World of Work

Student Handbook

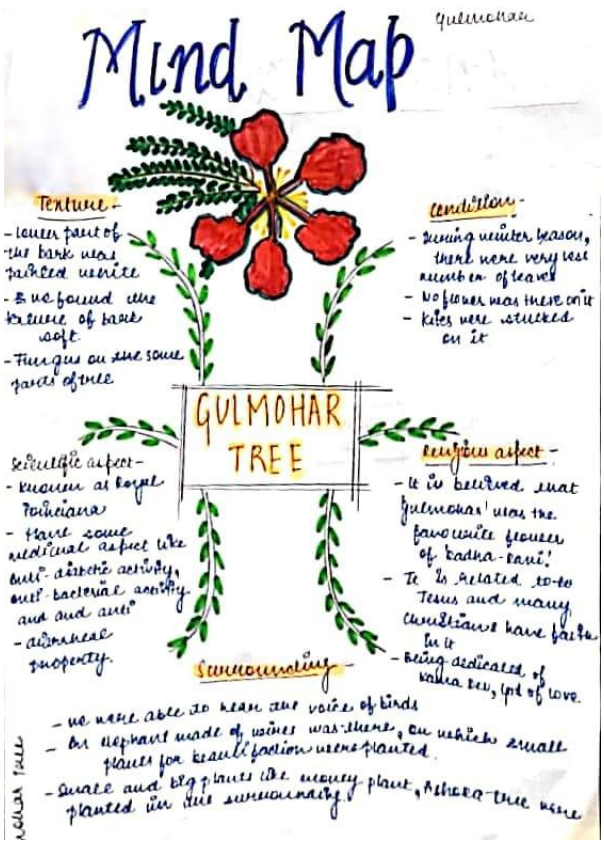
Volume VI:

Research and Critical Thinking Cluster

Module 1: Research and Critical Thinking

Module 2 : Academic Research

Module 3: Marketing Research



Led by

World of Work Grade 9 & 10 is a specialised subject in the School of Specialised Excellence, Delhi Board of School Education, designed by **Centre of Excellence in Teacher Education, Tata Institute of Social Sciences (TISS), Mumbai.** The course aims to introduce students to the world of work and develop skills and perspectives through enquiry, projects, and interactions with industry experts. The full set of course material includes lesson plans, teacher professional development guides, students' and teachers' handbooks, and assessments.

Schools of Specialised Excellence are choice-based schools for grades 9 to 12 that allow students to specialise in their chosen fields of study. The Government of NCT of Delhi established Specialised Excellence in 2021 in order to cater to students who have a demonstrated interest and aptitude in specific domains. Schools of Specialised Excellence are affiliated to the Delhi Board of School Education (DBSE). They are designed as per the philosophy of DBSE that centers around moving away from rote memorisation through integrating assessment into the everyday practice of teaching-learning and using assessments for learning rather than restricting them to only being assessments of learning.

The Centre of Excellence in Teacher Education (CETE) at the Tata Institute of Social Sciences Mumbai (http://bit.ly/cetewebsite) aims to enable Right to Quality Education for all children in India by enabling teachers to respond to diverse and changing needs. Built around the central premise that professional qualified teachers can create lasting impact. The Centre focuses on empowering teachers, improving professional development standards, supporting teachers' education ecosystem and advocating to strengthen policy on teaching and teacher education.

Research at the Centre is on themes of quality in teaching, policy and scaling innovations inclusion, curriculum and pedagogy and Ed Tech. Academic teaching programmes include BEd-MEd (Integrated), MA Education, MA Education (Elementary), MA Education and Technology, doctoral research, short term programmes through blended learning and online offerings to enhance capabilities of teachers and teacher education faculty (www.tissx.tiss.edu). Key field action projects are focussed on improving inclusive teaching learning at schools and employing technology thoughtfully in professional development of teachers. The Connected Learning Initiative (www.tiss.clix.edu) was awarded the UNESCO-King Hamad Prize for the use of ICTs in Education in 2018. CETE received seed support from the Pandit Madan Mohan Malaviya National Mission on Teachers and Teaching. Government of India and TATA TRUSTS.

As knowledge partner of the DBSE for the Schools of Specialised Excellence, the CETE has developed the following six clusters of modules for Grade 9th and 10th specialised subject "World of Work". Each cluster comprises a skill/perspective building module and two/one career modules, detailed in a teacher handbook with an accompanying student handbook.

Student and Teacher Handbooks:
Volume I: Transmedia Storytelling Cluster: Transmedia Storytelling, Journalism, and Content Creation
Volume II: Mapping and Visual Representation Cluster: Mapping and Visual Representation, Geographic Information System (GIS) Analyst, and Urban Planning
Volume III: Working with People and Communities Cluster: Working with People and Communities, and Social Work
Volume IV: Enabling Learning Cluster: Enabling Learning, and Teaching
Volume V: Justice and Constitution Cluster: Justice and Constitution, Lawyering, and Public Policy
Volume VI: Research and Critical Thinking Cluster: Research and Critical Thinking, Academic Research, and Marketing Research

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Photo Credits for cover page: Mind Maps created by students in the module

World of Work

Student Handbook

Research and Critical Thinking

This handbook belongs to:

Name: _____

Class: _____

Section: _____

Index

Introduction

I.I World of Work

One of the components of the vision for Schools of Specialised Excellence (SoSE) is increasing exposure of students to careers and the world of work. However, career domains today are not straightforward and are becoming exceedingly integrated. Students require a multidimensional and interdisciplinary approach. Separately, the best education globally offers students abundant opportunities for project-based learning, development of higher-order thinking skills and development of soft skills.

The World of Work (WOW) course aims to address all the above requirements during the 9^{th} and 10^{th} grades for the SoSE schools of the Humanities stream. The course is designed as a series of 1 month (16 classroom hours) 'taster' modules that explore different skills and careers in the humanities and social sciences. The modules are designed as a skill module, paired with career modules. Skill modules address a workplace skill that has wide applicability across a range of careers. Each skill module is followed by 2 career modules which are strongly associated with the skill and which develop further on the skill. For example, the Transmedia Storytelling module is followed by Journalism and Content Creation as career modules. Each module is a 16 hour exploration and is delivered via discussions, expert guest speakers ('masterclasses'), digital content, field visits, projects and assignments. These modules are critical in enabling SoSE students to make informed choices and prepare in advance to succeed in their chosen career pathways.

Students learn in various ways in the World of Work course. In developing the modules a priority has been to provide interesting and vivid teaching material including videos and presentations. Classroom discussions are an important part of the session and students learn from each other as well as develop their confidence and spoken communication. Expert guest speakers and field visits offer rare and privileged opportunities to experience a profession. Assignments and project work take them out of the classroom to engage with the environment they live in. These also demand developing time management, creativity, working collaboratively and good presentation skills. All this nurtures students for all round development and at the same time sets them up for success in their chosen area of specialization.

The role of the teacher in the World of Work is both challenging and rewarding, offering exciting opportunities for professional growth. While teachers may not be subject matter experts, their extensive training positions them as facilitators of student learning. Embracing this role involves stretching boundaries to familiarize themselves with a diverse array of skills and careers within the course. Engaging students in group and individual projects is a key component, requiring teachers to develop new skills in project facilitation and navigate the inherent ambiguity in project evaluation. Classroom discussions, another vital aspect of the course, demand adaptability to various formats.

This journey may necessitate teachers to step out of their comfort zones, letting go of traditional teaching methods in favor of innovative approaches—a humbling yet enriching experience. This presents an opportunity for teachers to explore new content areas and methodologies that can greatly benefit both them and their students. The true rewards lie in witnessing tangible growth and development in students, particularly in areas such as confidence, presentation, and communication. Simultaneously, teachers can anticipate significant personal and professional growth, making the journey in the World of Work an exciting and fulfilling one.

Assessment is an important part of the World of Work. The course is meant to be rigorous and not limited to the level of awareness-raising or exposure. The course delivers specific skills and concepts that the students are expected to understand, internalize and apply. The assessment framework has components of “Knowledge and Understanding”, “Inquiry and Exploration”, “Critical Thinking and Decision Making” and “Presentation and Communication”. Assessment of each module of WOW will draw from the above set of components and be tailored to the module. Internal assessment of the modules will be usually through the module project, while the summative assessment could be through a variety of formats including mini-project or different types of sit-down exams.

I.II Overview of the Curriculum

The World of Work course is designed as a series of 1 month (16 classroom hours) ‘taster’ modules that explore different skills and careers in the humanities and social sciences. The modules are designed as a skill module that is paired with one or more career modules. Skill modules address a workplace skill that has wide applicability across a range of careers. Each skill module is followed by 2 career modules which are strongly associated with the skill and which develop further on the skill. For example, the Transmedia Storytelling module is followed by Journalism and Content Creation as career modules.

The following table gives the full list of modules that will run in the World of Work curriculum.

Skill Area	Career Pathway 1	Career Pathway 2
Transmedia Storytelling	Journalism	Content Creation
Mapping and Visualization	Geographic Information System (GIS) Analyst	Urban Planning
Working with people and communities	Social Work	
Enabling Learning	Teaching	
Justice and Constitution	Lawyering	Public Policy
Research and Critical Thinking	Academic Research	Marketing Research

The first 3 rows show the modules that run in 9th Grade and the next three rows the modules that run in 10th grade.

Below shows the classroom time allocation for the modules and the number of instructional days they will run over.

S.No.	Modules	Suggested time allocation/Instructional days
Grade 9		
	Unit 1: Transmedia Storytelling	16 hours/12 days
	Unit 2: Journalism	16 hours/12 days
	Unit 3: Content Creation	16 hours/12 days
	Unit 4: Mapping & Visual Representation	16 hours/12 days
	Unit 5: Geographic Information System (GIS) Analyst	16 hours/12 days
	Unit 6: Urban Planning	16 hours/12 days
	Unit 7: Working with People & Community	12 hours/ 9 days
	Unit 8: Social Work	12 hours/9 days
Grade 10		
	Unit 9: Enabling Learning	12 hours/ 9 days
	Unit 10: Teaching	12 hours/ 9 days
	Unit 11: Justice and Constitution	16 hours/12 days
	Unit 12: Lawyering	16 hours/12 days
	Unit 13: Public Policy	16 hours/12 days
	Unit 14: Research and Critical Thinking	16 hours /12 days
	Unit 15: Academic Research	16 hours/12 days
	Unit 16: Marketing Research	16 hours /12 days

Note the exceptions to the standard format: In two skill areas, “Working With People and Communities” and “Enabling Learning”, there is a single career module associated with the skill module. In these two cases, the Skill module runs for 3 weeks and the career module for three weeks. In these cases, the skill and career modules are tightly integrated rather than running as individual modules.

I.III Objectives of the curriculum

- To give the students a very wide area of exploration that leaves them with an understanding of the world of work at large. They are also shown interconnections between modules and clusters and realize the interdisciplinarity of the world of work.
- To develop a range of skills (the skills of the skill modules) that will continue to be useful to students in their future irrespective of the specific career path they choose.
- To give the students sufficient information and engagement with skills, careers and workplaces so that they can start a deeper process of focussed exploration in skills and professions as designed for the 11th & 12th grades. In a few cases, the students will have gained enough clarity from the course that they will make a decision on their own about their career goal and independently plan and work towards reaching it.
- To develop their ability to do independent work and thinking, to deliver projects, and work collaboratively.
- To develop skills of critical thinking and creativity.
- To enhance students' presentation skills in different modes and media.

I.IV Curriculum Framework

The course consists of a sequence of skill and career modules. These modules are grouped into related clusters. A cluster will contain a skill module and 2 (or 1) related career modules.

A skill module introduces the students to a particular skill or skill area that is widely required for many careers. In this course the students are introduced to 5 skill areas in the Social Sciences and Humanities which gives them a good range of knowledge. By practicing these skills, students develop themselves with a wide range of skills. Simultaneously they have the opportunity to find out if they have an aptitude for or interest in that skill. Discovering such interest and aptitude can be an enormous boon to the student - if they find a niche they are happy with, they start exploring and developing on their own and the future unfolds with ease and fulfillment. While it is not possible to develop a skill in-depth in the time available, the engagement with the skill does result in concrete learning outcomes.

Career Modules explore a career that is strongly connected to the skill in that cluster. Career modules explore the career from multiple perspectives:

Skills: The career module builds on the work done in the skill module to develop the skill further in the context of the particular career. For example the Journalism career module will take storytelling to the context of Journalism.

Career Roadmap: The career module will talk about way to join that career ie. what subjects to choose for 11th & 12th grades, what degree courses are appropriate, what are the premier colleges, what communities of practice exist, relevant skills to develop etc.

'A Day in the Life': The career module also gives students an idea of what work in that career looks like. Practitioner interactions are a very effective way to do this.

Is this for me?': The various interactions and experiences of the career module helps the student build some evidence for whether this is the direction they want to take. The intention is not however that the student should decide by the end of 10th grade.

Career modules will have sub-areas or may cover a career *area*. For example, Content Creation is a career area which covers careers in Graphic Design, Content Writing, Film-making and more. Journalism is considered a career, but there are a wide range of sub-options by media and types of writing eg. news reporting, news analysis, photography, video journalism etc.

I.V About this handbook

This Handbook is written to provide the students with all information, support, and guidance they need as they work through World of Work modules. It guides the students through the “Research and Critical Thinking” skill module, “Academic Research” and “Marketing Research” career modules under the Research and Critical Thinking Cluster. It contains the handouts and worksheets that the students will use while going through the modules. It also contains the student planner for each module which will help them plan, organize and keep track of their work.

Cluster VI Module 1: Research and Critical Thinking

Credits

Initial Module Conceptualization, Authoring and TPD sessions:	Dr. Bindu Thirumalai, Assistant Professor, CETE, TISS
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	Ms. Manvi Suyal, Research Associate, CETE, TISS
	Ms. Tanya Mittal, Program Manager, CETE, TISS

Student Planner

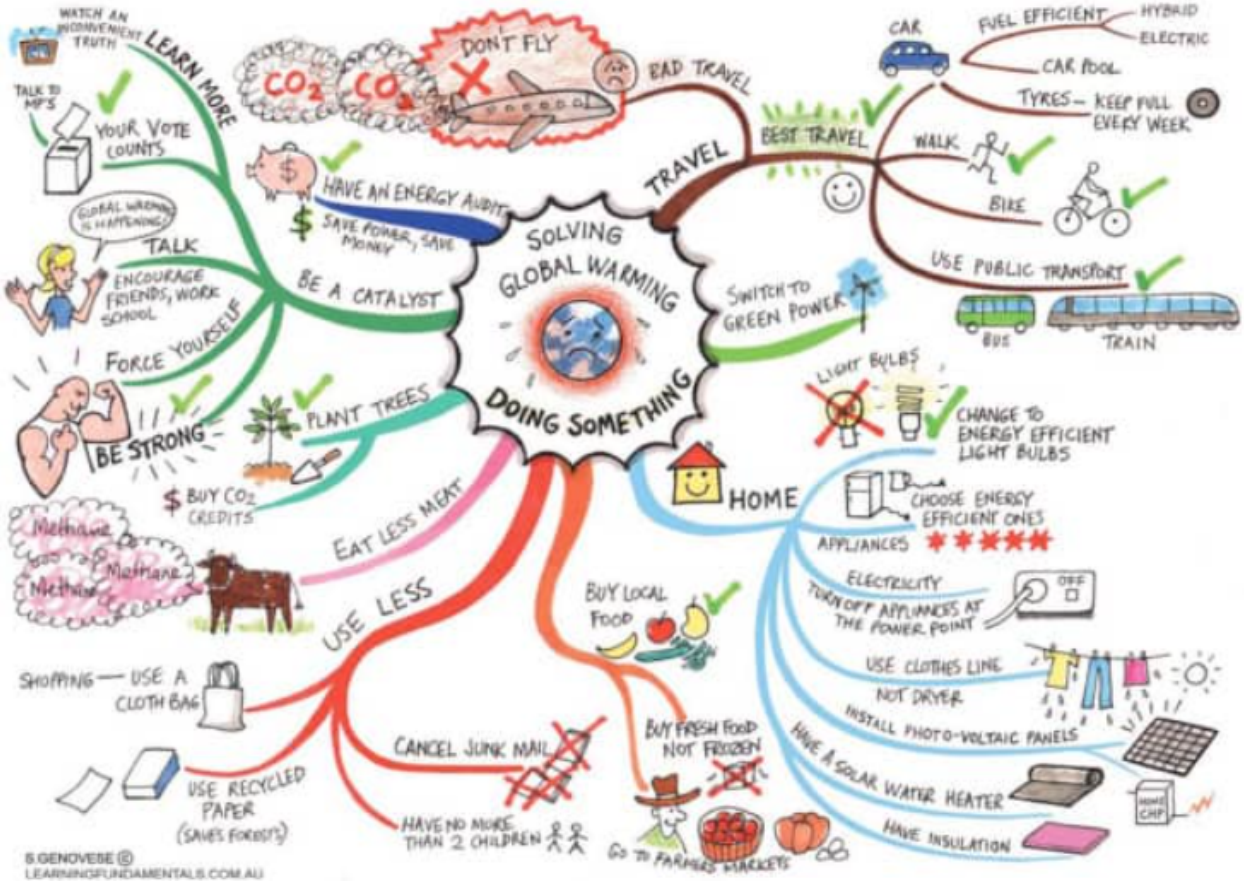
Session	Topic	Objectives and Description	Readings
Week 1			
Session 1	Close Observations and Presenting Data Using Mind Maps	1. To understand how observations are carried out with the help of our senses 2. To identify the gaps and silences in the observation 3. To understand how to map observation data using mind maps *In this session, we will be looking at the nuances of observation and how we can use our senses to observe things closely. We will also be learning about mapping the data gathered through these observations using mind maps. The gaps produced within the observations will also be looked upon.*	
Session 2	Different Ways Of Classification	1. To understand how classification is done and what are the different ways of classifying. *In this session, we will be looking at the concept of classification and the different ways of carrying out the process.*	It is critical to plant the right trees: Pradip Krishen
Session 3	Critically Watching a film to understand different perspectives	1. To understand close observation through (4W+ H). 2. to recognise and understand different perspectives used in the film *In this session, we will be focusing upon doing close observations and looking at different perspectives through the means of watching a film*	
Week 2			
Session 4	Introduction to research and understanding the research process	1. To understand research as a systematic process 2. To understand the different steps of conducting a research.	

		In this session, we will be looking at the concept of research as a systematic process and understanding what are the different steps that are involved in this process.	
Session 5	Identifying a problem and developing research questions	1. to identify a problem and develop research questions 2. To develop a mini research proposal *In this session we will be focusing upon how to identify a problem and develop research questions related to it. Students will also be creating a mini research proposal to get a sense of how the actual research work looks like.*	
Session 6	Data Collection in Research	1. To understand concepts such as primary & secondary data 2. To familiarize students with various tools of data collection 3. To design tools for data collection *In this session, we will be looking at different types of data i.e. primary and secondary and the various tools of data collection. We will also be looking at how to create the interview schedule as a research tool.*	
Week 3			
Session 7	Difference between natural science and social science research	1. To understand the difference between a natural science research and a social science research. *In this session, we will be looking at how to differentiate between natural science research and social science research.*	
Session 8	Facts vs Opinion	1. To identify facts and opinions and distinguish between the two 2. To critically read a text and identify the facts, opinions and claims made. *In this session, we will be looking at the concept of facts and opinions and the process of reading a piece of text critically.*	

Session 9	**Making sense of data**	1. To analyze research critically 2. To do some basic data analysis with respect to the research *In this session, we will be focusing upon how to analyze a research critically and how to do data analysis*.	
Week 4			
Session 10	Listening to the research process of a researcher	1. To learn the research process from the experience of a researcher. *In this session, we will be looking at the process of research through the eyes of a researcher and learn from their experiences in the field on how to undertake a research*.	
Session 11	Interaction with a researcher	1. To learn more deeply about the research process through an interaction with a researcher 2. To understand the skills needed to become a good researcher *In this session, we will be learning about the process of conducting a research by interacting with a researcher and also look at the various skills required to be a good researcher.*	
Session 12	Filling a research proposal template	1. To understand how we present ideas in an organized and coherent manner. 2. To draft and submit a research proposal *In this session, we will be focusing upon understanding the nuances of creating a research proposal and how to successfully represent our ideas in a holistic and concise manner.*	

Mind Map

Look at the mind map of 'Solving Global Warming' given below:



Close Observations

After completing the observation using the template, the following table will help you to summarise your observation. Collect as many objects related to that particular tree and bring them to the class. (bark, seed, leaves, nests, dead insects, materials/ objects of interest near the tree etc.)
https://drive.google.com/file/d/1DQ9tdlQwY1M8eDAbYu49AZE9G8oRX79u/view?usp=sharing

	BRANCHES	TRUNK	ROOTS	LEAVES	FLOWERS
See					
Touch					
Smell					
Hear					
Taste					

Different Ways of Classification

Write the names of objects that formed a group in different boxes. Give the reasons for your classification.

It is critical to plant the right trees: Pradip Krishen

Pradip Krishnen, environmentalist and author of 'Trees of Delhi', in the Garhi Mandi city forest, Delhi.

Environmentalist and naturalist Pradip Krishen's 2006 book Trees of Delhi—A Field Guide, is a bible for nature lovers and birdwatchers in the Capital. Few people know Delhi's flora better than Krishen, who is working on a new book, Jungle Trees of Central India, due to be released this year.

We are in Garhi Mandi in south Delhi. A spectacular place—I don't think many people in Delhi know about a forest like this in the middle of the city.

No, you won't see many people here apart from the villagers who stay around the area. This is all alluvial soil that got piled up millions of years ago by the shifting of the Yamuna. It's pure silt,sometimes 80 ft deep. The ecosystem is totally different from the rest of the Ridge. For example, here's a tree called jhand. It likes sandy, deep soil because it has incredibly deep roots—30-40m—so you will only find jhand in old riverbeds like this, or Lodhi Gardens. People eat the fruit of the tree. The bark saved lives during the Great Rajputana Famine (1868-70), because you can make flour out of it. The leaves make great fodder, bees love the flowers. In Rajasthan, the jhand is called khejri and is worshipped.

Here's sheesham, it's not a native tree, but grows well in silted areas.
Most of the foliage you see is babool, or the true kikar, not vilayati kikar. Babool is native, and is almost an indicator of good alluvial soil. This is chudail here, a great native species that becomes a huge tree, then we have palash or flame of the forest, and semal.
Now this is a tree from Africa called Acacia tortilis or Israeli babool and this has been planted racross Haryana and Rajasthan by forest departments because it is extremely drought-hardy, and animals don't browse on it. Also, nothing nests in it, and it has absolutely no biodiversity value.

While some parts of this forest are beautiful, most of it looks badly degraded.
Yes, it's a theatre of destruction. There's encroachment from all sides since this land has no legal protection, and the state agencies still haven't mapped boundaries for these forested areas. Surely the role of the forest department is to treat this as a repository for useful species, and to use it in a way that is sustainable, by talking to people, engaging people. There is space here, elevation, different water gradients, a seasonal lake, everything you need.
If I was a forest officer in Delhi, I would be a bit puzzled about what my role is and where I'm supposed to go. They have virtually no role in the urban space; not on roadsides, and certainly not in parks. The Ridge is one big swathe where they can play a role. The Central Ridge is a great opportunity in the middle of the city for them to actually create an amazing forest which is beautifully adapted to the environment.

The forest department has been planting trees on "gram sabha" land in outlying areas in Delhi, but these plantations are all in little pockets. Each pocket is about the size of a football field.
I see very little utility in planting trees in little fragmented pockets, it just helps their statistics. A forest is much larger than its parts, it has to be a little micro habitat. Fragmentation is a deadly process for forests. There is a drastic fall in the number of species, both flora and fauna, when you fragment a forest. A fragmented forest is not viable on its own.
The Delhi government spends a lot of time and money on plantation drives. How important is it to plant the right kind of trees?

It is critical to plant the right trees. It starts with ecological issues—if you plant native trees, then you are planting trees already adapted to the environment; they don't need any extra water or nutrients. If you plant exotic species, let's say something that grows well in a rainforest, you will have to use vast amounts of water to make it flourish, and there can be no excuse for that wastage. We all know what the vilayati kikar, introduced by the British from Central America at the turn of the 20th century, has done. It has invaded with alarming speed, killed off native flora and established itself all over the Ridge. I was once invited by the forest department to go to Asola (Delhi's only wildlife sanctuary) when they were on a plantation drive. They did not have a single native plant. I left. There is a huge awareness/sensitization gap that applies to every agency in Delhi concerned with horticultural work. Most recruits are taught nothing more than watering plants and digging pits.

Here, at the Central Ridge forest, how many species of trees can you see? How many can actually thrive here if this area is properly managed?

Right here there are 10-12 species of plants with decent populations. If there was proper management and the vilayati kikar was destroyed, this very water-stressed environment can support 80 species of just trees, not counting shrubs and climbers. Jodhpur has one-fifth the rainfall of Delhi, but supports large tracts of forests that have 70-80 species of trees.

Critical review of film to understand different perspectives

Scan the QR codes given below to watch the video and access the news article.

QR code for the video

QR code for the article

While Reading the article, think about the pointers given below:

What are your first Impressions of the article?

I. First, as you scanned the article
II. Second, after reading about it.

CONTEXT

What do you know about :
-The Author
-The Journal/Newspaper
-The Audience
-The Date
-What does this information tell you?

IDENTIFYING THE MAIN IDEA AND KEY ARGUMENTS

I. What is the author's main idea?

II. What are the key arguments presented in this article? What specific evidence, examples or illustrations has the author used to support their arguments?

III. Has the author ignored or left out any issues?

EVALUATION

How logical and valid are the arguments? Are they well constructed/supported?

REFLECTION

How does what the author says relate to your own situation and your opinions? Has the article succeeded in changing your beliefs or your position with its arguments?

N*ow, write a short critical review after watching the video and reading the news article .*

Introduction to Research and Understanding the Research process

What is research?

Research is a systematic process for the creation of new knowledge and ideas. The final product of the research could be something tangible as a new alloy for creating batteries or something intangible like a new understanding of how children learn language. The process or methodologies of conducting research will vary from field to field. Nevertheless, there are some common stages in the research process.

Understanding the research process through an example.

BOXERS PUNCH THEIR WAY TO 3 GOLD IN A DAY

Eldhose Paul (left) won gold and Abdulla Aboobacker bagged silver in the men's triple jump. India narrowly missed a clean sweep in the event as Praveen Chitravel finished 4th with a best jump of 16.89m, while Bermuda's Jah-Nhai Perinchief won the bronze with a best jump of 16.92m

Boxing

World champion Nikhat Zareen won the 50kg (light flyweight) gold

Amit Panghal captured gold in the 48-51kg category

Nitu Ghanghas won in the 48kg category

Achanta Sharath Kamal and Sathiyan Gnanasekaran got a silver in TT men's doubles but the pair of Sharath & Sreeja Akula won the mixed doubles gold

Annu Rani won bronze in women's javelin; Sandeep Kumar bronze in 10,000m walk

Indian women's hockey team ended 16-yr wait for CWG medal, beating NZ 2-1 in shootout

PV Sindhu confirmed a medal, defeating Singapore's Yeo Jin Min 21-19, 21-17 to enter her second consecutive women's singles final. She won a silver in 2018 and a bronze in 2014. Lakshya Sen beat Jason Teh 21-10, 18-21, 21-16 to also clinch a final spot in the men's singles while Satwiksairaj Rankireddy and Chirag Shetty won their men's doubles semifinal match 21-6, 21-15

A headmaster in a school in Jungpura, Delhi was inspired by India's recent achievements in the Commonwealth games. The headmaster himself was an athlete in his school days but did not pursue it as a career. He wants to promote varied sports and encourage every student to play and those who are talented/have the potential to think about taking sports as a professional career. He wants to change the mindset of students and parents about sports as a profession.

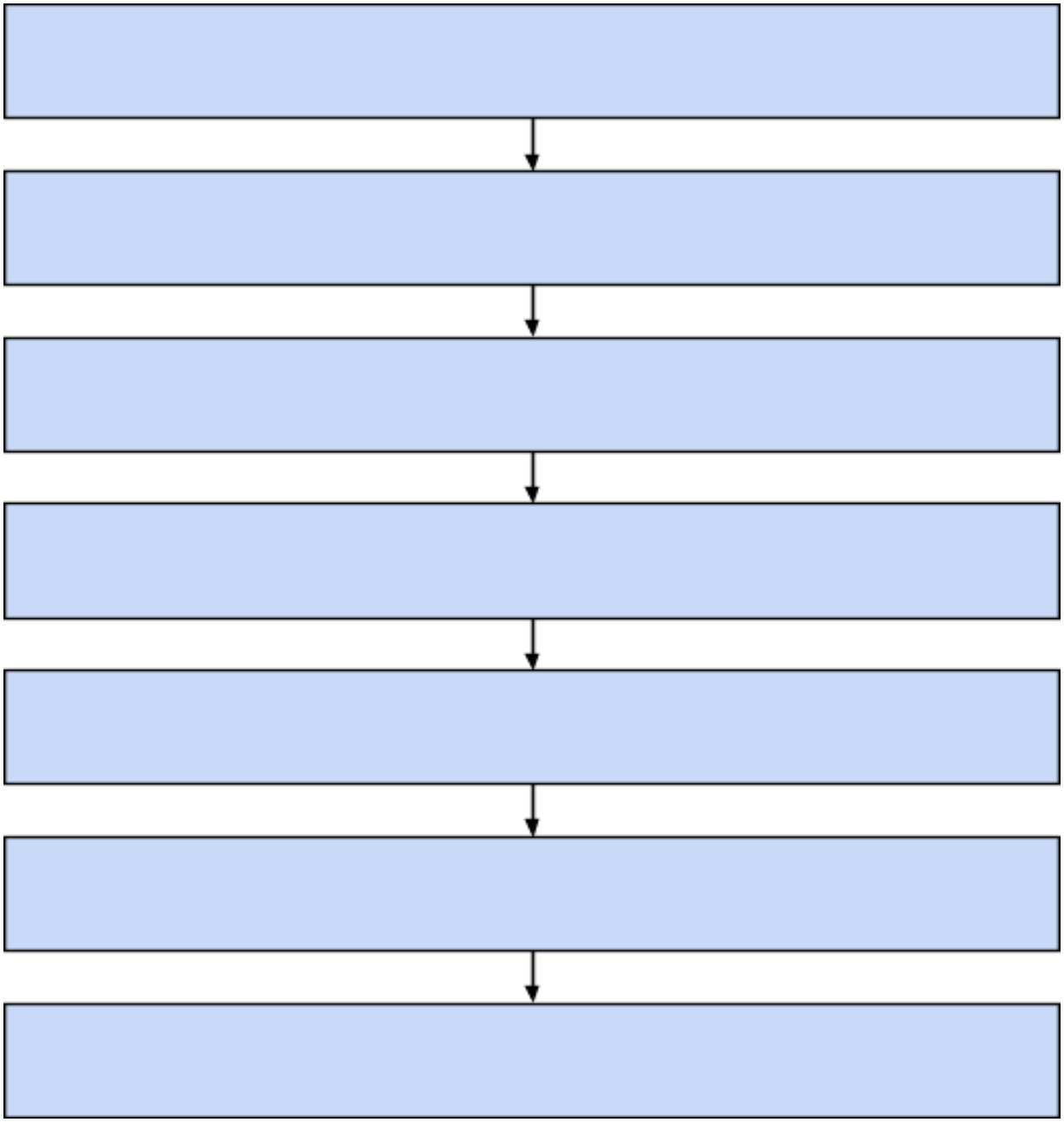
But he has a few questions to which he is seeking answers:

(1) What are the factors that motivate students to take up sports?

(2) What support do students need to choose sports as a profession?

Steps in an research process

Based on your discussion in the classroom, name the different steps in the research process.



Identifying a problem and developing research questions

Research Question Generator

(adapted from UConn Library's adaptation of the University of Michigan Library Skills Challenge)

General Topic

What is your broad theme/topic? What is the problem you have identified?	

Topic Refinement

WHO? Who is impacted by your topic? Which population? Gender? Age? Profession? etc.	
WHAT? What aspect of your topic are you interested in? Is there a theme or category you'd like to focus on? Causes? Effects/implications? Solutions?	

WHERE? Are there any specific locations to where you want to focus your study?	
WHEN? What timeframe is most important in the study of your topic? Current? Historical? Specific event? Future?	

Research Question/Statement #1	
Research Question/Statement #2	
Research Question/Statement #3	

Research Proposal Template

1. **Problem/topic identified:**

2. **Research questions:**

3. **Plan for Data Collection** ***(****will you be collecting primary data or using secondary data? From whom will you collect data? What data will you collect? Which tools will you use to collect data?)***:**

Data Collection in Research

Primary & Secondary Data:
Primary data is first-hand data collected by the researcher using interviews, surveys etc. and secondary data is using data that has been already collected

Tools of Data Collection: tools used for people to share their perceptions/opinions, experiences etc.

- Interviews: these are carried out one-to-one, and questions are open-ended
- Surveys: can be carried out with a large number of people, questions are largely close-ended (i.e. there is a set of responses to choose from)
- Focus Group Discussions: these are carried out with groups of people. The ideal number for a group discussion is (5-10), and questions are open-ended

Ethical considerations in Research: *(important things to keep in mind when collecting data)*

(a) The purpose of the study and the role of the participant to be communicated clearly to the respondent.
(b) Full consent of the participant should be taken prior to the study. This includes voluntary participation of the respondent, permission to record the respondent, and use of data for analysis and reporting.
(c) Participant names are to be kept anonymous for the purpose of data analysis and report writing.
(a) Confidentiality of the participant data to be maintained.
(b) While using secondary data, you should give credit/cite the other researchers

Create an interview schedule with at least four questions(schedule means the questions that will be asked in an interview): on the theme of **Parental support for pursuing sports as a career**.

Difference between Natural Science and Social Science Research

Write the differences between natural science and social science research from the discussions in the class.

Natural Science Research	Social Science Research

Describe the difference in & similarities in the research process of trees and that of motivation to take up sports.

Facts and Opinions

What is a fact? A fact is something that could be verifiable in time and space
What is <u>not</u> a fact? A fact is not a definition or theory. Fact is not based upon consensus or tradition.
What is an opinion? An opinion is an informed belief. Opinions are arguable. Opinions can be supported by evidence.
What is not an opinion? Opinion is not a preference. An opinion is not what you like. An opinion is not just what you believe.

Facts | Opinions

Instructions: Read each statement and underline if it is a fact or opinion. Explain your answer

1. Jawaharlal Nehru was India's first prime minister
    a. Fact | Opinion |Other
    b. Explain: _____
2. The cheetah is the fastest animal on Land
    a. Fact | Opinion |Other
    b. Explain: _____

3. Virat Kholi is the greatest cricket player of all time.

    a. Fact | Opinion |Other

    b. Explain: _____

4. Newton's First Law of Motion (Inertia) - An object at rest remains at rest, and an object in motion remains in motion at constant speed and in a straight line unless acted on by an unbalanced force.

    a. Fact | Opinion |Other

    b. Explain: _____

5. The sun rises in the east and sets in the west

    a. Fact | Opinion |Other

    b. Explain: _____

6. This generation of school children seem to be more stressed about exams than the previous generation.

    a. Fact | Opinion |Other

    b. Explain: _____

7. We should paint the classroom yellow as it is my favourite colour.

    a. Fact | Opinion |Other

    b. Explain: _____

8. It is wrong for people under the age of 21 to drink alcohol.

    a. Fact | Opinion |Other

    b. Explain: _____

9. The orange fruit contains both calcium and Vitamin C

    a. Fact | Opinion |Other

    b. Explain: _____

10. People who graduate from college are smarter than people who dropout of school

    a. Fact | Opinion |Other

    b. Explain: _____

11. Mahatma Gandhi was assassinated on 30 January 1948.

    a. Fact | Opinion |Other

    b. Explain: _____

12. Mahatma Gandhi was assassinated on 30 January 1948 because of his unwillingness to give in to a hatred of Muslims.

    a. Fact | Opinion |Other

    b. Explain: _____

13. It is dangerous to be outdoors during a solar eclipse.

    a. Fact | Opinion |Other

    b. Explain: _____

Data Analysis

Read the article -

"Study reveals 1/3 of India did no physical activity in past year; skipper Virat Kohli is not too happy"

You can access the article here:

This article is related to the study commissioned by Virat Kohli that you heard about in the previous session (Interview with Virat)

Study

The study, covering 3924 respondents in the age bracket of 18-40 years (both male and female), was spread across 18 cities - Bangalore, Mumbai, Delhi, Hyderabad, Chennai, Pune, Kolkata, Cochin, Ghaziabad, Goa, Gurugram, Guwahati, Jaipur, Lucknow, Ludhiana, Patna, Raipur, and Surat.

Look at the infc

1. How ma 1 year?

2. How many respondents have played at least one sport in the last one year

3. If you have to make one graph representing the section "Playing is effortless" how would you draw it?

4. Can you find another way of representing the data to answer the question - How did different Indian cities fare?

5. Do you think this research is representative of the Indian population related to sports and fitness?Which section of society?Why or why not?

Research Proposal

Name:	**Class:**

Broad Theme:

Problem identified for research:

Why is this research problem important?

Research Questions (*at least two)*

Plan for Data Collection ***(****will you be collecting primary data or using secondary data? From whom will you collect data? What data will you collect? Which tools will you use to collect data and why? - give the rationale for your plan****)*****:**

Cluster VI Module 2: Academic Research

Credits

Initial Module Conceptualization, Authoring and TPD sessions:	Ms. Meera Samson, Director and Senior Researcher at Collaborative Research and Dissemination (CORD), Delhi Ms. Anuradha De, Director at Collaborative Research and Dissemination (CORD), Delhi
Research and Coordination:	Mr. George Jose, Research Assistant, CETE, TISS Ms. Tanya Mittal, Program Manager, CETE, TISS

Student Planner

Session	Topic	Objectives and Description
Week 1		
Session 1	Introduction to academic research in social sciences, Glimpses of a Research Paper	1. To understand the concept of academic research 2. To identify elements of a research paper 3. To discuss what is a good quality research paper *In this session we will be focusing upon the concept of academic research in social sciences. We will also be looking at how it differs from the research in natural sciences. In addition to this we will be looking at a research paper to understand its nuances and learn what exactly is a good research paper.*
Session 2	**Exploring how a research study is done**	1. To understand how a research study is done 2. To learn about Google Scholar *In this session, we will be looking at the elements of the research process (what, why, how and where are questions which have to be addressed). We will also be looking at how Google scholar is a specific search engine for academic research by looking at various articles related to key words we search.*
Session 3	A deeper understanding of Academic Research in Social Sciences	1. To understand who are the people responsible for conducting an academic research 2. To look at the various ways in which it is useful for formulating laws and policies 3. To look at the features of academic research *In this session, we will be focusing upon the people and organizations who are involved in carrying out an academic research, what are the different uses of doing this research and the distinct features it encompasses.*
Week 2		

Session 4	Understanding quantitative research method	1. To build the conceptual understanding of quantitative research *In this session, we will be looking at what quantitative research is, what are the different research tools that it encompasses and how the analysis is done. We will also be looking at how sampling is done under quantitative research methods.*
Session 5	Watching an interview with a quantitative researcher	1. To understand what a quantitative researcher does 2. To learn how data quality and data security is ensured 3. To understand the possible pathway towards becoming a quantitative researcher *In this session, we will be focusing upon understanding the experiences of a researcher who has undertaken a quantitative research, major steps in their research work and how they became a researcher*
Session 6	Understanding data collection and preliminary analysis in quantitative research	1. To have a preliminary experience of doing survey and analysis 2. To have a hands on experience of data presentation - tables and charts *In this session, we will be looking at compiling the data gathered in the previous activity, analyzing it and presenting the data in the form of tables and charts.*
Week 3		
Session 7	Understanding qualitative research method	1. To understand what is qualitative research 2. To understand how data is collected in qualitative research 3. To learn how data is analyzed and presented in qualitative research 4. To understand the subjects where qualitative research methods are more commonly used *In this session, we will be focusing upon the concept of qualitative research, how data is collected, analyzed and presented through qualitative research method.*
Session 8	Watching an interview with a qualitative researcher	1. To watch and learn the process of qualitative research by viewing an interview

		In this session, we will be focusing upon understanding the experiences of a researcher who has undertaken qualitative research, major steps in their research work and how they became a researcher.
Session 9	Understanding data collection and preliminary analysis in qualitative research	1. To learn about how to use an interview schedule with open ended questions. 2. To practice asking questions and noting answers. 3. To learn about some basic principles of data analysis. *In this session, we will be focusing on carrying out an interview based on the schedule provided and learn about analyzing the data thus gathered.*
Week 4		
Session 10	Introduction to internal Assessment, understanding research presentations	1. To understand how to communicate research findings 2. To learn how to use audio-visual or PowerPoint for presentation 3. To identify main findings for presentation *In this session, we will be looking at the ways of communicating the research findings in a cohesive and clear manner. We will also be looking at the usage of Powerpoint as the tool for presenting the main data findings.*
Session 11	Draft presentation for the research paper	1. To make a draft presentation of the research paper *In this session, we will be making a draft presentation of a research paper prepared through the data collected in week 2 research question.*
Session 12	Internal Assessment - Final presentation of the study by groups, and discussion	1. To make the final presentation of the research paper. *In this session we will be looking at the final presentation by the groups on the research paper prepared. The findings will be presented through the means of a powerpoint followed by a whole class discussion.*

Introduction to Academic Research in Social Sciences

In our everyday life, we might casually use the word 'research' for the act of looking up information on the internet for a school project or comparing items to buy. But this is not what is meant by 'academic research' — it has to follow an established method and contribute to a body of knowledge.

NEWS | 26 August 2022

COVID vaccines slash risk of spreading Omicron – and so does prior infection

But the benefit of vaccines in reduci

Ruby Prosser Scully

Article

Hitler's Worldview and the Interwar Kulturkampf

Todd H. Weir

Abstract

This conceptual historical investigation of Adolf Hitler's use of the term 'worldview' (Weltanschauung) opens new perspectives on the debate over the relationship of religion and National Socialism. Most studies of Hitler's worldview have focused on the genealogy of his beliefs, an approach that has led to an anachronistic understanding of worldview. By contrast, this article reveals that Hitler's own usage of the term 'worldview' was decisively shaped by the German culture wars that preceded his entrance into politics in 1919. The article shows how the varying Nazi religious policies, from supporting 'positive Christianity' during the Weimar Republic to suppressing elements within the churches once taking power, continued to be framed by the dynamics of the culture wars.

Closure of Schools and Migration of Adolescent Tribal Girls

A Case Study of Surat

NEWS AND VIEWS | 24 August 2022

Suspended pores boost gas solubility in water

Porous solids have been dispersed in water to produce suspensions that can car more oxygen than blood can. Such 'porous water' opens the way to water-based formulations for biomedical use.

Margarida Costa Gomes

NEWS AND VIEWS | 17 August 2022

Evidence at last that the proton has intrinsic charm

An analysis of the distribution of the elementary particles that make up the proton provides evidence that it contains a type of quark known as an intrinsic charm quark – verifying a proposal made four decades ago

Ramona Vogt

Articles

Forecasting changes of economic inequality: A boosting approach

Christian Pierdzioch, Rangan Gupta, Hossein Hassani & Emmanuel Sirimal Silva

Pages 252-268 | Received 12 May 2019, Accepted 04 Sep 2019, Published online: 14 Feb 2020

NEWS AND VIEWS | 17 August 2022

Plate tectonics controls ocean oxygen levels

Variations in ocean oxygen levels during Earth's history have been linked to evolution and mass extinctions. Simulations now suggest that the configuration of the

The health promoting effects of social flourishing in young adults: A broad view on the relevance of social relationships

Carol Vidal[a,*], Jenna Silverman[b], Emilia K. Petrillo[b], Flavius R.W. Lilly[b]

[a] Johns Hopkins University, School of Medicine, Baltimore, MD, USA
[b] University of Maryland, Baltimore, MD, USA

(examples of academic research in natural science and social sciences. Circle the research topics which you think belong to social sciences)

Research in social sciences is carried out for studying social groups and human behavior. It is different from scientific research done in labs or controlled environments. For example, when scientists were working on the development of the Covid Vaccine, they could control factors like temperature. But in social sciences, it is difficult to control research settings. It is also generally difficult to isolate the effect of one factor on another because so many factors are working together. For example, you might be interested in studying how the choice of school is dependent on tuition fees, but there will be many other factors such as distance, availability, and reputation affecting the choice of school.

This module will give us a glimpse into the world of academic research — different stages in the research process, research methods used by social scientists, and research communication.

Write down the difference between academic research in science and social sciences.

_____

_____

_____

_____

Looking at Research Paper

Look at the research paper given to you and answer the following questions.

a. Title of the research paper _____

b. Name of the author(s)

_____

c. Name of the journal

_____

d. Date of publication

_____

e. Volume and issue number

_____

Structure of Research Paper

One of the common forms of bringing your research findings to the research community is by publishing a research paper in an academic journal. A research paper is generally written in the following structure.

(Not all papers will strictly follow this format. There will be variations in subheadings, but a good research paper will cover all these elements)

1. **Introduction** - This is an outline of the research paper
2. **Background of the Study and Literature Review** - This section describes the rationale for undertaking the research. There will be already existing literature[1] (research studies) on the topic. In the literature review, the author(s) describe what we already know, and what we do not know (the gaps in knowledge), and explain how the research will help in filling those gaps.
3. **Research questions -** A research study will have clearly defined research questions. This section explains 'what' the research objectives are.
4. **Methodology used -** The methodology section explains the methods and tools used by the researcher to collect data for answering the research question
5. **Discussion and results** - This section reports the findings of the research and the implication it has.
6. **References** - Research is built on top of the work of others. The reference section is the list of previous works that have been used (referred) to conduct the research.

Abstract - In most academic journals there is also an abstract given on the first page. It is a brief summary of the research paper. In addition to the abstract, the first page might also include keywords (these are the words or phrases that are helpful when you are searching for literature).

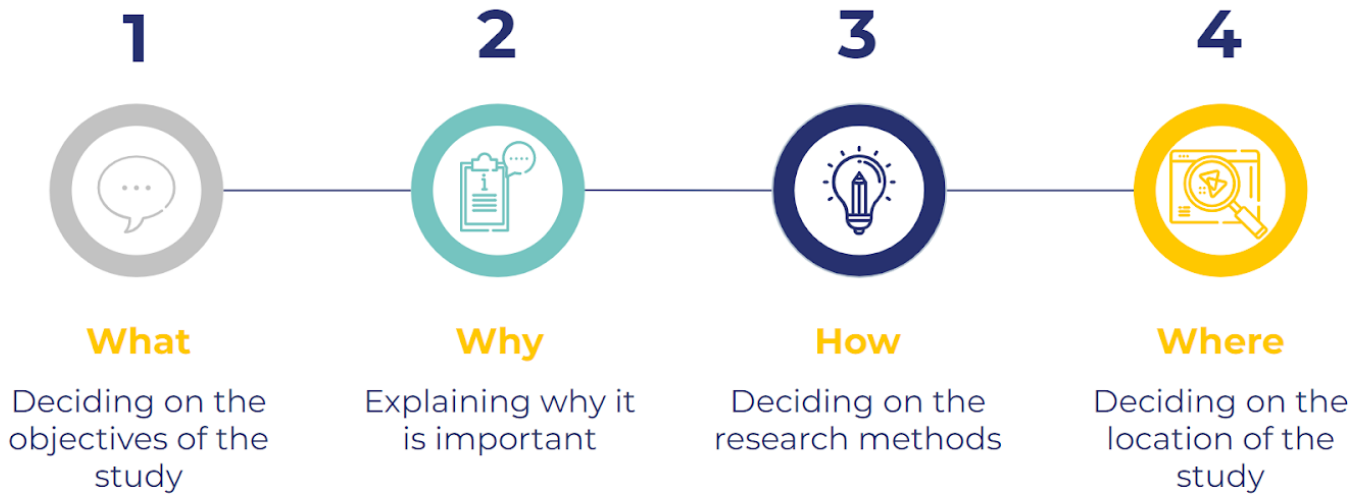
[1] Literature in academic research refers to the existing research studies that are available for reference

What is a good quality research paper?

There are research papers of good quality and poor quality. A good quality research paper follows an acceptable structure/format. Research should have a sound basis and be read and accepted by other researchers. In a good quality research paper:

- Elements are clearly explained
- References indicate literature has been examined
- Credit given to the work of other researchers / not copying without acknowledging

Elements of Research Process



1. **What are we researching?-** The research study must have clearly defined objectives and research questions.
   Example for research question - 'How does midday meal help in school education?'

2. **Why are we doing this research? -** We must be able to explain why our research is important. For this, we will have to do a literature survey (looking through already existing research). This process will help us understand how other researchers have approached the problem, what they have already found and what is left to be found.

3. **How are we going to do the research?** - The answer to this question will depend on our research questions and objectives. Broadly there are two types of research methods.

(i) Quantitative research methods -	**(ii) Qualitative research methods** -
If our research question has to be answered by measuring variables, describing frequencies or averages, or comparing quantities, we go for quantitative research methods.	If our research question has to be answered in-depth, we have to choose qualitative research methods.

Through quantitative methods, we will get a bird's eye view as data is gathered from a large number of respondents Eg *"Do more educated mothers have fewer children?'* Quantitative research methods are more suited here– we can compare the family size of mothers who are illiterate, with some education and those who have secondary education.	This gives us a worm's eye view as data is gathered from a few respondents, but will have in-depth information. Eg *"how has the education of mothers impacted their decision to have fewer children?*" Qualitative research methods may be more suited here as this helps us explore this question in an open-ended way with mothers.

Some studies may involve both quantitative and qualitative methods and are called **mixed-method research**.

4. **Deciding on the location of the study (where) -** After finalizing our research methods, we will have to decide the location(s) to conduct the research depending on our research questions and practicalities. We have to decide if the study will be conducted in urban or rural areas; if in urban, the size of the city can be considered; where in the city/town; if in rural, the size of village may be important.
   After deciding on the location, we will also have to decide on the participants (sample) of our study. We will have to decide which families/households we will be studying and choose which member in the family to be studied – Male/female or Elders/parents/children etc.

Google Scholar Exercise

Use the keyword ‘mid day meal’ and search in Google and Google Scholar (https://scholar.google.com/). Note down the differences in the search results. What kind of websites and articles are displayed in the search results?

Google	Google Scholar

Who does academic research?

Look at the first pages of five research articles and write down the affiliation of the authors of the paper.

_____

_____

_____

_____

_____

_____

Use of Academic Research

Academic research adds to knowledge. In addition, it impacts human behavior by influencing laws and policy. Examples of how research has influenced law and policy:

- Research on the positive impact of “early childhood care and education” on future learning has led the government to invest in the anganwadi programme for the 3-6 year age group.
- Research on the negative impact of early marriage for maternal and child health has led to the government having a law for minimum age at marriage for girls and boys.
- Research on the importance of inclusion for CWD (Children with disability) led the government to give all CWD the right to be admitted in school and receive the support required.

Disciplinary Differences with Social Sciences

Research takes different forms depending on which of the disciplines it is based on. These include economics, history, sociology, and political science.

- Researchers in economics may focus on issues involving measurements like income, and landholding.
- Researchers in history may look at a historical figure or a historical event.
- Researchers in sociology may study behavioral patterns of different social groups.
- Researchers in political science may look at election results.

Some studies are multidisciplinary.

Understanding of quantitative research methods and uses

Quantitative research is the process of collecting and analyzing numerical data. It can be used to find patterns and averages, make predictions, test causal relationships, and generalize results to wider populations. Quantitative research is the opposite of qualitative research, which involves collecting and analyzing non-numerical data (e.g., text, video, or audio). It is widely used in the natural and social sciences: biology, chemistry, psychology, economics, sociology, marketing, etc. Policy makers like evidence based on large numbers and through quantitative research methods we can and interpret large amounts of data. For instance, to understand data collected for Census and NSSO for employment details, quantitative research methods will allow us to see the patterns and make generalizations in the form of numerical data.

Sampling

When we conduct research about a group of people, it's rarely possible to collect data from every person in that group. Instead, you select a sample. The sample is the group of individuals who will actually participate in the research. To draw valid conclusions from your results, you have to carefully decide how we will select a sample that is representative of the group as a whole. This is called a sampling method. There are two primary types of sampling methods that we can use in our research:

- Probability sampling involves random selection, allowing you to make strong statistical inferences about the whole group.
- Non-probability sampling involves non-random selection based on convenience or other criteria, allowing you to easily collect data.

(Source:https://www.scribbr.com/methodology/sampling-methods/)

Data is collected from the chosen sample through various research tools such as questionnaire, survey, interviews, observation and document review. The collected data goes through stages of data cleaning and data entry before it is analysed. It is analysed using specific softwares such as SPSS, RStata, SAS, JMP. and then presented using graphs and tables.

To understand how a questionnaire is administered, look at the activity given on the next page.

(Instructions: Choose class 9 and Class 10 students who live near you and take private tuition). Ask the following questions, and write the correct code.

Questionnaire on private tuition

Your name ---------- ----------

1	Name		
2	Age (in completed years)		
3	Gender	1 = Male 2 = Female	
4	Class enrolled	1= class 9 2= class 10	
5	School type	1= Government 2= Private	
6	Do you take tuition?	1 = yes 2 = no	
7	How many tutors do you have?	1=1 2= more than 1	
8	Where do you take tuition?	1= in my house 2= Very close to my house 3= quite far from my house	
9	How many hours in a day do you take tuition?	1=1 hour 2=2 hours 3= 3 hours 4= more than 3 hours	
10	How many months in a year do you take tuition?	1= less than 6 months 2= 6 to 9 months 3= more than 9 months	
11 a	Do you take tutions in English	1 = yes; 2 = no	
11 b	Do you take tuitions in Maths	1 = yes; 2 = no	
11 c	Do you take tutions in Science	1 = yes; 2 = no	
11d	Do you take tutions in any other subjects	1 = yes; 2 = no	

12	How many students study together?	1= 1 student 2= 2 to 5 students 3= 5 to 10 students 4= more than 10 students	
13	What is the monthly fee?	1= less than Rs. 500 2=Rs. 500 to Rs. 1000 3= Rs. 1001 to Rs. 1500 4= more than Rs. 1500	
14	Why did your parents choose this tutor?	1= Because its close by 2= Because the fees is low 3= The tutor teaches very well 4= Others students from my area go there 5= Any other	

Understanding Qualitative Research

Qualitative research involves collecting and analyzing non-numerical data (e.g., text, video, or audio) to understand concepts, opinions, or experiences. It can be used to gather in-depth insights into a problem or generate new ideas for research. It is the opposite of quantitative research, which involves collecting and analyzing numerical data for statistical analysis.

Qualitative research is commonly used in the humanities and social sciences, in subjects such as anthropology, sociology, education, health sciences, history, etc. It is used to understand how people experience the world. While there are many approaches to qualitative research, they tend to be flexible and focus on retaining rich meaning when interpreting data. Common approaches include grounded theory, ethnography, action research, phenomenological research, and narrative research. They share some similarities, but emphasize different aims and perspectives.

Qualitative Research Methods

Each of the research approaches involve using one or more data collection methods. These are some of the most common qualitative methods:

- Observations: recording what you have seen, heard, or encountered in detailed field notes.
- Interviews: personally asking people questions in one-on-one conversations.
- Focus groups: asking questions and generating discussion among a group of people.
- Surveys: distributing questionnaires with open-ended questions.
- Secondary research: collecting existing data in the form of texts, images, audio or video recordings, etc.

Data Analysis

Qualitative data can take the form of texts, photos, videos and audio. For example, you might be working with interview transcripts, survey responses, fieldnotes, or recordings from natural settings.

Most types of qualitative data analysis share the same five steps:

1. Prepare and organize your data. This may mean transcribing interviews or typing up fieldnotes.
2. Review and explore your data. Examine the data for patterns or repeated ideas that emerge.
3. Develop a data coding system. Based on your initial ideas, establish a set of codes that you can apply to categorize your data.
4. Assign codes to the data. For example, in qualitative survey analysis, this may mean going through each participant's responses and tagging them with codes in a spreadsheet. As you go through your data, you can create new codes to add to your system if necessary.
5. Identify recurring themes. Link codes together into cohesive, overarching themes.

(Source:https://www.scribbr.com/methodology/qualitative-research/)

Interview Schedule and Data Analysis

Look at the study given below and read it carefully, after which you are required to take up the role of an interviewee/interviewer in pairs and fill up the interview schedule.

Study – Use of mobile phones among young people in Delhi

Objective – This is a small study to explore use of mobile phones among young people in Delhi.

Research question – We know that mobile phones play a critical role in the lives of young people. Through this study, we are interested to capture details about this critical role, and how young people themselves see it.

Sampling – Our choice of respondent is important. They should be in the 15-25 years age group, and should have a mobile phone. We may want to speak to a mix of men and women, and a mix of those in different age groups (15-18 years; 19-21 years; 22-25 years).

Introducing yourself and the study – We have given a sample introduction.

About the schedule

We are asking a few questions and next to each question are suggestions about how you should take each question further. Each question is like a small conversation. You want to encourage the respondent to talk. If they stop, you look interested, and you could say, "Tell me more".

The schedule has 7 questions. These are suggestions. You can add questions which you think might be useful.

The questions will give us data on different categories.

<u>About the respondent</u>

Question 1 gives us the age and gender of the respondent.

Question 2 tells us if they are studying or working or doing housework or a combination. We get to know if they are earning.

<u>About the respondent and the type of mobile they own</u>

Question 3 gives us important details about the kind of phone they have and how they may have got it. Gives us an idea of their financial situation.

Question 4 asks them to tell us what they like about their phone.

<u>About the use of the phone</u>

Question 5 comes to the use of their phone for fun activities.

Question 6 comes to the use of their phone for essential activities.

<u>About what the respondent thinks about the importance of the phone in his life</u>

Question 7 explores the importance of their phone in their life.

The interview tells us a story about each person who is interviewed.

Interview schedule – Use of mobile phones among young people in Delhi

Introduction

- Hello! My name is …… and I am in class … in ……..school.
- We are doing a small study on the use of mobile phones among young people in Delhi.
- Can I ask you a few questions on this subject? We are talking to young people in the age group of 15-25 years.
- The interview will take 10 mins, and will be completely confidential. No personal details will be shared with anyone.

1. Can you tell me about yourself (name, age,)?
   Name: Age: Gender:

2. Can you tell me about how you spend your day (studying in school; college; looking for a job; any type of employment; housework).

3. Mobiles have become such an important part of our lives. Can you tell me about your current mobile phone? (smartphone or not? How and when did you get it? Who chose it? Paid for it? Approximate cost)

4. Tell me a bit about why you like this particular model. (features, price, design)

5. What fun activities do you use your phone for? (talking to friends; whatsapp; instagram; FB; looking on google if you want to find out something; others…)

6. Can you tell me about any study or work-related activities in your day for which a mobile phone is essential. (online classes; employer communicates about schedule at work)

7. How would your life be if you didn't have a mobile phone? (any time when you are not checking it; how important is it to you)

Difference between Qualitative and Quantitative Research Methods

In the table given below mention the distinct features of qualitative and quantitative research methods

Qualitative	**Quantitative**

Mind Map

Create a mind map of all the concepts you've learnt in the academic research module.

Cluster VI Module 3: Marketing Research

Credits

Module Conceptualization, Authoring and TPD sessions:	Mr. Ashish Kulkarni, Blogger at Econforeverybody, prior Assistant Professor at Gokhale Institute of Politics and Economics
Research and Coordination:	Ms. Manvi Suyal, Research Assistant, CETE, TISS
	Ms. Tanya Mittal, Program Manager, CETE, TISS

Student Planner

Session	Topic	Objectives and Description
Week 1		
Session 1	The art and science of marketing	1. To familiarise students with the concept of marketing and its relevance in today's world. 2. To understand that working of a firm is essentially marketing and identify personal instances of marketing in our own lives. *In this session, we will be focusing on understanding the basic concepts of marketing and its importance in the world today and to see how a marketing firm functions.*
Session 2	Data, Facts, Opinions and Decision-Making in Marketing	1. To understand what a target group is and the need to identify the right targets. 2. To understand that the opinion of target group is not all that matters in marketing research 3. To analyse the gathered data. *In this session, we will be focusing on what is the right target group for any marketing research process and what are the other key characteristics of marketing research*
Session 3	The key components of marketing research	1. To understand key components of a market research and the importance of sequencing of the components 2. To understand the limitations of such a process *In this session, we will be focusing upon understanding the key components of marketing research and what are the constraints such as budgetary that one faces while undertaking the process*
Week 2		
Session 4	Statistics and Marketing	1. To develop an understanding of the basic concept of statistics. 2. To establish the relation between statistics and marketing 3. To develop and understanding of the extent to which statistics can help in marketing research and limitations it encompasses *In this session, we will look at how statistics and marketing are interlinked, focusing on how statistics aid the process of marketing research and the limitations it has.*

Session 5	The Art of Asking the Right Questions	1. To understand different methods of designing a questionnaire. 2. To develop a sense of limitation and advantages of each of the methods. 3. Develop an appreciation for the idea of curating a perfect questionnaire. policy implementation and review *In this session, we will focus upon what are the different ways of designing a questionnaire and the limitations which each of the methods has , we will also look at the challenges faced in designing a perfect questionnaire.*
Session 6	Understanding Sampling	1. To understand how conclusions can be drawn about a population by studying a sample 2. To have a basic understanding of central limit theorem 3. To understand limitations of sampling *In this session, we will focus upon the basic concept of sampling and its limitations. The session will also ponder upon the concept of central limit theorem in marketing research.*
Week 3		
Session 7	Importance of data in policy making	1. Students will gain an appreciation for qualitative research and its importance. 2. Students will be able to understand the limitations of qualitative research 3. Students will develop a sense of constraints in terms of time and money when it comes to qualitative research *In this session, we will focus upon understanding how qualitative research is done in the space of marketing. Students will also take cognizance of the various limitations it entails in terms of money and time.*
Session 8	What are FGD's and what is an ethnographic survey?	1. Students will be introduced to the basic concept of FGD and its advantages. 2. Students to be introduced to the idea behind ethnographic survey *In this session, we will focus upon exploring what is FGDs and ethnographic survey in marketing research. The students will also understand how observation is important while doing an ethnographic survey.*

Session 9	Recap, review and summarization	1. Students to recap what they've done so far 2. Students will reflect on what marketing research can or cannot do. *In this session, we will be recalling the concepts they've learned so far in the module. Students will also look at things that can be done through marketing research and what are the objectives it cannot achieve.*
Week 4		
Session 10	Understanding the project	1. Students will refine their questionnaire to make them more suitable for pilot survey *In this session, we will be familiarised with the project they have to undertake and the questionnaire which they need to refine.*
Session 11	Working on the project	1. Students will carry out a pilot survey in school *In this session, we will be carrying out a pilot survey in the school using the questionnaire developed in the previous class.*
Session 12	Presenting the final work	1. Students will reflect on the data collected, and begin preliminary analysis. *In this session, we will be focusing upon doing a simple analysis of the data collected in either qualitative or quantitative manner preferably both. The session will end with a reflective essay on the entire four weeks of the module.*

Introduction to Marketing Research

Have you seen advertisement boards around you or emails and calls asking you to try a newly launched product or buy an insurance cover from them? Well, no matter how annoying we find these, all of these are part of marketing campaigns for a brand.

Marketing is an integral part of business, and with the cutthroat competition that exists in the business world, marketing has the power to make or break a venture.

Marketing involves a slew of steps. Through effective campaigns, the market is studied initially. From the surveys, the required services or products are presented to the consumers and strategies are prepared to increase the consumer base and boost sales to generate more revenues and leads.

What is marketing?

Marketing definition includes activities undertaken by a business establishment or an individual to promote their services and products. Marketing includes promotion, advertisement and selling products and services to the consumers.

Marketing is the key component of any venture and includes aspects like writing product descriptions, designing website pages, improving customer services, establishing business & market segments and conducting market research. Marketing involves strategies that aid in the growth of a business venture.

What is Marketing Research?

According to the American Marketing Association, marketing research is the systematic gathering, recording and analyzing of data about problems relating to the marketing of goods and services. Marketing research is not a perfect science. It deals with people and their constantly changing feelings and behaviors, which are influenced by countless subjective factors. To conduct marketing research, you must gather facts and opinions in an orderly, objective way to find out what people want to buy, not just what you want to sell them. It is impossible to sell products or services that customers do not want. Learning what customers want, and how to present it attractively, drives the need for marketing research. Small business has an edge over larger concerns in this regard. Large businesses must hire experts to study the mass market, while small-scale entrepreneurs are close to their customers and can learn much more quickly about their buying habits. Small business owners have a sense of their customers' needs from years of experience, but this informal information may not be timely or relevant to the current market.

Marketing research focuses and organizes marketing information. It ensures that such information is timely and permits entrepreneurs to:

- Reduce business risks
- Spot current and upcoming problems in the current market
- Identify sales opportunities
- Develop plans of action.

Without being aware of it, most business owners do market research every day. Analyzing returned items, asking former customers why they've switched, and looking at competitor's prices are all examples of such research. Formal marketing research simply makes this familiar process orderly. It provides a framework to organize market information. ***(Source: https://www.schoolcraft.edu/pdfs/bdc/2005-03.pdf)***

The term marketing research is also more often confused with market research, many times the terms are used interchangeably. However, it needs to be kept in mind that even though both the processes are crucial to marketing, they come with their own set of inherent differences. The distinction between market research and marketing research is easily discernible on the following grounds:

1. Market research is the study of customers and the market, whereas marketing research is the study of all aspects of marketing.
2. Market research is reliant, whereas marketing research is autonomous.
3. Marketing research has a much broader reach since it involves doing product research and customer preferences, whereas market research just involves gathering market information.
4. Market research investigates the market success of a product or service, whereas marketing research collects data for marketing intelligence activities and decision-making.
5. Market research is focused on answering particular questions, whereas marketing research is more general and utilized to solve various marketing challenges.

(***Source:*** *https://www.voxco.com/blog/market-research-vs-marketing-research)*

Understanding Marketing Research

Look at the activity below to develop an understanding of marketing research.

A Smartphone for 15-18 Year Olds

Read the following paragraph:

A major mobile phone manufacturing company is considering launching a new phone designed exclusively for 15-18 year old's. You, the latest employee in the marketing department, are tasked with deciding what features such a phone should have.

The owner of the company, a seventy-year old, would like the phone to have a physical keyboard, because that is his own favourite feature on the phone. (Option A)

He says he has also spoken to the parents of 15-18 year old's he knows, and they have told him that they would like such a phone to always share its location with them, so that they can always know where their children are. (Option B)

He asks you what features you (a 15-18 year old) would like the phone to have, and you say that it should be a good gaming device. (Option C)

Now, divide yourselves in groups and discuss and reflect upon the questions below:

1. Who is best placed to decide which features should be included in this phone? Why?
2. Who is likely to be the decision maker when it comes to the purchase of this phone? Grand-parents, parents or 15-18 year old's? Whatever your answer, how do you know?
3. Will price be an important factor? Whatever your answer, how do you know?
4. If price ***will*** be an important factor, which features can we afford to cut from this phone? Whatever your answer, how do you know?
5. [Note to the teacher]: the fourth question is likely to elicit many different opinions. Ask the class how they can decide which is the most important, and why.

The Target Group

- A *target group* is something that is in the day-to-day of anyone who proposes marketing and communication actions from a strategic point of view. A real basic among the terms we must handle.

What is a target group?

- Basically, it is about the segmentation that we have to do to limit the audience to which we will direct our campaigns. Different criteria can be used, such as sociodemographic, geographical or personal interests.

  The important thing is to have the most accurate approximation of who are the people receiving the impact of our marketing and advertising actions.

Why are target groups important?

- Keep in mind that each *target group* needs a different approach: they do not have the same interests nor are stimulated the same way by one communication tone or another. It will always depend very much on some key factors like:
- Brand positioning: do you sell exclusivity and luxury? Is your differential advantage found in *eco-friendly* products? Are you the first price in your niche? Only by answering these questions will you start defining your target audience.
- Markets you are targeting: consumers are different in different parts of the world. The cultural footprint makes them have even opposite shopping habits.
- Age range: from references to the communication tone, everything varies if we go to Baby Boomers, Generation X, Millennials or Generation Z.

(Source: https://www.oleoshop.com/en/blog/what-is-a-target-group)

Key Components of Marketing Research Process

At the heart of every marketing research process lies five components i.e. scope, sampling, questionnaire design, data collection, data cleaning and analysis. Scope represents the areas covered or the aspects studied under marketing research. In other words, it implies where or on which areas marketing research can be applied. Sampling refers to the target group towards which the product is based, it is about getting opinions from a number of people, chosen from a specific group, in order to find out about the whole group. The third component is questionnaire design which comprises the tool that will be used for data collection for the research. The questionnaire is a structured technique for collecting primary data in a marketing survey. It is a series of written or verbal questions for which the respondent provides answers. A well-designed questionnaire motivates the respondent to provide complete and accurate information. From the data that has been collected not every bit of it would be useful for drawing conclusions or making decisions, therefore the fourth component of data cleaning is the step in which relevant data is separated from the irrelevant or redundant data. Subsequently in the last step of data analysis, key decisions regarding the product can be undertaken from the conclusions drawn.

Look at the activity given below to develop a sense of key components of the marketing research process. You are required to divide yourselves into five teams with each group representing one key component.

Key components: Scope | Sampling | Questionnaire Design | Data Collection | Data Cleaning and Analysis

Team 1, Scope: This team gets to decide what the project will seek to find out, and what it will stay away from. Should comparisons be made with other smartphones as a part of this (the smartphone for 15-18 year olds) project? What about comparisons with laptops and tablets? With “dumb” phones? How much time should we allocate for this project? Three weeks, or six months or two years? How many people should work on this project?

Team 2, Sampling: Whom should we be asking? Why? How many people do we need to ask? Everybody? Everybody in a locality, in a city, in a state or the entire country? Should we ask only young people, or only old people? Only rich people or only (relatively) poorer people? Educated or uneducated? More men or more women? Again, the emphasis is on figuring out the important questions, not their exact answers.

Team 3, Questionnaire Design: Should we even design a questionnaire? Or just ask people to talk? If we are to design a questionnaire, how many sections and how many questions? Should we ask “personal” questions? What about questions about education? Income? Current phone ownership? Patterns of usage on current phones? Ownership of past phones? Features they will look for in new phones? “Ideal” features?

Team 4, Data Collection: How should we target data collection? What day of the week? Which month of the year? What time of day? How many people in a team and how many teams? How much time should we budget? What if things go wrong? How to do data checks? How should we audit collected data? Language

barriers? Method of recording answers?

Team 5, Data Cleaning and Analysis: How much bad data should we anticipate? What should our definition of bad data be? What questions should we definitely get answers to? What are nice-to-have answers? What questions can we skip analysing? What should we be telling the questionnaire design and data collection team?

Statistics in Marketing Research

Statistics are applied in marketing to identify market trends, and to measure and evaluate the potential and success of marketing programs. The secret to successful marketing is to identify the target market accurately and to use effective marketing communications channels and tactics to reach it. Statistics can help the marketer achieve both of those goals as well as evaluate the success of the marketing effort and provide data on which to base changes to the marketing program.

Data Source

1. The most basic use of statistics in marketing is as a source of data. Statistics provide demographic information such as the number of potential customers in a geographical area, their ages, income levels and consumer preferences. Used as part of competitor analysis, statistics can identify the major competitors, their market share and trends in the longevity of their products. Industry sector data helps marketers understand the trends governing supply and demand of the product category and fluctuations in its popularity.

Read below to understand what statistical analysis in marketing research means:

An Explainer on Commute Times, Outliers and Their Identification

Imagine that you are part of a group of students who are studying how long it takes for different students to commute to school. You collect data on the commute times of all the students in the group and calculate the mean (average) and standard deviation.

The mean is the sum of all the data points divided by the number of data points. For example, if the commute times of the students in your group are 10 minutes, 15 minutes, 20 minutes, 25 minutes, and 30 minutes, the mean commute time is 20 minutes (10 + 15 + 20 + 25 + 30 = 100 / 5 = 20).

The standard deviation is a measure of how spread out the data points are from the mean. For example, if the standard deviation of the commute times in your group is 5 minutes, it means that most of the students' commute times are within 5 minutes of the mean.

Now, let's say that one student in the group has a commute time of 45 minutes. This student's commute time is significantly longer than the mean and falls outside of the range of most of the other students' commute times. We might consider this student's commute time to be an outlier.

By calculating the mean and standard deviation, we can identify outliers in our data and investigate why they are different from the rest of the group. In this example, we might want to find out if there is something unique about the student with the longer commute time, such as living farther from school or taking a different mode of transportation.

To understand the different statistical analysis techniques used in the process of marketing research refer to the QR code given below:

What is Signal to Noise Ratio?

Let us read below to find out about Signal To Noise Ratio!

The signal to noise ratio (SNR) is a measure of how much useful information, or "signal," is present in a dataset compared to the amount of "noise" or irrelevant information. In the context of marketing research, the signal refers to the data that is relevant and meaningful for understanding consumer behaviour and making informed business decisions, while the noise refers to data that is unrelated or misleading.

For example, imagine that you are conducting a survey to gather information about consumer preferences for a new product. If the survey questions are carefully designed and the responses are representative of the target market, the data you collect will be a strong signal that can help you understand consumer needs and preferences. However, if the survey questions are poorly written or the responses are biased or unrelated to the product, the data you collect will be noise that will not provide meaningful insights.

In general, it is important to aim for a high signal to noise ratio in marketing research because it allows you to make more accurate and reliable conclusions about consumer behavior. A high SNR means that the data you collect is more likely to be representative of the target market and relevant to your research goals, while a low SNR means that the data may be misleading or irrelevant.

Different Methods of Conducting Marketing Research

Market research techniques

Quantitative research includes surveys and questionnaires. Qualitative research involves in-depth questioning of small groups of respondents. If you're doing your own research on a limited budget, the best approach is to talk to existing customers and use simple surveys to gather information. More sophisticated methods, such as focus groups, are best left to the professionals.

Market research questionnaires are a well-known way of generating market information. Questionnaires are typically used to answer simple queries - for example, how many potential customers there are in the local area, whether they would find such a product or service useful and the sort of price they would be willing to pay for it. The key is to ask the right people the right questions, and that you are asking enough people to get meaningful results.

Asking friends and relatives what they think about your ideas is not market research. You need to approach a significant sample of people who match the profile of your target audience. Unless people care about the product or service, you'll find that response rates are generally low. An incentive can help lift those rates.

Questionnaires are effective in getting feedback from existing customers. Respondents are usually happy to help as they can see a direct benefit. Remember to show you have acted on their feedback.

A market research survey doesn't always rely on questions. You might research a retail location by observing pedestrian traffic. You may also want to carry out an experiment as part of your market research, such as a blind tasting of different products. Other observational techniques include watching people as they shop (accompanied shopping) as well as anonymous calls or visits to shops, restaurants or offices (mystery shopping).

Another alternative is to use focus groups for market research. Rather than using large numbers of questionnaires, a focus group works with a small number of participants for in-depth research. For example, you might use a professional market researcher to investigate how customers feel about your brand. Participants must be carefully selected to ensure they are a representative sample.

The internet offers further market research opportunities. Online market research can be cheaper and faster than traditional surveys. However, while response levels are high, you have little control over the types of people that respond so it can be hard to achieve a representative sample**.**

(Source:https://www.marketingdonut.co.uk/market-research/questionnaires-surveys-and-focus-groups/questionnaires-surveys-and-focus-groups-overview)

However each of these methods also come with their own set of limitations based on time, money and convenience. Which method will be suitable for a particular kind of product is subject to these limitations.

Sampling Bias

In the previous section we've learned about what sampling is in the process of marketing research. Now, we will look at what we understand by the term bias in sampling.

Bias in sampling refers to the idea that the results of a study or survey may not accurately represent the entire population because the sample group was not chosen in a random or unbiased way.

For example, let's say that a researcher wants to survey high school students to find out their favourite type of music. If the researcher only surveys students at one particular high school, the results of the survey may not accurately represent the favourite types of music for all high school students. This is because the sample group (students at one high school) is not representative of the entire population (all high school students).

Another example of bias in sampling is if a researcher only surveys people who use social media, and ignores people who do not use social media. The results of this survey would not accurately represent the entire population because the sample group is missing a significant portion of people (those who do not use social media).

One real-life example of bias in sampling is the 1948 presidential election in the United States between Harry Truman and Thomas Dewey. Several polls were conducted before the election that predicted that Dewey would win. However, Truman ended up winning the election, leading many to question the accuracy of the polls.

It was later discovered that the polls were biased because they only surveyed people who owned landline phones, which at the time were more likely to be owned by wealthier and more educated people who were more likely to support Dewey. The polls did not survey people who only had mobile phones or no phones at all, who were more likely to be poorer and less educated and therefore more likely to support Truman.

As a result, the poll results were not representative of the entire population and did not accurately predict the outcome of the election. This example shows how bias in sampling can lead to incorrect conclusions and predictions.

A study was conducted to determine the average weight of college students. The researchers only surveyed students at a small, private college and found that the average weight was 75 kilos. Based on these results, the researchers concluded that the average weight of all college students was 75 kilos.

However, this conclusion is biased because the sample group (students at one small, private college) is not representative of the entire population (all college students). It is likely that students at other colleges, or students at the same college who were not surveyed, may have different average weights. As a result, the conclusion that the average weight of all college students is 75 kilos is not accurate.

It is important to be aware of biases in sampling because they can lead to incorrect conclusions about a population. In order to get accurate results, it is important to try to choose a sample group that is representative of the entire population. This can be done through random sampling, where every member of the population has an equal chance of being selected for the sample group.

In conclusion, biases in sampling can lead to inaccurate results and it is important to try to choose a sample group that is representative of the entire population in order to get accurate results.

Central Limit Theorem

It is a statistical theory which states that when the large sample size has a finite variance, the samples will be normally distributed and the mean of samples will be approximately equal to the mean of the whole population.

In other words, the central limit theorem states that for any population with mean and standard deviation, the distribution of the sample mean for sample size N has mean μ and standard deviation $\sigma / \sqrt{n}$.

As the sample size gets bigger and bigger, the mean of the sample will get closer to the actual population mean. If the sample size is small, the actual distribution of the data may or may not be normal, but as the sample size gets bigger, it can be approximated by a normal distribution. This statistical theory is useful in simplifying analysis while dealing with stock indexes and many more.

The CLT can be applied to almost all types of probability distributions. But there are some exceptions. For example, if the population has a finite variance. Also, this theorem applies to independent, identically distributed variables. It can also be used to answer the question of how big a sample you want. Remember that as the sample size grows, the standard deviation of the sample average falls because it is the population standard deviation divided by the square root of the sample size. This theorem is an important topic in statistics. In many real-time applications, a certain random variable of interest is a sum of a large number of independent random variables. In these situations, we can use the CLT to justify using the normal distribution.

(Source: https://byjus.com/jee/central-limit-theorem)

Ethnographic Marketing Research

Lets us read the article given below to understand the meaning of Ethnographic Marketing Research:

The Art & Science of Ethnographic Marketing Research

-Tasha Estey

"There is no better way to get closer to the consumer… than by using ethnography as a bridge." ~John F. Sherry Jr. (1995, 15)

Ethnography is not new to marketing research. Today, most companies who invest in marketing research have had some experience with 'ethnography' and many have fully incorporated the approach into their ongoing research programs. In this era of big data, it is as important as ever to understand the value of ethnography for companies in the product and service business. This article considers the art and science of ethnographic marketing research: the 'science' includes the specific set of methods that are utilized and their execution and the 'art' includes how a particular suite of ethnographic methods is selected as part of a customized research design and how the data, once collected, are interpreted through the lens of culture and society.

What is ethnographic marketing research?

Anthropology is the study of people and culture. An anthropologist's job is to make sense of and systematically describe a single, contemporary culture; ethnography is the methodology and perspective they use including *participant-observation*, *open-ended interviews*, *objectology*, and writing *detailed field notes*. An anthropologist tries to understand another culture from the point of view of members of that culture. Translated to the marketing research industry, an ethnographic approach can deal with and make sense of the complexity and segmentation of contemporary life as it plays out in patterns of consumption and consumption activities.

In a nutshell, ethnographic marketing research is a vehicle for gaining insight into what, how, and why people consume and the sociality of consumer behaviour. It allows marketing researchers to observe the consumer demonstrating a relationship with a brand in cultural context.

In ethnographic marketing research, the ultimate quest is for insights into the sociality of consumer behaviour — things like the hierarchy of cultural values consumers subscribe to, how the brand acts as a marker of social relationships, consumption as an expression of consumer taste and style, and how brands help consumers construct concepts of themselves and of the cultural world they live in. Often, this interpretive process feels like a bit of a fishing expedition because the researcher isn't always sure what they will catch in the net of data and there is an inherent openness to unanticipated needles of insight in the proverbial haystack.

Can anyone do ethnographic marketing research?

You don't have to be an anthropologist to be good at ethnographic marketing research, but it helps. In theory, anyone can systematically execute a specific set of ethnographic methods and this approach can provide

opportunities for advertising agencies and clients working with research suppliers to get directly involved in data collection.

What is 'the field' and how long do you spend there?

'The field' in ethnographic marketing research terms is anywhere brand decisions are made and/or consumer behaviour occurs, not a focus group facility, which is a quasi-controlled environment. The field can be almost anywhere consumers are: home, car dealership, shopping mall, nightclub, vehicle, campground, movie theatre, workplace, etc.

Traditional ethnographic 'fieldwork' is intense, long-term research conducted among a community of people. However, marketing researchers rarely have more than a few weeks or a couple of months from brief to debrief. Effective research *can* be done within a shorter period of time in the field if the researcher is already familiar with the culture or community being studied (Bernard 2002, 329). Depending on the objectives, ethnographic marketing research designs will propose spending three-plus hours, half days, whole days, or longer with participants. That's because it takes some time to develop rapport with participants and even longer to fade into the background enough that naturalistic consumer behaviour will emerge. If the research objective is to understand daily usage behaviours, for example, spending just two hours observing is not going to provide the answers.

How do you find research participants and how many do you need?

Participants can be found through *traditional recruiting methods* similar to how focus group respondents are found. *Snowball sampling* is another common ethnographic recruiting method that involves one participant leading a researcher to others from his or her social network who may share similar brand or category usage. Since rapport has already been developed, more can be asked of participants (e.g. attending a dinner party, spending a weekend observing media consumption in the home, probing deeply about their affluent lifestyle, etc.). Participants in ethnographic marketing research are paid more for their time than focus group respondents because the 'ask' is more intrusive (i.e. they have to be okay with researchers looking through the cupboards in their home, hanging out with them during Sunday football on TV, driving with them, etc.).

For research buyers accustomed to more traditional qualitative sessions where 30 or 40 respondents might be interviewed, an ethnographic marketing research proposal that recommends a sample size of 16 may seem a bit thin. The 'mile wide/inch deep versus inch wide/mile deep' analogy works well here. In a traditional two-hour focus group with eight respondents, each respondent might get about 10–15 minutes of 'airtime'. In ethnographic marketing research, each participant gets a significant amount of air time and they are observed in-context in a great amount of detail. Assuming that participants are well-recruited, even a sample size of six can provide a surprising wealth of information.

How do you record what happens in the field?

One could argue that a symbol for ethnographic marketing research is the digital camcorder, or, increasingly, the smartphone. The digital age has revolutionized the data collection process and digital technology has effectively brought participants and insights to life in the presentation boardroom.

The technological tools of ethnographic market research collection include camcorders, voice recorders, cameras, and smartphones. They do an excellent job of capturing consumer behaviour and demonstrations of dynamics of the brand relationship and can be used in almost any environment where they are allowed (homes, vehicles, retail locations, bars, streets, etc.). Voice recorders are useful in situations where verbatim capture is desired, but video recording isn't allowed (e.g. in a retail location). Cameras can be a primary or secondary data collection tool (e.g. taking hundreds of photos in-situ and then sorting them and building analysis around the categories created). Mobile ethnography or 'lifelogging' is becoming an increasingly popular tool because it allows the researcher a glimpse of life through the participant's eyes. Nevertheless, digital technology will never completely eliminate taking old fashioned field notes — paper and pen technology.

The videos, images or audio collected during ethnographic marketing research can be impactfully integrated into client deliverables. The final report could be an ethnographic film or could include video clips ('visual verbatims' or short vignettes around a particular theme or finding) or photo collages (collections of images sorted by emergent theme or insight). Another way to deliver findings is by developing participant 'profiles' — each profile representing a category of behaviour, a distinct expression of the brand relationship, or some other relevant cultural tendency.

What is the art of ethnographic research analysis?

Decoding the cultural embeddedness of consumer behaviour is the linchpin of ethnographic marketing research. The kinds of 'anthropological' questions asked during fieldwork — about social networks, values, identity, ritual, objects, community, etc. — and the direct observation of behaviour that illustrates these cultural concepts — will affect the information collected and the way it is analyzed. For example, in a study conducted with affluent owners of different luxury vehicles, the objective was to gain a deeper understanding of who these people are — their values, the way they expressed their social identity through their brand choices, and how they experienced their vehicles as owners and drivers. Researchers spent time with them in their homes, observed their interaction with owners of competitive brands of luxury vehicles, asked about possessions of significance, observed their driving rituals, and discussed how their brand choice acted as a marker of social identity and values. Researchers framed the interpretation of the data with these same sorts of anthropological concepts which led to insights around definitions of luxury and social identity that differentiated one brand from another. They were then able to translate these culturally situated findings into conclusions and recommendations that are relevant and actionable in informing marketing strategy and communications.

Conclusion

Ethnographic marketing research has become an entrenched and valued approach to understanding consumer behavior. The research design, the kinds of information sought during fieldwork, the questions asked of the information during analysis, and the final deliverables all influence the outcome, which is concomitantly determined by the specific research objectives, budget, time, and needs for application/action. Ethnographic marketing research should be managed by marketing research professionals who are trained in its science and art.

Pilot Survey

When conducting an investigation we always want it to be efficient, to meet the goals and for the process to be carried out with the fewest number of difficulties. If you are determined to use surveys as a research method, one way to make sure that everything will go well is to do a pilot survey to help you detect any unforeseen events that may arise.

Every research project involves money, time and effort, so carrying out various tests before starting the process will be of great help, especially when a large number of participants are involved. Let's get into the world of pilot surveys.

What is a pilot survey?

People think that testing a survey takes a long time and requires a lot of resources to do it. The pilot survey is a strategy that helps to evaluate or test a questionnaire using a smaller sample size than the planned sample.

Any test is better than none, so if you are going to do a survey it is best to test it with the resources you have available, keep in mind that even applying it to a very small group of people you can make significant improvements to your research.

Uses of a pilot survey

You can make use of pilot surveys to:

- Apply it to a small group that will not be evaluated in the original survey.
- Consider the responses of a selected group as the first results obtained from the project.
- You can also use a pilot survey as the definitive survey of your **research** and deliberately ask participants for feedback, for example asking them how clear the instructions are or what questions are difficult to answer.

After obtaining and analyzing results from the pilot survey, logistical, technical and any other issues can be addressed. You can correct the questions on your survey or choose the most appropriate types of questions if, for example, you are going to carry out an online survey.

A pilot survey can be used to detect the lack of training of the personnel to be surveyed, issues with the logistics of distribution and collection of the survey as well as errors in the data recording. These problems can be fixed before taking the actual survey.

(Source: https://www.questionpro.com/blog/pilot-survey/)

Carrying out a pilot survey

Look at the activity given below to understand how a pilot survey is carried out:

Divide yourselves in two groups, one will be interviewing the teenagers and the other group will be interviewing the parents. Refer to the questionnaires given below and in your respective groups decide which are most significant questions that you would like to keep in your questionnaire. You can only delete five questions from the questionnaire provided to you.

Outline of questionnaire for parents

1. Demographic questions (age, gender, number of children, etc.)
2. How often do you purchase smartphones for your children?
3. What is the most important factor in your decision to purchase a smartphone for your child?
4. How much are you willing to spend on a smartphone for your child?
5. How important is durability in a smartphone for your child?
6. How important is battery life in a smartphone for your child?
7. How important is the camera quality in a smartphone for your child?
8. How important is the storage capacity in a smartphone for your child?
9. How important is the processing speed in a smartphone for your child?
10. How important is the display size in a smartphone for your child?
11. How important is the brand in a smartphone for your child?
12. How important is the design of a smartphone for your child?
13. How important is the security of a smartphone for your child?
14. How important are parental controls in a smartphone for your child?
15. How important is the availability of apps in a smartphone for your child?
16. How important is the availability of educational content in a smartphone for your child?
17. How important is the availability of entertainment content in a smartphone for your child?
18. How important is the availability of social media platforms in a smartphone for your child?
19. How important is the availability of messaging apps in a smartphone for your child?
20. Do you have any additional comments or concerns about purchasing a smartphone for your child?

Outline of questionnaire for teenagers

1. Demographic questions (age, gender, grade level, etc.)
2. How often do you use your smartphone?
3. What is the most important factor in your decision to purchase a smartphone?
4. How much are you willing to spend on a smartphone?
5. How important is durability in a smartphone for you?
6. How important is battery life in a smartphone for you?
7. How important is the camera quality in a smartphone for you?
8. How important is the storage capacity in a smartphone for you?
9. How important is the processing speed in a smartphone for you?
10. How important is the display size in a smartphone for you?
11. How important is the brand in a smartphone for you?
12. How important is the design of a smartphone for you?
13. How important is the security of a smartphone for you?
14. What do you think will be the most important factor for your parents to consider when approving the purchase of a smartphone for you?
15. How important are parental controls in a smartphone for you?
16. How important is the availability of apps in a smartphone for you?
17. How important is the availability of educational content in a smartphone for you?
18. How important is the availability of entertainment content in a smartphone for you?
19. How important is the availability of social media platforms in a smartphone for you?
20. How important is the availability of messaging apps in a smartphone for you?
21. Do you have any additional comments or concerns about purchasing a smartphone?

After finalising the questionnaire, follow the instructions given below to carry out the final pilot survey in the school.

1. Both groups should have the final version of their questionnaires ready, and have five to ten copies made of each questionnaire.
2. Each group should form five teams, the members in each team is a function of the class strength
3. Each team should interview at least one, preferably two respondents. The parents' interview can be administered to teachers on campus, while the teenagers' interview can be students from a different division, or students in a class that is one year junior/senior
4. Each team should conduct two interviews so that students get to ask questions, and record responses, and validate them
    a. Assume there are five students in each group. Two students are the designated "askers", two are the designated "recorders" while the last student's job is to audit the whole process as it

proceeds. Depending on the number of students, these roles can be scaled up or down as per necessity.

5. There should be, ideally, at least ten responses in total, and certainly no lesser than five. More is always welcome, subject to time constraints.
6. Once all the responses are collected, the information must be fed into a Google Sheet that is shared with the whole class

Limitations of Marketing Research

On the basis of your understanding of the module, list out some limitations of the marketing research process