

Comparative Analysis between **Design Education of Germany and India**

Anirban Maiti | 156130003

Master of Design (ID) | Industrial Design Centre
Indian Institute of Technology Bombay India

COMPARATIVE ANALYSIS BETWEEN DESIGN EDUCATION OF GERMANY AND INDIA

DESIGN RESEARCH SEMINAR

PDSPL - 166

SUBMITTED BY

ANIRBAN MAITI

156130003

GUIDE: PROF. SUGANDH MALHOTRA



INDUSTRIAL DESIGN CENTRE

INDIAN INSTITUTE OF TECHNOLOGY, BOMBAY

2017

“Our guiding principle was that design is neither an intellectual nor a material affair, but simply an integral part of the stuff of life, necessary for everyone in a civilized society”

- Walter Gropius

Design Project III (IDP-603)

Comparative Analysis between Design Education of Germany and India

under the guidance of **Professor Sugandh Malhotra**



IDC School of Design
अभिकल्प विद्यालय

Anirban Maiti | 156130003
4th Semester | Master of Design (ID)
Industrial Design Centre
Indian Institute of Technology, Bombay, IN

Approval Sheet

This project titled “Comparative Analysis between Design Education of Germany and India” is prepared and submitted by Anirban Maiti for the partial fulfilment of the requirement for the degree of ‘Masters in Design’ in Industrial Design. It has been examined and is recommended for approval and acceptance.



Signature of Project Guide
Professor Sugandh Malhotra

Declaration

This work done as a part of written submission under this report “Comparative Analysis between Design Education of Germany and India” as Design Research Seminar (DRS) for post graduate program in IDC School of Design, IIT Bombay, India under the guidance of Professor Sugandh Malhotra.

I hereby declare that, all the content of this project is my own original work with appropriate reference information or links provided wherever due.

Any violation of the above will be cause for disciplinary action by the institute.

Anirban Maiti

Anirban Maiti
156130003
Master of Design (ID)
IDC School of Design
Indian Institute Of Technology, Bombay

Acknowledgment

I am heartily thankful to my project guide Prof. Sugandh Malhotra for encouraging me at every level to take decisions for my project and believing in me when I chose one option over the other.

I am highly grateful to my friends, fellow classmates and parents for encouraging me when I felt lost and constructively adding to my project with their valuable feedback in every possible way.

Abstract

This report will give a clear overview about the design education system of two countries - India and Germany. It will also give the main design principle and design thoughts of two different countries over respective social and political background. It will help to know about creating relations and exchange design thoughts to enrich global knowledge overall.

Keywords

Quantitative Content Analysis, Text Mining, Word Association, Co-occurrence Network, Multi-Scaling Hierarchy

Table of Contents

Name of the chapters	Page No.
1. Introduction	14
2. Objectives of the project	16
3. Importance of the project	18
4. Previous studies in this area	20
5. Methodology	22
6. Results and Analysis	30
7. Inferences	40
8. Future scope of Work	42
9. Conclusion	44
10. References	46

01

Introduction

About this project

This is a quantitative content analysis research based project to look into course curriculum of several famous design institution from two country - India, the fastest growing country and Germany, one the most developed country and how they are very different in principles and focus of education system with respect to background history and present political & socio-economical situation. After this, synergy between these countries will discussed and accordingly will conclude with relevant inferences from the experimentation.

02

Objectives of the project

Objectives of the project

Major objectives of this project are:

- (i) To trace Principle of Design Education of the both the country - India and Germany
- (ii) Influence of different culture to enrich present design curriculum and develop future courses.

03

Importance of the project

Importance of the project

The major importance of this type of projects are finding answers of several unanswered questions or to dig out latent truths.

There is always a clash between a developed and a developing country. But as India is one of the fastest growing country, it is quite to follow developed country like Germany to come up with new design solutions which should not only solve the problem locally but also motivate young designers to look forward for the holistic approach which will be both culturally enriched and technically modern and also can be validated by the enthusiastic users for the overall development of the country.

This project can give a clear direction for the future changes in design curriculum for the famous design institutions and how can be the better solution come in collaboration with the good and diversely knowledgeable people. It will help Indian design student to align with global trends and world class scenario.

In this project, several issues will be discussed passively and come up with the logical inferences to be taken care in the near future.

04

Previous studies in this area

Previous studies in this area

In different sector, quantitative content analysis is used for passive understanding of different latent areas to go in depth and study the facts underlying. In few cases, direct questionnaire doesn't help much to get enough information. Then it is appropriate to analysis different information which is directly available in different sources like online website, social networking sites, several blogs and other materials which is open publicly.

It is very well known method to analyse information and statistics and predict future trends or incident in pretty simple logical way.

Previously, analyst people and several researchers did different work in the area of **Travel Behaviour of Tourists, Unanswerable Questions of different secret diseases, Social Impact of Different websites, Effect of E-learning, Risk Management Analysis of different news in several medium** etc. In all the above noted areas asking or taking interviews of actual users is tough, so passive analysis is preferred and this method gives non-manipulated results in scientific way.

So, it is a well established method to analyse different design curriculum of different country and come up with the possibility factor of collaboration and knowledge exchange. It is quite relevant and similar process of content analysis by KH Coder Software.

05

Methodology

Methodology

It is very important for every design school to have a good relation and exchange of thoughts to be at par with the global situation and universal user needs. It depends on diverse design perspectives and course curriculum of different eminent design schools which contribute good designers for future development. Comparing perspective of different design schools is very tough to do in real time scenario due to lots of limitations and restrictions. But we can do it through scientifically passive method by comparing different informations provided on the website and brochure of course curriculum which is open to all and which is actually responsible to connect with different students and institutions.

For this passive comparison a well constructed method has been followed in this project given below. Due to limited scope of work, the comparative analysis is done between different famous and ongoing design schools from India and Germany as both of the countries are good in design education since long back but have several difference due to political and cultural background.

1. At first, we selected all types of information available over internet from the respective websites of the design schools.
2. For better comparison three famous design schools selected from both India and Germany.
3. There is two methods of analysis. One is analysing different aspect of design schools singularly from different country and the other is comparison of similar issues over the political and cultural aspects.
4. After rigorous qualitative analysis, we have to come up with inferences
5. From this we can easily differentiate perspective of design education with respect to social background of two different countries.

This study will help in collaboration between different design schools to exchange design and cultural thoughts to enrich global knowledge.

Methodology

For this research project it is necessary to select design schools which are old & famous in both the countries and still running successfully with **diversified design streams**. These are also selected to make comparison with maximum possible design streams in both the countries.

Based upon this selected design schools for this project are:

From India:

1. National Institute of Design, Ahmedabad (estd.-1961),
2. IDC School of Design, Mumbai (estd.-1969)
3. MIT Institute of Design, Pune (estd.-2006)

From Germany:

1. Bauhaus Universitat, Weimer (estd.-1860)
2. Burg Giebichenstein Kunsthochschule Halle (estd.-1915)
(University of Art and Design, Halle)
3. Cologne International School of Design (estd.-1991)

Courses taught in these design schools are:

National Institute of Design, Ahmedabad

Bachelors of Design in Animation Film Design, Ceramic & Glass Design, Exhibition Design, Film and Video Communication, Furniture Design, Graphic Design, Product Design and Textile Design

Masters of Design in Animation Film Design, Apparel Design, Ceramic & Glass Design, Design for Retail Experience, Digital Game Design, Film and Video Communication, Furniture Design, Graphic Design, Information Design, Interaction Design, Lifestyle Accessory Design, New Media Design, Photography Design, Product Design, Strategic Design Management, Textile Design, Toy & Game Design, Transportation & Automobile Design and Universal Design

Methodology

There are extensive PhD Programs and few International Programs. Further more lots of funded projects are running under the supervision of experiences professors.

IDC School of Design, Mumbai

Bachelors of Design with diversified design curriculum started from 2015.

Masters of Design in Industrial Design, Mobility and Vehicle Design, Interaction Design, Animation Design and Communication Design

There are few International Student Exchange Programs and lots of PhD & funded projects are running under the supervision of expert professors.

MIT Institute of Design, Pune

Bachelors of Design in
Industrial Design

Product Design, Transportation Design, Interior Space & Furniture Design, Retail and Exhibition Design, User Experience Design

Communication Design

Graphic Design, Animation Film Design, Film & Video Design, Game Design (only for B.Des), New Media Design (only for B.Des)

Fashion Design

Fashion Design, Fashion Communication

Collaborative Programmes with Middlesex University UK, Northumbria University UK, Abertay University UK and George Brown College Canada

Masters of Design in all the subject noted above and also **Master of Business Administration** in Design Management and Fashion Management & Marketing

Moreover there are few funded projects are running under the supervision of experiences professors and industry experts.

Methodology

Bauhaus Universitat, Weimer

Fine Arts - Diploma in Fine Arts and MFA in Public Arts & New Artistic Strategies

BFA and MFA in **Media Art and Design**

BA in **Product Design**, MA in Sustainable Product Cultures

BA in **Visual Communication** and MA in Visual Cultures

Doctoral Degree and extensive International Programs

Burg Giebichenstein Kunsthochschule

(University of Art and Design, Halle)

Bachelor of Arts and Master of Arts in

Industrial Design (Design of Playing & Learning and Ceramic & Glass Design), Interior Architecture, Communication Design, Fashion Design (Fashion and Textiles), Multimedia and Virtual Reality Design

Cologne International School of Design

The main theme is Integrated, Interdisciplinary and International
Design courses provided here are:

- (i) Typography & Layout
- (ii) Service Design
- (iii) Production Technology
- (iv) Ecology and Design
- (v) Interface Design
- (vi) Identity and Design
- (vii) Gender and Design
- (viii) Design Theory and Research
- (ix) Design Concepts
- (x) Design for Manufacturing
- (xi) Design and Economy
- (xii) Image and motion

All these topics are quite open & cover a huge domain of design industry.

Methodology

According to **U-Multirank** - Design and Testing the Feasibility of a Multidimensional Global University Ranking by Consortium for Higher Education and Research Performance Assessment, CHERPA-Network, US major areas that can be considered for analysis design education in both the countries are:

1. Design Course Curriculum and activities
2. Perspective and basic principle of Design Education
3. Concentration Area

There are lots of other factors and issues which creates impact on design education of a country, but for the limited scope for this project the above noted areas are focused.

This research is fully based on public information and documents available online and for this passive research relevant quantitative content analysis software is used.

Methodology

Details of the software used for this project:

Name of the software: KH Coder

Setup Filename: khcoder-200f-f.exe

Stable Version: 2.00f (2015 12/29 Perl 5.14.2, Perl/Tk 804.029)

Company: Sourceforge

Webpage: <https://sourceforge.net/projects/khc/>

Powered by: ChaSen, MySQL, Perl, R and more

Thanks to: KAWABATA, Akira

Copyright: © 2001-2017 HIGUCHI, Koichi

Basic function: Quantitative Content Analysis

Availability: Freeware

About KH Coder:

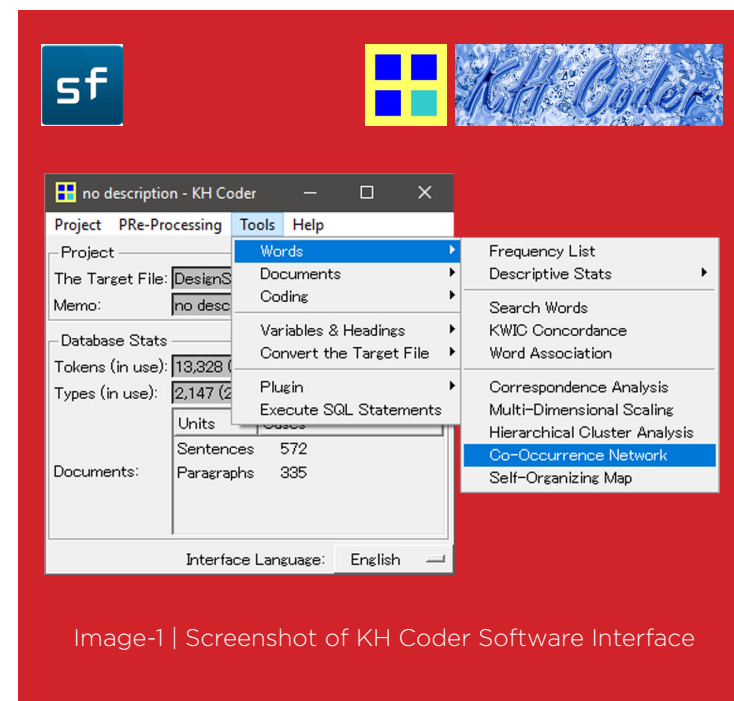
KH Coder is a free software for quantitative content analysis or text data mining. It is also utilized for computational linguistics. You can analyze Japanese, English, French, German, Italian, Portuguese and Spanish text with KH Coder. Also, Catalan, Chinese (simplified), Korean, Russian and Slovenian language data can be analyzed with the latest alpha release (Version 3).

KH Coder provides various kinds of search and statistical analysis functions using back-end tools such as Stanford POS Tagger, FreeLing, Snowball stemmer, MySQL and R. Functions can be done with this are -

Words: *Frequency List, Searching, KWIC Concordance, Collocation Stats, Correspondence Analysis, Multi-Dimensional Scaling, Co-Occurrence Network, Hierarchical Cluster Analysis*

Categories: *Developing Your Own Categories or Dictionaries, Frequency List, Cross Tabulation, Correspondence Analysis, Multi-Dimensional Scaling, Co-Occurrence Network, Hierarchical Cluster Analysis*

Documents: *Searching, Clustering, Naive Bayes classifier*



Methodology

Analysing Process:

For analysing one document file (in .txt format) is created each for Indian and German design institutions which includes course curriculum and other information gathered from their respective websites. Now by quantitative content analysis we can do our experiment in focused area of the project to come up with scientific inferences.

The processes are followed for analysis are:

1. Frequency of Words - This process gives a generic list of most frequently used words with respect to different part-of-speech on those selected websites of the design schools.

2. Co-Occurrence Network of Words - This process gives the word association of maximum frequent words in their classified sector.

3. Multi-Dimensional of Words - This process gives word association with clusters. Each cluster have different colour to denote and size of bubbles gives an idea of most used words.

Further more, if we apply filters like noun-adjective or verb-adverbs, detail information can be found in a more logical way.

06

Results & Analysis

Results & Analysis

After creating raw text files for analysis, containing information and course curriculum writeup from respective official webpage, quantitative content analysis has been done over it very selectively and scientifically.

Some logical method was followed to run the experiments like, for design principle of course curriculum we worked only on nouns, pronouns and adjectives; for analysing their activity or area serving we focused on verbs and adverbs based on top frequency words.

Noun	ProperNoun	Foreign	PRP	Adj	Adv	Verb	W	
design	255 Design	133 etc	15 they	91 creative	38 also	27 be	254 that	36
program	117 Des	46 vis	6 it	29 social	31 well	24 have	73 which	21
student	98 India	32 pro	3 you	27 visual	24 as	19 develop	43 who	19
course	76 M	27 2d	1 its	23 professional	21 not	14 create	28 where	12
industry	59 MIT	22 3	1 we	18 new	18 only	11 design	28 what	5
skill	50	21 e.g.	1 he	1 various	18	11 include	25 how	4
project	48 B	18 hi	1 I	1 cultural	17 more	9 make	25 when	1
communication	43 IDC	18 imitating	1 itself	1 human	17 highly	7 use	20	
product	43 Graphic	17 tech	1 themselfe	1 diverse	16 thus	6 offer	19	
designer	35 Film	16		indian	15 increasingly	5 build	18	
system	35 ID	16		other	15 just	5 work	18	
technology	35 NID	16		digital	14 rapidly	5 provide	17	
experience	34 Communicator	13		innovative	14 so	5 require	16	
animation	33 Fashion	12		such	14 eventually	4 encourage	15	
fashion	33 Product	12		holistic	13 ever	4 understand	15	
study	33 Video	12		strong	13 further	4 explore	14	
knowledge	31 Management	11		many	12 here	4 change	13	
process	30 Retail	11		relevant	12 very	4 learn	13	
research	30 Industrial	10		global	11 abroad	3 base	12	
need	28 Institute	10		conceptual	10 always	3 lead	12	
ability	26 Furniture	9		critical	10 closely	3 equip	11	
approach	26 Animation	8		interactive	10 contextually	3 find	11	
area	26 MBA	8		international	10 currently	3 look	11	
business	26 MITID	8		own	10 especially	3 address	10	

Image-2 | Frequency List of the Words for Indian Design Schools

Noun	ProperNoun	Foreign	PRP	Adj	Adv	Verb	W	
design	250 Design	134 e.g.	4 they	97 new	40 also	47 be	428 which	49
course	123 Art	88 le	3 we	60 academic	35 not	36 have	47 that	34
student	92 Prof	57 etc	2 it	54 other	35 as	32 develop	34 who	19
study	92 Master	47 i.e.	2 you	54 professional	30 well	28 offer	32 how	17
degree	87 Media	47 n.n.	2 its	31 artistic	29 more	13 work	31 what	17
program	83 Weimar	45 vs	2 he	9 practical	25 here	12 provide	23 when	8
art	57 Architecture	38	itself	8 creative	22 only	11 do	20 where	8
faculty	55 Bachelor	26	s	4 own	22 abroad	10 play	19 whereby	1
product	53 Bauhaus-Universität	20	my	3 complex	19 even	10 take	18 whoever	1
project	51 Telephone	19	themselves	3 theoretical	19 just	9 follow	16	
area	50 Fine	18	one	2 visual	19 most	8 apply	15	
process	43 M.A.	18	yourself	2 able	17 thus	7 include	15	
work	43 Industrial	17	I	1 social	17 generally	6 make	15	
media	39 Product	16	ourselves	1 conceptual	16 then	6 require	15	
designer	37 Communication	15		individual	16 very	6 teach	15	
research	37 Interior	15		interdisciplinary	16 already	5 cover	14	
semester	37 Germany	14		relevant	15 closely	5 focus	14	
skill	37 Bauhaus	13		digital	14 later	5 create	13	
development	36 Studies	12		first	14 often	5 become	12	
master	34 Education	11		important	14 so	5 lead	12	
discipline	30 Multimedia	10		scientific	14 too	5 prepare	12	
university	29 University	10		such	14 accordingly	4 complete	11	
architecture	28 Arts	9		urban	14 environmentally	4 design	11	
concept	28 Burg	9		experimental	13 indeed	4 learn	11	

Image-3 | Frequency List of the Words for German Design Schools

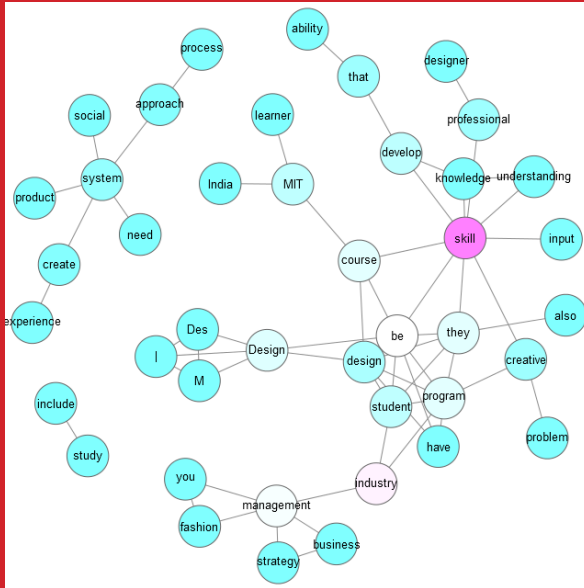


Image-4| Co-Occurrence Network of Words for India

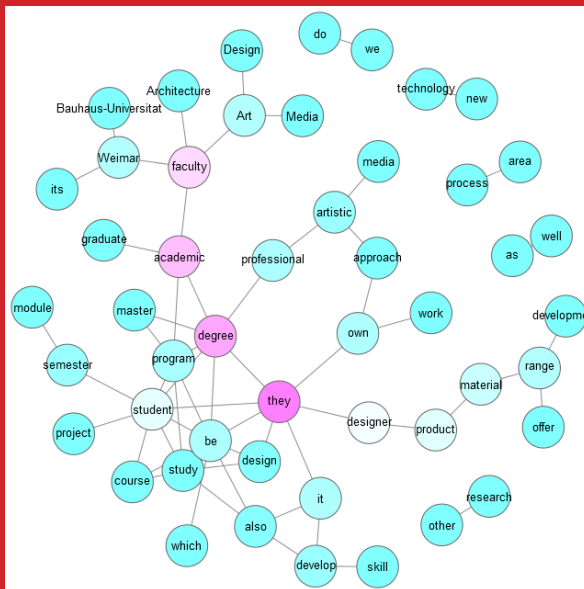


Image-5| Co-Occurrence Network of Words for Germany

Results & Analysis

So now we will do further analysis with respect to filtered visuals to get more in-depth knowledge. For analysis we can generically focus major two area -

- (i) Basic Principle of Design Education
- (ii) Concentration Area of Design Schools

This issues are not discreet rather very much significant

The step-by-step methods for this experiment are:

(i) Frequency of Words - which gives the list of most frequently used words with respect to different part-of-speech on those selected websites of the design schools (*see page - 26*). From this we can get an idea about the culture of design education of both the country.

(ii) Co-Occurrence Network of Words - From this visual information an outlook about the focus of the design courses of both the country can be found. Size of bubbles and bold connection lines gives an idea of most used words.

(iii) Multi-Dimensional of Words - From this visual information different coloured and different sized of bubbles gives an idea of most used words and how they are connected and clustered according their most association with other words.

Results & Analysis - India

Basic Principle of Design Education in India

From Image-6, it is clearly found that, Design courses in India influences to acquire more skill based knowledge rather than theoretical. As India is a developing country, lots of project run at system level focusing social issues and environmental friendly approaches. Design projects practised in Indian design institutions are mainly problem oriented and based on user needs. Besides design schools, Indian industry is also looking for more specialised designers with creative and innovative ability to solve problems to enrich livelihood of the citizens. And for tough Indian context, design industries are highly dependent on good business management and sustainable strategies for critical project implementations and to survive in the race of highly competitive market.

From Image-7 the clusters of words found are given below.

Cluster-1 | Design, Program, Course, Student, Designer, Input, Skill, Creative
Cluster-2 | Environment, Approach, Technology, System, Product, Development, Process, Social, Ability

Cluster-3 | Understanding, Research, Knowledge, Industry, Project

Cluster-4 | Year, Professional, Visual, Communication

Cluster-5 | Experience, Lerner, Space, Need

Cluster-6 | Game, Animation, Problem, area

Cluster-7 | Fashion, Management, Strategy, Business

Overall, Principle of Design Education in India are based on system level learning and guides student to go with skill based industry with holistic understandings keeping several social and environmental aspects in mind.

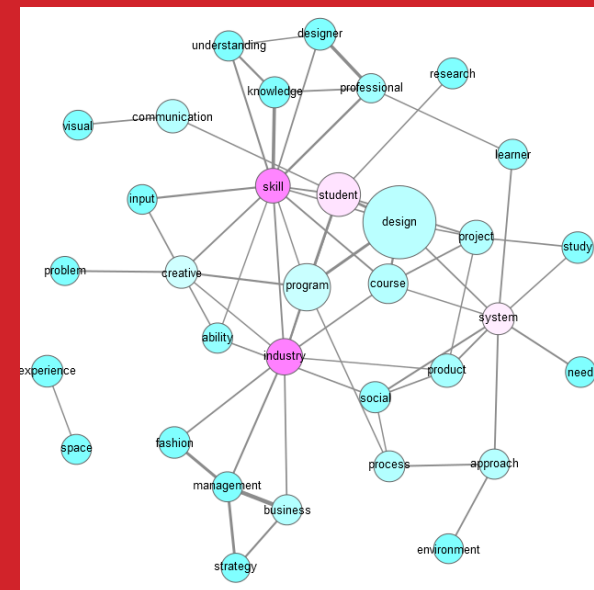


Image-6 | Co-Occurrence Network of Words for India

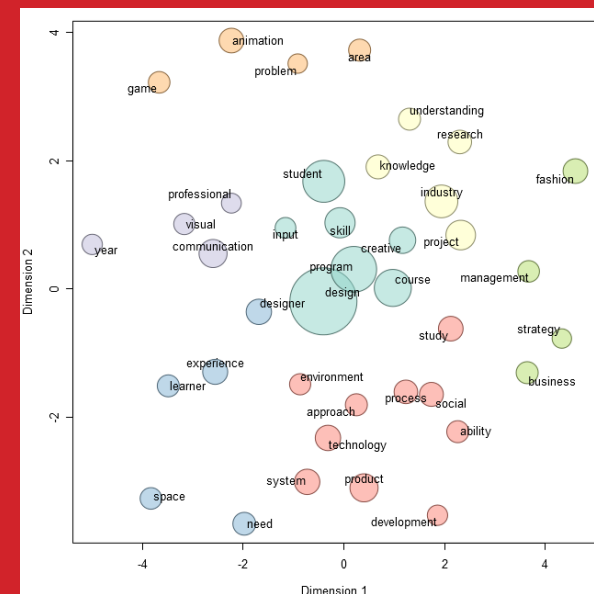
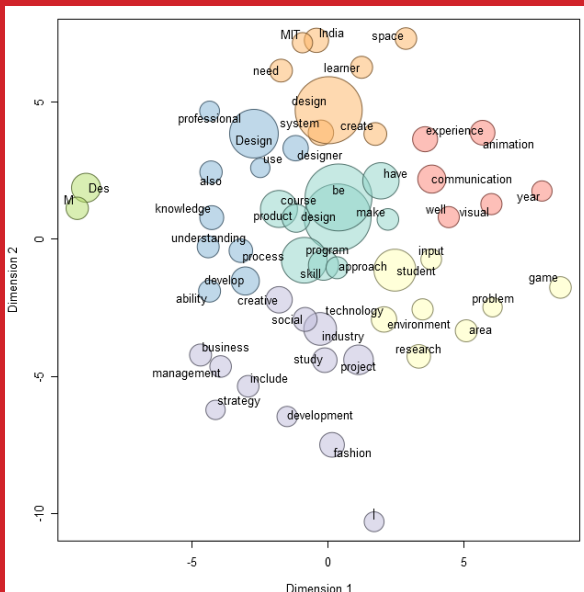
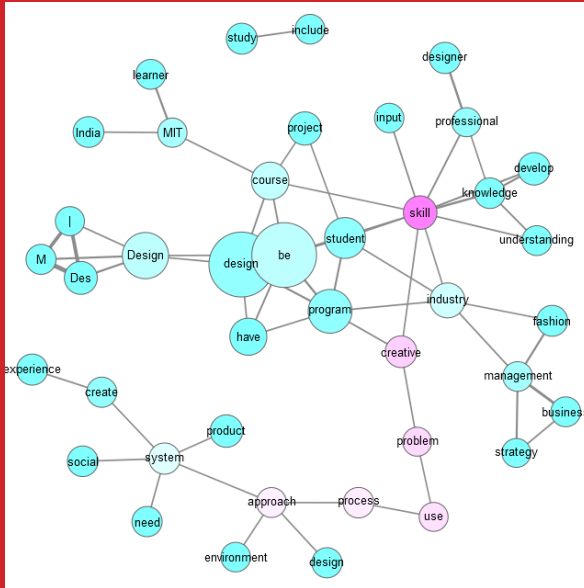


Image-7 | Multi-Dimensional of Words for India



Concentration Area of Design Schools in India

Based on Principles of Design Education, it is very easy to found what are the major focus areas and working domain of Indian Design institutions. From Image-8, it is very clear that all the design courses are focused to industry requirements, which is based on hardcore management skill and acute strategy based.

Major two working domains are - Skill oriented and Creativity oriented sectors. Skill based courses are very focused towards incorporating diverse input data and to develop products after proper understanding and interpretation of the actual problem and user need.

On the other hand, developing creativity with respect to need based problem solving at system level is the major feature of the Indian Design course curriculum. All the Indian designers are also supposed to receive proper training how to approach different design problems in environment friendly manner keeping social issues in mind.

From Image-9 the clusters of words found are given below.

Cluster-1 | design, course, product, program skill, approach, make, have, be

Cluster-2 | design, system, create, need, learner, space, India

Cluster-3| Design, Designer, Professional, Understanding, Knowledge, Use, Process, Develop, Ability

Cluster-4 | Creative, Social, Industry, Study, project, business, management, include, strategy, development, fashion

Cluster-5 | Technology, Environment, research, area, problem, game, input, student

Cluster-6 | experience, animation, communication, visual, well, year, M.Des.

At last, it can be concluded that, the overall concentration area of Indian Design Schools is focused on creating interesting experience around the product to satisfy all types of users adequately.

Results & Analysis - Germany

Basic Principle of Design Education in Germany

From Image-10, it is very clear that in German Design Schools different course curriculum are very structured. But due to a developed country and strong socio-political background, approaches to projects are quite artistic and technology based but not so much user need and problem oriented. Even creativity knowledge has good cross-section with arts and artistic approach. They are pretty good about running research projects but all such projects are generally based on new concept of technologies with wide range of development plans which eventually includes different types of new materials and process of making.

Design business are mainly based on strategies but pretty much settled down. There is no so much competitive market due to low population and limited & more or less similar user needs.

From Image-11 the clusters* of words found are given below.

Cluster-1 | Design, area, research, development, range, object, communication

Cluster-2 | Study, course, student, program, degree, art, project, work, professional, master

Cluster-3 | Product, Strategy, process, material, concept, designer, approach

Cluster-4 | Own, skill, media, technology, artistic, creative, knowledge, practical

Cluster-5 | University, Faculty, Academic, year, graduate, semester, module

Cluster-6 | Discipline, Planning, Architecture

After this discussion it is clear enough that German Principle of Design Education are very structured like other technical or engineering courses but not actually focused to real life problem and user demand and trend. They are more oriented to technology and development which is also a strong approach for innovation.

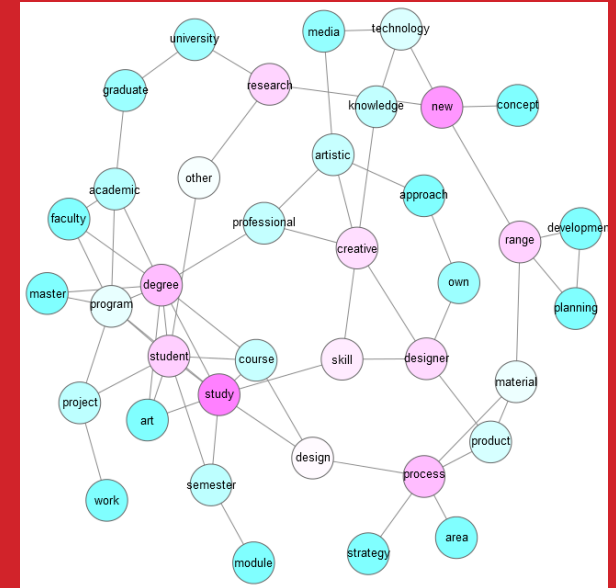


Image-10 | Co-Occurrence Network of Words for Germany

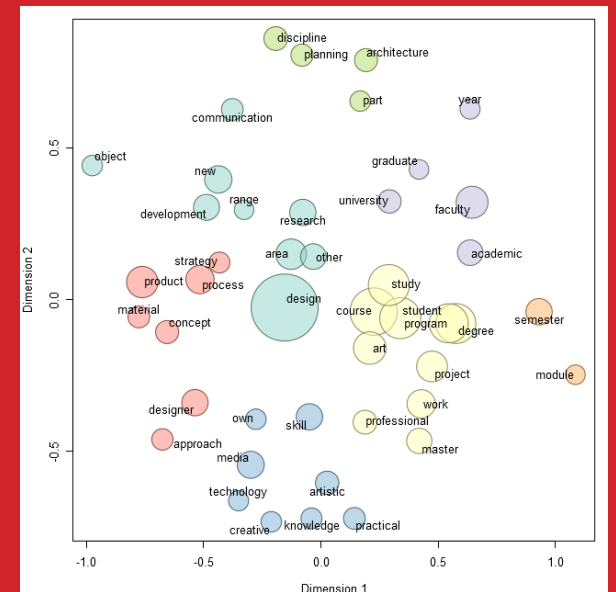


Image-11 | Multi-Dimensional of Words for Germany

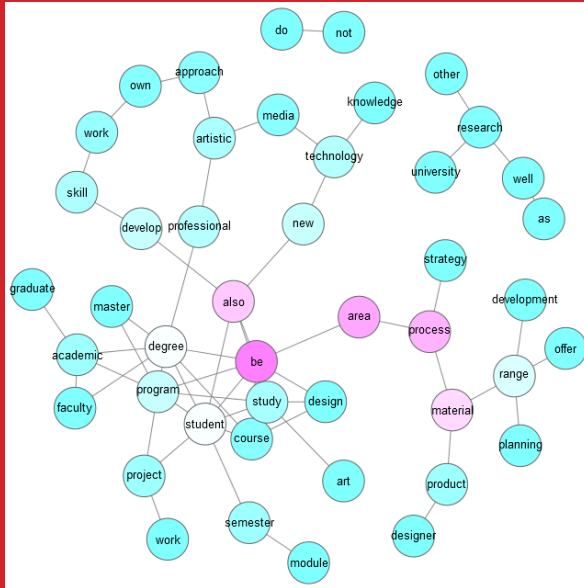


Image-12 | Co-Occurrence Network of Words for Germany

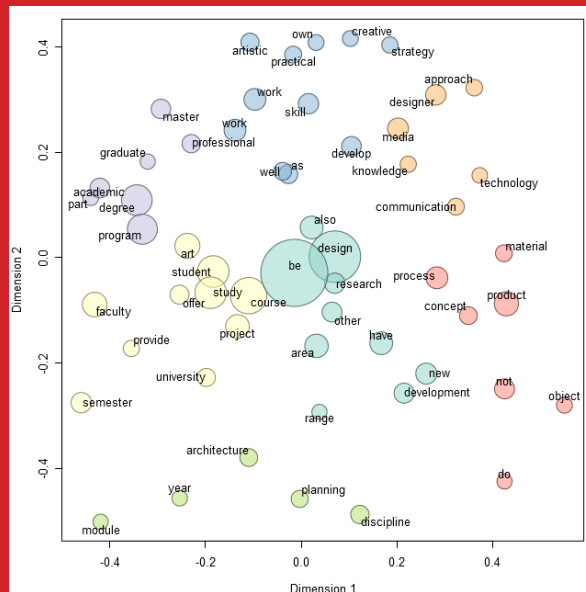


Image-13 | Multi-Dimensional of Words for Germany

Results & Analysis - Germany

Concentration Area of Design Schools in Germany

From Image-12, it is clearly visible that well structured German teaching methods are more focused on new technology knowledges with artistic approaches and skill for developing prototypes.

There is no diverse user needs and no acute industry requirements. All the major ongoing projects are in the area of implementing artistic media and new technologies as other user related issues are already pretty much resolved. These are more on fine tuning stage.

From Image-13 the clusters* of words found are given below.

Cluster-1 | Design, research, be, other, area, have, range, new, development
Cluster-2 | Art, student, study, course, project, faculty, university, semester, offer, provide

Cluster-3 |Academic, degree, program, graduate, part, master, professional
Cluster-4 |Work, skill, practical, artistic, creative, strategy, own, develop, well

Cluster-5 | Approach, designer, media, knowledge, communication, technology

Cluster-6 | Process, concept, product, material, object

Cluster-7 | Architecture, Planning, Discipline, module, year

But for new technologies, designers often go in deep exploration and their making process and develop new interesting products with structured business strategy and detailed product planning.

Overall it is easily found, major design projects are not crudely based on user study and not focused on hardcore industrial requirement scenario like India.

Comparative Analysis - India vs. Germany

Principles of Design Education		
Factors	Indian Design Schools	German Design Schools
Structure of Design Curriculum	Design curriculum is made to provide creative skill based knowledge and adequate industry orientation	Design curriculum is made to provide development skill and technology based knowledge with artistic inclination
Diversity of Design Course	More versatile addressing various social and environmental issues with respect to user need of huge population	Less diversified, focused to problem level only, no social and environmental issues are addressed
Design Approach	System Level - holistic approach taking care of lot more other factors other than the actual problem to understand the system level issues	Very much focused to Problem Level, no system level intervention is practised
Major Focus	Creative ability to meet user needs & problem solving	Come up with research based new technological concepts with artistic media intervention and develop things successfully
Creativity & Innovation	More in the area of usability functions and formal aspects	Incremental & more in the area of technology domain
User Study	Extensively done for the validation of the project and for mass implementation among huge population	Comparatively less, taken forward from previous studies
Design Strategies	Strategies to follow fashion and current trends to manage different system level approach at industrial scale	To make product planning properly to develop a wide range of products with new technological concepts
Industry Orientation	Students are trained with different skills according to industry requirements to fit with	Well structured design curriculum but unfortunately not so much oriented to industry requirements
Social Issues	Design courses are made to get trained how to tackle social issues and to take care of from industrial perspective	Comparatively less oriented to socio-economic issues to come up with own creative design style and strategy
Environmental Issues	Plays a key role to keep a balance between system level approach and product development in the industry	Not a major issue as it is almost resolved since long time

Comparative Analysis - India vs. Germany

Concentration Area of Design Education		
Factors	Indian Design Schools	German Design Schools
Skill development	Make designer skilled enough to solve problems according to user needs	Courses are designed to make students skilled enough to approach problems artistically and develop products accordingly with newer technologies
Creativity Development	Develop creative ability to solve problems from holistic point of view	not a major area for concentration from the point of usability but often do exploration in the area of artistic styling
Problem finding ability	Taken care of by the holistic approach to understand the overall system and classify different problem sectors accordingly	not so taken care of seriously
Artistic Approach	Although having rich heritage and cultural value, function and affordability are more serious issues over artistic intervention	Quite appreciated to come up with new innovative product form
Materials and Innovation	Not so widely practised but appreciated	Widely practised and further is also appreciated
Research Projects	Exploration mostly on existing problems as they are pretty high in numbers	More on technology to come up with new innovative concepts
Practical Knowledge	Practical knowledge is more and taken care of by industry oriented professional design courses	Not so much as courses are not so well oriented to Industries and much time is spent over research projects
Social Issues	One of the major concentration area to create appropriate user experience according to different user from different social background, as India is a country of diversity	not at all a major area for concentration
Environmental Issues	One of the essential element for the design approach to reduce environmental impact which is quite serious in India	Already taken care of since long time
Business Strategy	Briefly taken care of by different courses itself to have a preliminary idea about design management and product planning	Only focused around educational design courses and research projects

07

Inferences

Inferences

From this research project, it is clearly visible that due to past political history of Germany, they were very arrogant towards quick development after the massacre of World War II and their design curriculum is also focused to quick development and prototyping. Then due to social structure and literacy technology took place very dominantly. So they often come up with solution which is more about technology based but not so creative about user need and future trends. Their approach is also very artistic.

But in Indian context, as the country itself is in developing stage and one of the fastest growing country and for its diverse population, there are various user needs in several sectors from different economical background. And mass implementation is also a major issue due to its huge population. So Indian design education is more about need based problem solving and rigorous user study and also about rich value of tradition and heritage.

So for the future design curriculum it is very necessary to have collaborative programs between two countries to develop more holistic design solutions with both technical and cultural credits as there is a synergy.

08

Future scope of work

Future scope of work

From the comparison it is found that there is a synergy between principles and concentration of Design Education of Indian and German Design Education. It will surely help about deciding the events given below:

- (i) Future structure of design education which will portray a global vision
- (ii) Collaboration of both the country for knowledge and skill interchange
- (iii) Exposure to different culture to get global taste of designing
- (iv) It will also help in criticising student performance and evaluation with respect to global scale, criteria will change over the time
- (v) It will help a designer to become a global player in design & business

There can be further more experimentation on these topics to prove in a more accurate way.

09

Conclusion

Conclusion

There can be a good collaboration between Indian and German Design Schools for come up holistic design solution enriched with technological aspects with user study and cultural values. It will help design students to get a global exposure and experience global competition of design.

10

References

References

1. Website of National Institute of Design (<http://www.nid.edu/>)
2. Website of IDC School of Design, Mumbai (<http://www.idc.iitb.ac.in/>)
3. Website of MIT Institute of Design, Pune (<http://www.mitid.edu.in/>)
4. Website of Bauhaus Universitat, Weimer (<https://www.uni-weimar.de/en/university/start/>)
5. Website of Burg Giebichenstein Kunsthochschule Halle (<http://www.burg-halle.de/en/>)
6. Website of Cologne International School of Design (<https://kisd.de/en/>)
7. Unanswerable Questions: What Do You Do with Challenging Health Reference Questions? - Carolyn Dennison, MA, MLIS, AHIP1 and Angela Lee, MLS, MSW2 1University of Hawai'i at Manoa (UHM) Library, 2550 McCarthy Mall, Honolulu, HI 96822; 2Health Sciences Library of the John A. Burns School of Medicine, University of Hawai'i at Manoa, 651 Ilalo Street, MEB 101, Honolulu, HI 96813
8. Study of Blog Mining for Examination of Tourist Travel Behavior in Japan by Kuniaki Sasaki and Kazuo Nishii
9. Exploring the Strategic Use of New Media's Impact on Change Management and Risk in Theory and Practice, 16th International Public Relations Research Conference
10. KH Coder. <http://khc.sourceforge.net/en>. Accessed February. 22, 2017



Find this at