

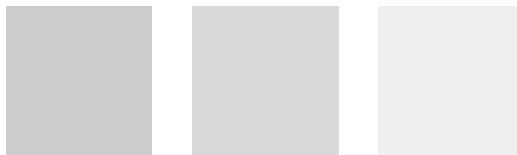


Dialogues

What is the concept of research according you?

What is the relevance of research in your field of expertise?

Team Kalpa steered the idea with expert insights from the RVCA faculty exploring definitions to research in varied field of expertises. Here are some interesting responses. Kids, here's your chance to quote them:



Dialogues



Prof. Arun Swaminathan | Architecture (Theory, Design and Consultancy)

**B.Arch (CEPT)
Design Chair, RVCA**

Firstly, to do any Project without finding out the Raison D'Etire leads to potential errors. In general, my philosophy for any action or task is that of a studied approach. Of course, there are plenty of times where Intuition takes over. However, even Intuition gets honed by experience. One must look into as many background aspects with regard to any project. Having assessed this background material and having this on hand, leaves a greater window for one to arrive at an informed conclusion. Even a child must be raised to question (the quintessential thoughts of J Krishnamurti) so that it does not blindly follow instructions or customs.

To put it in a nutshell, in my opinion, the concept of Research is one of a dispassionate assessment or appreciation of the topic in mind, culling from as many background aspects or issues and then breaking down that data to simple points of understanding so that one gets an informed conclusion in the study of that topic. In this manner, the conclusions of the Research may be of more practical use to anybody who is pursuing a subject, especially if it is Design related.

Fundamentally, there are two MAJOR areas of my research:

1. Lightweight Structures
2. Design Pedagogy

Lightweight Structures: Both in practice and in teaching, I use a 'Hands-On 'method to work out the Spatial Structures. I find that a purely theoretical approach is not satisfying at all. The above approach facilitates the student to imbibe the magic of structures and in practice, I find this the best way of communicating with the Engineer (most of whom find this field difficult coming from the Civil Engineering background). So without research (particularly of the Mechanical Engineering, World of Machines as well as what Mother Nature offers) one will be handicapped in coming up with the flow of the right ideas to conceive and build Aesthetic Spatial Structures.

2. Design Pedagogy: There are very many ways to bell a Cat and Design Teaching has many Cats to bell! Again, a very studied approach to the task on hand is absolutely essential, particularly in the fundamental stage of Design (First Year) Academics and in the Final Stage (Thesis). Also, in the Housing Studio, research provides the backbone to the Design Process. Having said this, I will add that across the 5 years of a student's academic life, it is most important that Research holds the key to the Design Process. In this, certain subjects must always go hand in hand: Climatology, Technology, Structures, Anthropometry, Sociology, and Cultural Anthropology and Regional Geography are quintessential Research Keys to a Design Studio across all 5 Years.

Prof. Bikramjit Chakraborty | Building Science
M. Conservation (SPA) | Phd. (CEPT)
Associate Professor, RVCA



The concept of research to me is “positioning the self” and “looking into the cross-section of the specific phenomena, keenly”, from a distance. Adding to that, as a next step, is a systematic recording of that observation. This keen observation helps the researcher decipher the correlation, which already exists, in reality. The “keen observation” and “drawing a correlation” is an integral part of the research process. This process needs evidence, to validate the claim, which is initially developed by the researcher based on the scientifically drawn assumptions. It is also important to identify and understand the lens of the researcher, which is going to be used to observe, decode and correlate the causative factors. The causative factors of any phenomena are the reasons that make it happen in a particular way. The amplitude and wavelength pattern reveal the nature of interrelationships between the causative factors. The understanding of that pattern helps the researcher to answer the “what” “why” and “how” questions, which the researcher has raised by looking at the conflicts and contradictions within the phenomena.

The urban transformation and change in India are one of the several relevant contemporary discourses. The political will to transform the country into an urbanized entity creates a silver lining for every citizen. Before deploying strategies to make a “one agenda” centric development, the pattern of the phenomena of transformation and change needs to be recognized as an eternal dynamic process. The complex dialectical relationship between nature, space and the human need, is to be understood to embrace the change in the urban domain. Human is the key entity, within the phenomena - “urban”. Thus, to transform the phenomena we must transform the human entity.

If we consider Nature, Spatial entity and Human entity together to create a triad, then we also need to appreciate its constant dynamic equilibrium. Thus, we may consider that in order to change the human entity we need to change the spatial entity, which the human is using and further in order to change that space, we need to change the nature. Thus, every change will create a possibility of a new arrangement, new negotiation and further, new appropriation. Each component of this “triad” is also an aggregation of several parts, which are interlinked and cohesively connected within them. The component “Human” is an aggregate of a spectrum of “human” which we can understand through the social lens. Similarly, the spatial entity is an aggregate of its physical expression that can be understood through spatial lens.

A similar method can be applied to understand nature too. But each lens also changes its position over time. The spectrum of positions over time reveals the complex paradigmatic relationship in the social and spatial domain. Now we must acknowledge here that this relationship is not a unilateral entity. It is multidimensional and thus, conflict and contradictions are inevitable. This conflict and contradiction within each entity can be observed by analysing its production and consumption process. This production and consumption process together indicate a particular “nature of cohesion”. Thus, “cohesion” can be considered as an effect within the phenomena urban. In the process of transformation, the “phenomena urban” express a range of cohesiveness, which is basically linked with its production and consumption process.

This process can be traced by studying the everyday life pattern of the Human entity. These studies are not confined by disciplinary boundaries. It can be captured through a spatial lens, or social lens and sometimes through the temporal lens. But for the holistic understanding, cross-disciplinary knowledge can be the lens for future research paradigm.



Dr. M. S. Amarnath | Art

B.F.A (B.U) | M.F.A (M.S.U, Baroda)| Phd (Jain University)

Associate Professor, RVCA

Research is very important for the growth of an individual in his discipline, particularly in academic domain. one can get great depth in any chosen area and field. One can learn the process and methodology. Perception and view can be externalised with quantitative and qualitative approaches. The researcher can get exposure to other fields and disciplines. Expression and writing skills will improve. One can find an identity in his area of research

Teaching and learning a visual language, art practice, culture, habitat, aesthetics, skill development, materials and medium, art applications in architecture, painting, sculpture, graphics, model making, installations and new media art with new and experimental approaches.

Dr. Salila Vanka | Urban Planning

B.Arch (VNIT) | M.Planning (CEPT) (Univ. Texas)| Phd.(Univ. Michigan)

Assistant Professor, RVCA



Research is important and integral to all fields of education since it helps in developing new knowledge which is built upon existing research, that reinforces or formulates new understanding of any subject or phenomenon in the field of study. Research provides a systematic and rigorous process to the researcher in building valid arguments and statements on their topic of study.

My academic interests and expertise align with the field of Urban Studies which encompasses urban history, sociology, design, planning, among other subfields. In my career, I have worked and undertaken research on the topics of urban design, governance and planning in different cities in India and the US. Urban design and urban planning are applied fields that mirror the political economy of their locales. The fields are dynamic and so must be the pursuit of knowledge in these fields. As responsible professionals, all architects, designers and planners must constantly endeavour to study and contribute to developing new knowledge on the built environment and society.



Prof. S. Madhuri Rao | Craft Processes

B.Arch (BMS, Bangalore) | Theory and Design (CEPT)

Assistant Professor, RVCA

The concept of research according to me

- Identify and awareness of perspectives on the subject
- Establish position
- Clarify and test ideas
- Critical thinking

Relevance of Research in my field

- Reassess positions, methods and technique
- Clarifying worldview and enhancing intellectual growth
- Clarifying areas of focus for exploration

Prof. Pankaj Shivarama | Lighting Design

M.A (Hochschule Wismar, Germany) | B.Arch (V.T.U, Belagavi)

Assistant Professor, RVCA



Research and practice cannot be two isolated facets of our profession. Practice informs research and vice versa! Research and its outcomes should guide us in bringing our profession closer to the user and their needs, reversing the trend of architecture and its associated domains being completely oblivious to the users and merely treating them as empirical data. In my humble opinion, research that remains just on paper without enriching the needs of our profession, and helping solve the issues at ground level is an opportunity lost.

Research, so far, has been about framing questions, to which I try and find directions, that would hopefully lead me to some clues through my interactions with students and through my practice.

It always helps when I find projects that have asked similar questions and attempted to answer the same, through different timelines and geographical contexts. These case studies reinforce the resolve in thinking out loud the same questions instead of merely contemplating on the same.



Dr. Shikha Varma | Building Science

B.Arch (NIT Bhopal) | M.Arch. Phd (MNU, Allahabad)

Assistant Professor, RVCA

Research leads to some conclusion after detailed analysis of some existing data, predicted data as well as some findings after some investigation or other scientific approach carried out in order to provide solution to some problem or to provide a different approach to some existing theory.

Research in the area of 'Sustainable Waste Management' is quite relevant in order to find a sustainable solution for waste management in the form of construction materials developed from waste products. It also includes development of new materials taking into consideration their ease in dismantling, rather than only their strength and durability aspects.

Research findings may create awareness in Architects to develop and think 'Construction and Demolition Management Plan' in the design phase itself which can lead to minimum material losses and generate minimum waste. The Design in the conceptual stage itself may have place for 'Composting Units' wherever applicable and waste collection areas for segregated waste so that in future the waste generation may not degrade the aesthetics of design as well as improve the sanitary and hygienic conditions also.

Research in waste management may also create a different vision on how waste can be treated. It can look into it being treated 'as a cultural heritage' and thus, this vision may provide a strategic approach to promote post-use materials as cultural assets. There is a need to put emphasis on research in waste management as creating new should always be clubbed with utilizing old in an innovative way so as to get rid of waste management problems as well as reducing carbon footprint and save our mother earth for future generations to live in.

Prof. Archana Vittal | Urban Design

B.Arch (VTU) | M. Urban Design (CEPT)

Assistant Professor, RVCA



Research according to me, is a quest to find something new or add knowledge to the already existing database or to find correlations between different entities in a particular case at a particular time (but that which can also be generalised with suitable measures). It is done with a focused approach on a subject/topic/area either by collecting primary data or by using secondary data.

Cities are complex and research on cities can be physical, social, cultural, economic or relating to psychology, public health and so on. In any profession, research informs design and can bring innovation, new insights and experiences into practice. Urban design, which has several definitions according to place and context, being interdisciplinary and varying broadly in scale and complexity from the design of transportation networks of entire cities to the design of a small curb on a street, can also greatly benefit from research and make our practice stronger.

For example, the pandemic has shaken the entire world in just a few months. Some blame the strong connectivity in cities, some the high density in cities, some have quarantined themselves in the suburbs and rural areas to stay safe considering cities riskier to stay. To prevent or at least tackle similar situations in the future, conducting various specific researches to find out what were the factors and conditions of our physical environment of our cities which were conducive for the rapid spread of the virus, becomes crucial and may completely dictate the future design of cities and urban spaces. Other than this, in general, the world is urbanizing rapidly and is connected like never before. The pandemic that spread so fast from one part of the world to the entire world, is a live evidence to this. India, among other several initiatives, has also undertaken the smart cities initiative which is under progress in several cities. But due to the lack of ground data, no one exactly knows how it is benefiting the citizens or the country at large. Research in such areas are highly beneficial to question and adapt various practices and policy level decisions.



Prof. Vidya V | Architecture (Theory, Design and Consultancy)

B. Arch (RVCA)

Assistant Professor, RVCA

Research according to me would be closely related to a methodology/process involved in understanding a concept and gaining the depth of knowledge in it, by collecting data available through various sources along with field research if required, depending on the research topic. Further proceeding to the next step of analysing the facts. Not all research activities need to have a conclusion.

Research in this particular field is a wide spread topic since it covers various platforms of understanding required at different levels of pause points. It could start right from abstraction/hypothetical concept to make ideas practically work. The whole process involved in understanding and connecting the dots between multiple levels and considering the sensitive issues within these two levels in different sub categories.

Talking about architecture, one must try to understand and relate to context, climate, people, culture, materials, practical issues and also on.



Prof. Mayank Singh | Building Science

B.Arch (BIT Mesra) | M. Str Engg. (CEPT)

Assistant Professor, RVCA

Research for me, is working on an original or an inspired idea that somehow helps make the world a better place. In terms of outcomes of research, on one end of a spectrum, it can be completely confined to help academics expand on that subject front and help propagate the knowledge down to other levels - graduate/undergraduate. On the other end, it can also manifest as a tangible tool of service itself both for the layperson/uninitiated or a specialist in a day to day activity. Or it can be a work in progress anywhere in between.

In my field, there is a growing demand and interest in optimization of material and geometry to achieve better efficiency in terms of design or manufacture/construction. All this is possible with the employment of an array of tools and processes like Generative Design and CAM. Moreover, material optimization is not limited to building structures; it transcends across disciplines into medical equipment, product design, aeronautical engineering and so on. Also, the pressing need for sustainability across everything we do, furthers the necessity of finding methods and materials to achieve more with less usage and even lesser wastage.

Prof. B.S. Girish | Building Material, Construction and Technology

B.E Civil (D.S.C.E) | M.E Str Engg.(R.V.C.E)

Assistant Professor, RVCA



For me, research is anything that leads to the best use of new materials or a new practice is what I consider as research. It is a careful and detailed study into a specific problem, concern or an issue and obtaining feasible solutions using practical or theoretical or scientific methods.

Being a civil engineer, the concern is more on finding sustainable construction materials or sustainable construct practices and technologies altogether. My areas of interests are mainly about new environment friendly materials or sustainable materials. I am also interested in research on developing design considerations for lateral loads resistance. The mentioned areas require a lot of research to be undertaken to get feasible and adoptable results.



Prof. Shweta Pedaparthi | Building Material, Construction and Technology

B.Arch (VTU)

Assistant Professor, RVCA

Research to me, is the ability to explore intensively on particular concerns and propose for radical and pragmatic solutions.

The relevance of research in my field of expertise is immense.

In times where the world is moving towards the idea of sustainable options, there is a strong need for research to find new materials and construction techniques that can help reach the goal.

