used on the lens which actually diffuse the incoming light to the camera censor.

Figure 7: Usage of stocking net as form of Jugaad

Figure 8: Difference in picture after using the stocking net.

CONCLUSION

So, whether in animation, photography, fashion, architecture, illustration, packaging or typography, the students have to understand the importance of spontaneity, their surroundings, their constraints etc. , otherwise they will be stuck in the middle of an assignment if there is a non-availability of resources.

The design teacher should also guide them by making them understand that Jugaad is not only just a local hindi term but is an approach to innovate an idea by working with minimal resources often by using work-arounds. In other words,one can take whatever material or elements one has around them and put them in use, even if not in the original way they were intended to be used.

Design students should also be guided that low cost does not really mean low tech, but this approach can be very sophisticated and it can make the design look

Very appealing and reflect the objective clearly. In this manner they can also understand the analytical method by finding alternatives as to what works better in what situation.

I wind up with the famous quote that ""Necessity is the mother of invention" and to make our future designers understand this at the basic design school level is very important.

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