

PART - III

- USER RESEARCH
- ANALYSIS
- MAKING CONNECTIONS
- MOVING FORWARD

USER RESEARCH

Delving into the minds of prospective users

WHY?

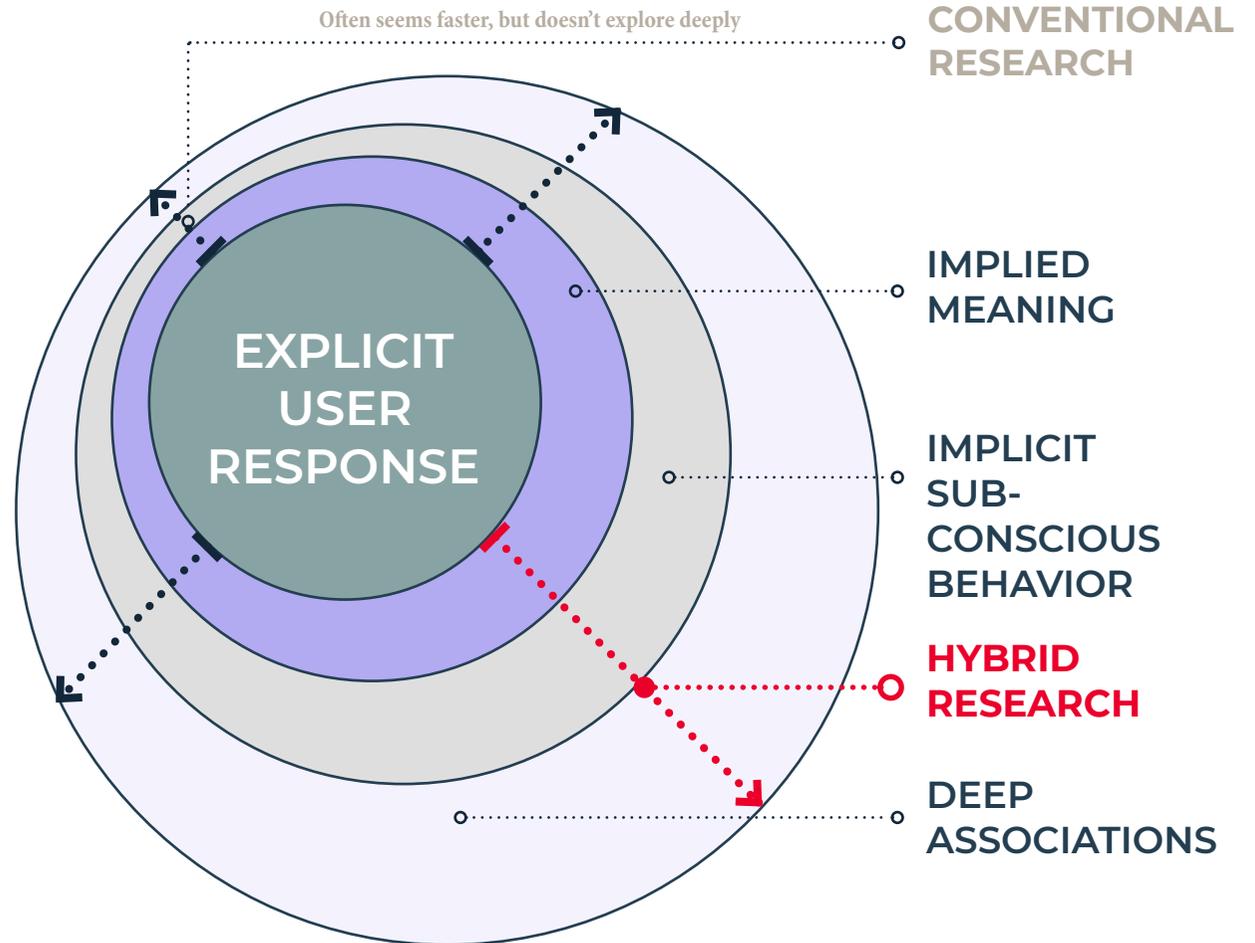
Users are the best critiques of anything that they consume. However when faced with identifying what they desire in a product or a service, they are unable to articulate their deepest needs but are nevertheless overjoyed with recognition, when they are met. Strategic design aims to delve into the deep multiple layers of the end-user's psyche and arrive at key insights into what they would appreciate.

WHO?

The selected user group comprises of people between the age of 16-35, of varied regional backgrounds, students or young professionals who are the primary users of learning solutions that cater to audiences above the K-12 segment. It is this group that suffers the most from the sharp waning of learning interest in their lives.

WHAT'S HYBRID?

Hybrid research combines quantitative and qualitative methods, with deep mind exploration techniques to efficiently and effectively elicit insight from the user.



METHODOLOGIES USED

QUESTIONNAIRES + TALK ALONG INTERVIEWS

Questionnaires allow quantitative research at scale to be able to get a general guiding response for large scale data collection. Trends from withing the large amounts of data can help narrow down the spectrum of inquiry to areas most relevant to the subject.

Talk along semi-structured interviews provide an open ended subjective framework for guided recollection. It allows qualitative data collection without having to use a fill in the blanks approach.

OBJECTIVE

To collect data from a large number of respondents, and then study subjects with higher relevance, more deeply.

EXPECTED OUTCOMES

Data about approaches and challenges related to learning experiences in a large sample group with different background and learning needs.

ASSOCIATIVE SPATIO-TEMPORAL MENTAL PROJECTION

Mental space projection allows the participant to map their mental-association models around concepts by projecting them onto a physical space they are used to. The technique guides participants to use non-literal markers like spatial elements to define parts of the concepts delving deeper into the subconscious of the subject.

OBJECTIVE

To map associated responses and drivers related to behavioral patterns at a deep cognitive level.

EXPECTED OUTCOMES

Insights into behavioral associations to learning paradigms by tracking similarities in the cognitive patterns of groups & individuals

MODIFIED METAPHOR ELICITATION

A variation of the Zaltman Metaphor Elicitation Technique, it is focused on deriving similar results. Metaphors reveal cognitive processes that provide subconscious signals into the experiences, inclinations and expectations of the subjects.

OBJECTIVE

To test the validity of the apparent outcomes of qualitative and quantitative analyses, by verifying them with subconscious behaviors and drivers of groups.

EXPECTED OUTCOMES

Image metaphors related to learning as a concept, motivations and lifelong experiences providing insight into the needs and their variations with culture, upbringing etc.

QUESTIONNAIRE

While not ideal as tools for qualitative research, questionnaires prove to be extremely useful as a tool for superficial inquiry. The results from the questionnaires can help inform the researcher of the context and aid their decisions regarding framing subsequent research methods for qualitative research. The ability to access a large number of subjects through the questionnaire allows data trends to be found for larger audiences. The protocol for conducting a research with a questionnaire needs to account for

CONGRUENCE

The intent of the question asked should be easily understandable to obtain an answer that is congruent with the sentiment of the inquiry. Questions need to be simply worded without ambiguous meaning. The implied context of the expected response should be as narrow as possible

OBJECTIVE VS SUBJECTIVE

The questionnaire should evenly balance factual information with subjective opinions. The more the respondent needs to think to answer the question the better. Open ended questions tend to provide better qualitative results. However these are difficult to make sense of specially if the number of respondents is too high. A balance between both needs to be maintained.

PRIMING ARC

The questions must be prepared in sections that prime the participants for a neutral response. Participants often try to “please the test” by anticipating ideal responses to a line of inquiry. The flow of the questions must not allow the participant to foresee any expected response, leaving them to respond honestly without anticipating judgment.

PROCESS



DEMOGRAPHICS STUDIED

Gender	Total	16-20 yrs	21-25 yrs	26-30 yrs
Males	210	70	96	44
Females	170	34	118	28

Respondents were from PDPU, DAIICT, NIFT, IIT Gandhinagar, IIT Mumbai, GNLU and Pune University campuses. 50 Working Professionals from TCS Gandhinagar, Infosys Bangalore, Bosch Bangalore, IBM Kolkata and other independent workplaces were also among the respondents for the questionnaire.

SAMPLE OF A QUESTION ARC ACROSS SECTIONS

Section n - Point of Inquiry - Preferred mode of transactions for learning/teaching
Lead into expectation and response. Prevention of ideal behavior

- Q6. Would you like to spend time teaching something to someone?
- Q7. How would you expect to be reimbursed for your time?

Section n+2 - Point of Inquiry - Benefits of shared peer-based learning
Hidden question revealed in section to check for fairness bias

- Q15. How would you reward a friend who spends time teaching you a skill?

TALK ALONG INTERVIEWS

BENEFITS OF TAI/SSI

The semi structured nature of talk along interviews allows the researcher to conversationally guide the subject along thought trails. It produces a rich combination of empirical and conjectural information. The information can be collated and analyzed in several different ways. If the questioning is well directed, it allows for individual variations in response which covers a broader behavioral spectrum than structured questioning.

PURPOSE OF USE

Learning is something which is very person to each one individual. No two people learn exactly the same way. Learning styles are also affected by the lived histories of individuals. Semi -structured interviews allow the narratives to play out while probing deeper into points the baselines established through quantitative interviews.

PROTOCOL

A context specific TAI protocol was developed to allow open ended deliberative conversations rather than questioning. Logic flow charts to guide questioning were carried along as questioning aids. Assistance of another research was taken to check of contingencies of leading questioning or biases developing in a conversation.

The questions were derived using the baseline results from the questionnaires, and directed conversations based on several theories of behavioral economics including but not limited to theory of social transactions, zero sum bias, game theory and five stage learning theory.



Participants in a Talk-Along semi-structured interview
Source: Author Photo

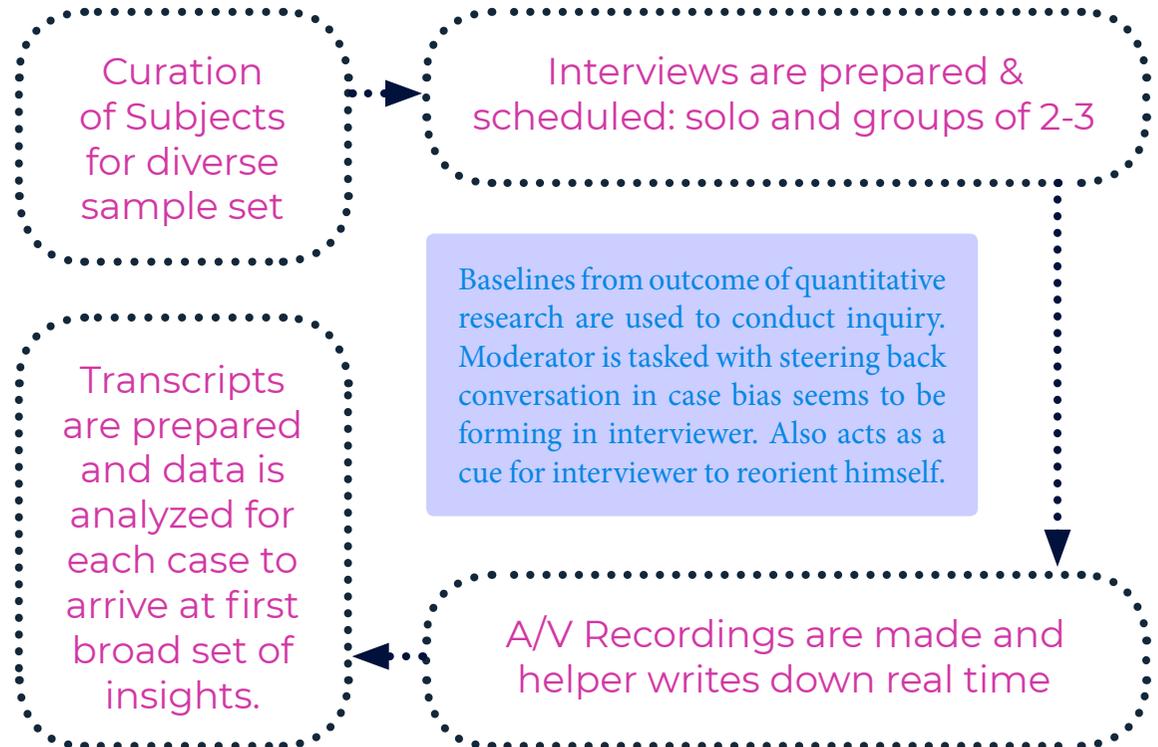
EXAMPLES OF KEY LINES OF QUESTIONING

PROCESS

1. What was the last thing you remember learning outside of a classroom? Who did you learn this from? Have you learnt something in a similar way since then?
2. Can you recall for us your fondest memory of learning something at school? Was this in a classroom or from a teacher?
3. How do you prefer to learn new things from these days? How do you normally pay for them? Which service or website do you use? How is your experience of learning?
4. Name a few people who have been mentors or gurus for you in your life? What did/ have you learned from them? Do you guys talk often?
5. What do you think, if anything went wrong or right with the way you were educated throughout your life? What would you like to go back and change?

PARTICIPANTS

52 participants over a course of one week from PDPU, NID and TCS. 16 working professionals, 18 postgraduate students, 16 undergraduate students and 2 faculty members.



ASSOCIATIVE SPATIO-TEMPORAL MENTAL PROJECTION

WHAT IS IT?

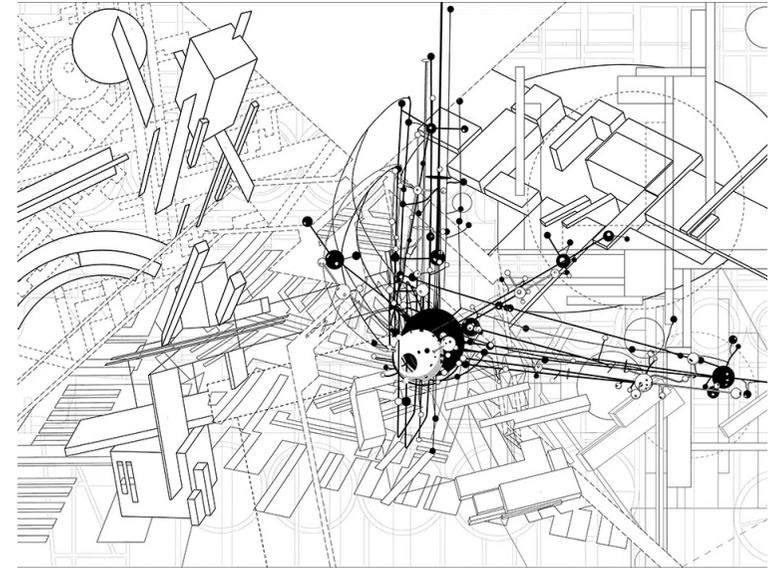
The ability to mentally project ourselves in three dimensional space and time is unique to human beings. It is what allows us to relive memories or imagine hypothetical scenarios as if they really happened or can happen with us. “Personality is partly an unconscious spatial construction in which the general representation of time, the self and humanity are the key parts.” (Derks, Walker and Otsch, 2012) MTT (Mental time travel) and MSN (Mental Space Navigation) hold cognitive patterns that can tell a lot about our personalities and preferences.

PURPOSE OF USE

The way we envision concepts in mental space by associating them to objects or elements can give insights into how we interact with them in our subconscious. Behavior patterns arising out of this give similar results as deep hypnosis does for psychiatric evaluation and it serves as a great tool to find commonalities in how people approach a common concept with individual personalities. It can help provide further validation to the project's insights.

PROTOCOL

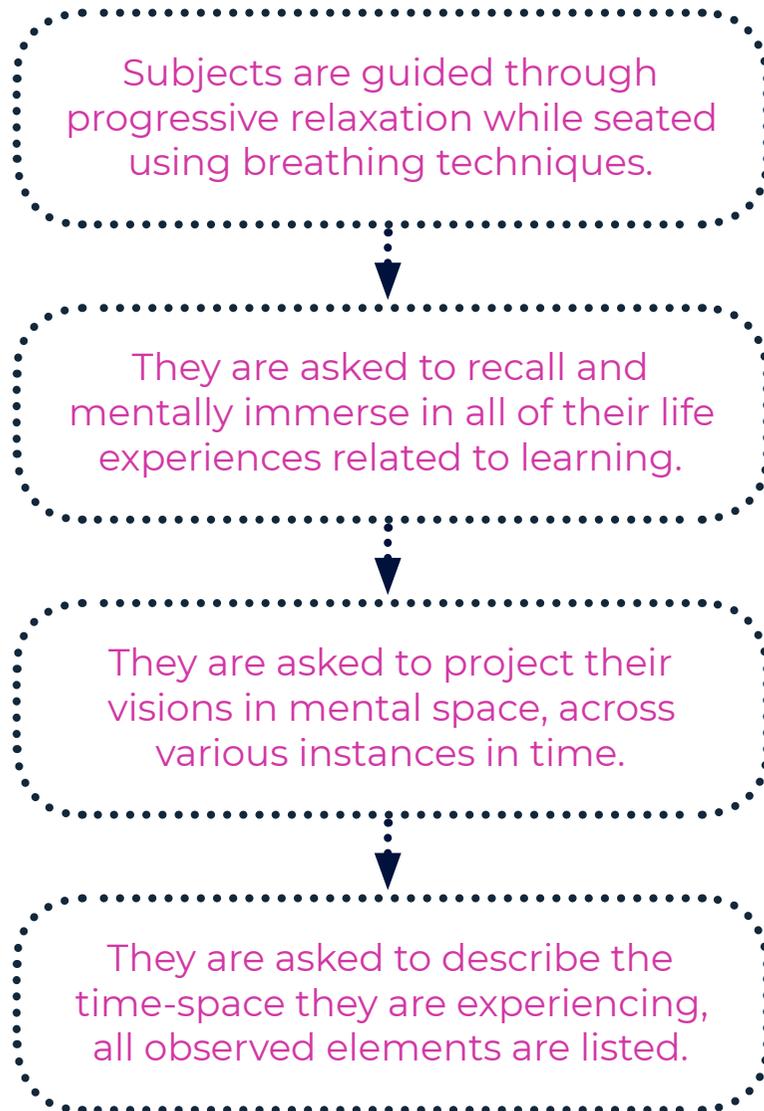
Subject is allowed to prime themselves by mental immersion into the concept of learning. They are asked to recall sensory memories like sounds, smells, light etc corresponding with learning experiences from the past. After this they are guided to project themselves into different times, the distant past, the recent past, the present, the near future and the distant future. They are asked to describe the various spatial elements , objects people etc that they observe in their mental projections of learning as a concept across time.



The Geometry of Mental Space

Source: Toposcapes

PROCESS



PARTICIPANTS

The exercise was conducted at different venues in controlled silent but open environments during off days on PDPU campus. A total of 20 participants between 19-27 years of age were studied.

EVALUATION PARAMETERS

Outcomes of the exercise are lists and textual descriptions of the mental time-spaces experienced by the participants. These are evaluated on two types of parameters, spatial and semiotic associations.

SPATIAL

- Scale or volume of space w.r.t self
- Lighting level of the space
- Vertical levels or tiers in space
- Placement of self
- Linearity or a lack thereof in experienced time. “Which way did you move to change time?”
- Number of elements populated in space.

SEMIOTIC ASSOCIATIONS

- Descriptions of objects, furniture etc
- Presence of other people or a lack thereof
- Focus on what? Space, people, features of people, content that was delivered, state of mind/emotional state?
- Triggered memories associated with the experience, ex- cycling home, Maggi in tiffin etc.

MODIFIED METAPHOR ELICITATION

WHAT IS IT?

The Zaltman metaphor elicitation technique (ZMET) is a patented market research tool. It is used to bring out conscious and subconscious (specially the latter) thoughts and connections around concepts through the exploration of non-literal semiotic or metaphorical expressions of the subjects. Devised by Dr. Gerald Zaltman at the Harvard Business School in the early 1990s, ZMET is well documented in the book *Marketing Metaphoria*.

PURPOSE OF USE

Prospective consumers of a solution are often not aware beforehand of what they need at a conscious level. Their subconscious however holds a lot of keys regarding what they will and will not like in a solution. However, they are themselves unaware of this so cannot satisfactorily answer a conventional research inquiry. The method uses visual metaphors as vessels of deeper ideas, feelings, behaviors, and outlooks of the subjects. It also explores how the subject describes and associates with these metaphors. It is a good method to validate insights from other research techniques for their relevance and aptness.

PROTOCOL

Participants were given trigger questions regarding the importance of learning in their lives. They were given a set of 100 digital images curated across several categories and walks of life. They were asked to select 5 images from the lot and build a collage.



Cover of *Marketing Metaphoria* by Gerald and Lindsay Zaltman
Source: Google Books

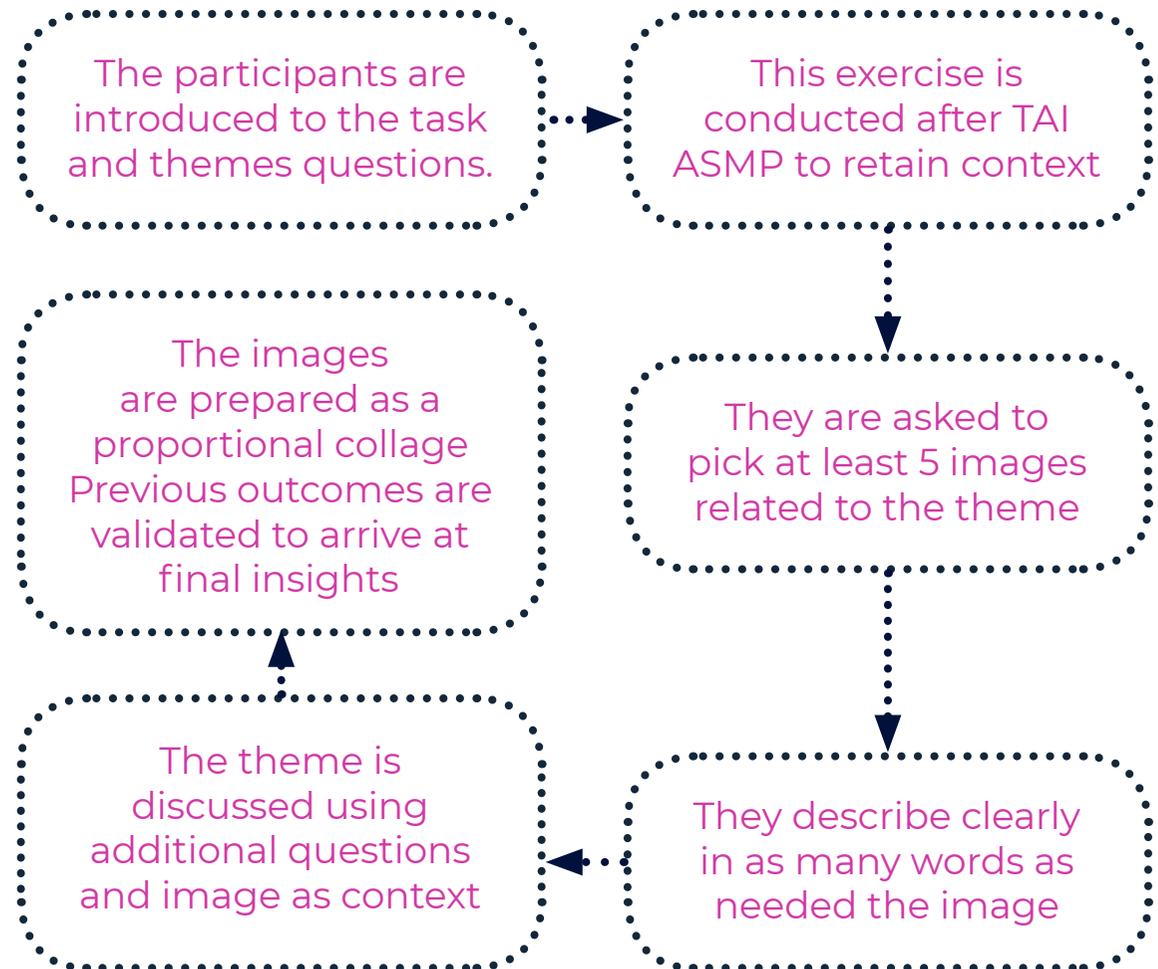
METHOD OF ELICITATION

1. 100 curated color and b/w images in digital formats were shared with the subjects.
2. Subjects were asked to pick at least 5 images per theme question.
3. The subject is asked to explain their rationale of picking the particular image in response to the question.
4. The explanations are recorded and studied for common associations and frequently picked images among users.
5. Previous findings are corroborated with the outcomes of the exercise to arrive at final insights.

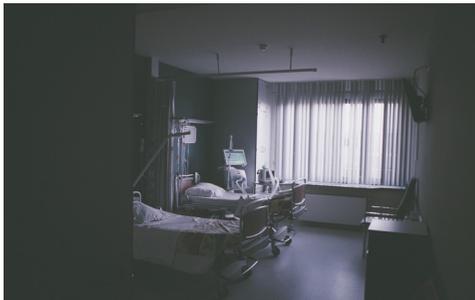
EXAMPLES OF PROBE QUESTIONS

1. What made you think of yourself as a chair?
2. Who inspired you towards academic achievement? Did you look up to them?

PROCESS



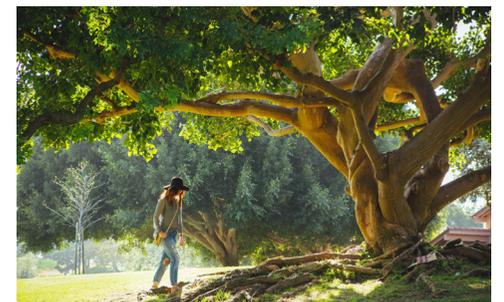
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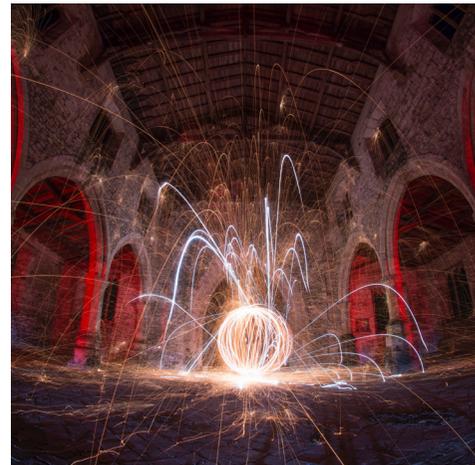
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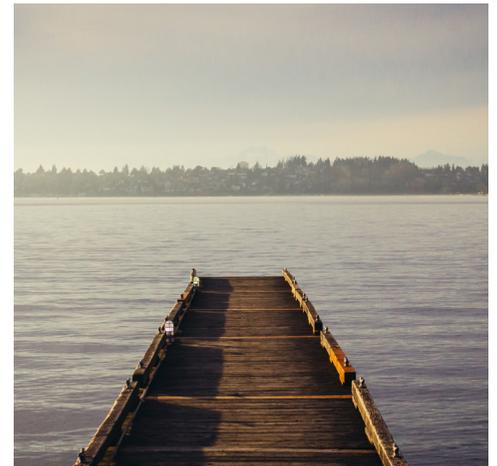
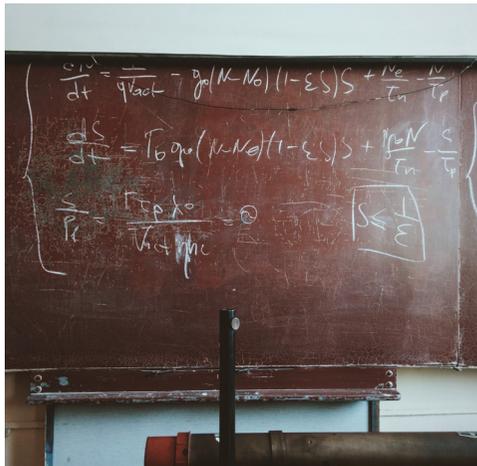
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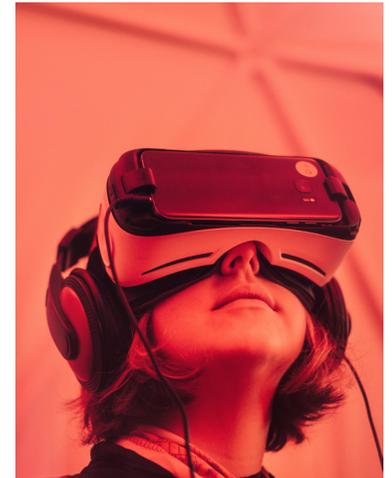
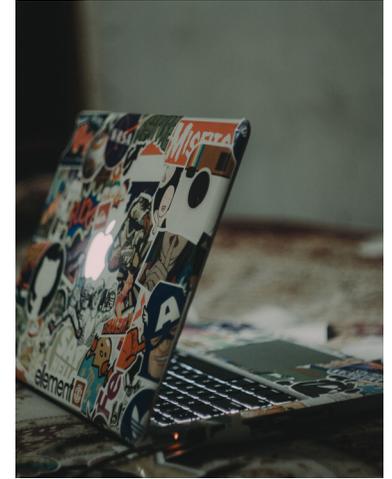
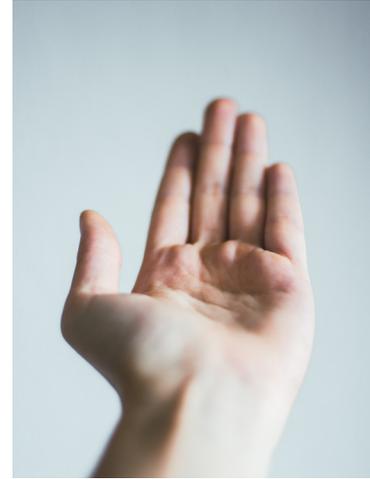
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SAMPLE OUTCOME - 1



Hemil Shah

Age: 23 years

Occupation: Undergraduate Student at SLS PDPU

From: Rajkot, Gujarat

Theme Question

What does learning mean to you?

Responses

1. Whatever (I) have learned, is like a puzzle only. I studied many different stuffs at school. Half to *mane yaad nathi*. But small pieces put together make me one. If one piece is also not there than I will be not here.
2. I hail from Rajkot, there I was in govt. school. I bunked school many times with friends and just roamed in the city. My teacher catch hold of me one day in market. Dhiresh Sir, he said he will tell my father, but he never said to him.
3. Study was like very difficult specially English, I still have problem. In college also some subjects are more like climbing mountain.
4. Is look like a schoolbag with memory inside of it.
5. My mother taught me tables in morning when getting me ready for school, uniform, *kangha* etc.
6. Today this learning is like this, can't look at world, just phone, Facebook, video game etc. But this is future.

Srinivas P.

Age: 27 years

Occupation: Senior Systems Engineer, TCS

From: Kochi, Kerala

Theme Question

What does learning mean to you?

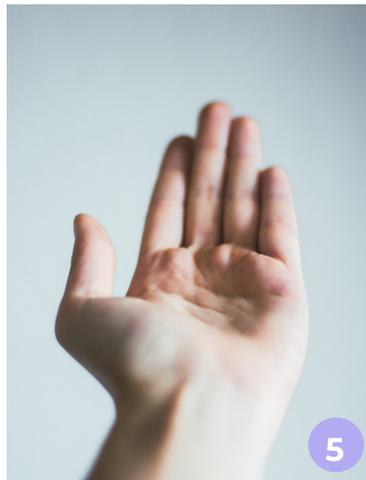
Responses

1. Learning is like a web of information. One thing leads to another, it is endless, can never stop. It is all about connections, sometimes information, sometimes people. The more connections you have the more you have learned.
2. Bookish knowledge is okay, good. But when you really come on job and start applying, like getting hands dirty is said, then also you need guidance. At school or college you at least have teacher, on job you have to figure out yourself everything.
3. There is achievement after you finish something difficult. I did a certification for Python and it was very tough alongside job, but when I put it in my LinkedIn profile, It really made me feel proud.
4. He's operating a drone I think, but generally I mean role of technology. I didn't have so much when I was small.
5. Famous dialog - "Chase excellence, success will follow"

SAMPLE OUTCOME - 2



SAMPLE OUTCOME - 3



Deviyani Sharma

Age: 19 years

Occupation: Undergraduate Student at SLS PDPU

From: Jaipur, Rajasthan

Theme Question

What does learning mean to you?

Responses

1. A student is like a pencil. More edges you have to shave off to make it sharp... But sometimes when you sharpen it too hard.. it just breaks.. and you sharpen again.. and it breaks again.. you just make it smaller, not sharp
2. I like this one. It is waiting to be put together. Learning happens when someone will put this together for you, your personal puzzle of the world.
3. Getting out of classroom I think is something I miss. I mean all work and no play proverb is correct. We have no games period in college or even in intermediate. How can we focus on lecture for 3-4 hours without any break?
4. This is VR right? So many things are there on Internet, like animations, videos, etc. we can completely learn everything just by browsing 3 hrs daily, but no one will give a job.. haha.
5. Like a helping hand, support from teacher in learning.

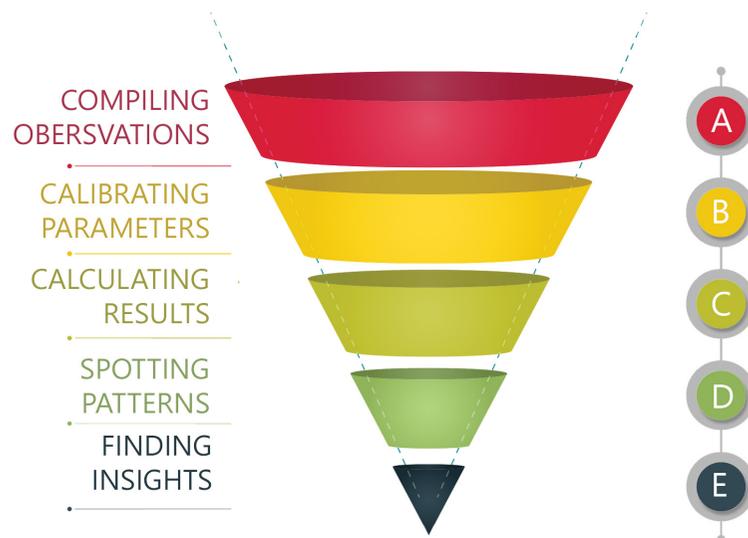
ANALYSIS

How to move from Observations to Insights

Scientific analysis of the results from various research inquiries conducted need to be compiled through a reliable and repeatable process. In order to do this well, evaluation methodologies and parameters have been developed for each of the research techniques used, which will be discussed along with sample outcomes in the following section.

STEPS OF THE PROCESS

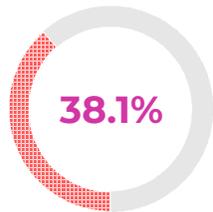
1. Compilation and transcription of data from the TAIs, Questionnaires, ASTMP and Metaphor elicitation into usable digital formats.
2. Preparing objective and subjective evaluation criteria and parameters for each of the qualitative methodologies.
3. Running the results through the developed evaluation frameworks for each of the methodologies.
4. Spotting commonalities and patterns in the results of the analyzed data. Accounting for outliers and assigning weightage based on qualitative response.
5. Arriving at insights through making connections in the patterns. Deducing the areas of interest in which interventions would alleviate and address the unmet needs and desires of the user.



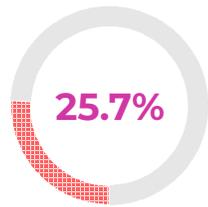
Analysis Funnel for Hybrid Research
Source: Author's Illustration

QUESTIONNAIRES + TAIs

QUANTITATIVE CHARTS FROM SURVEY - SAMPLES



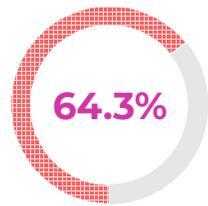
of respondents say they haven't learnt something new in over six months.



preferred classroom learning over other methods and found it productive.



would like to meet their online peers in person at a public location in the real world.



would like to learn something new in exchange for sharing their knowledge with peers

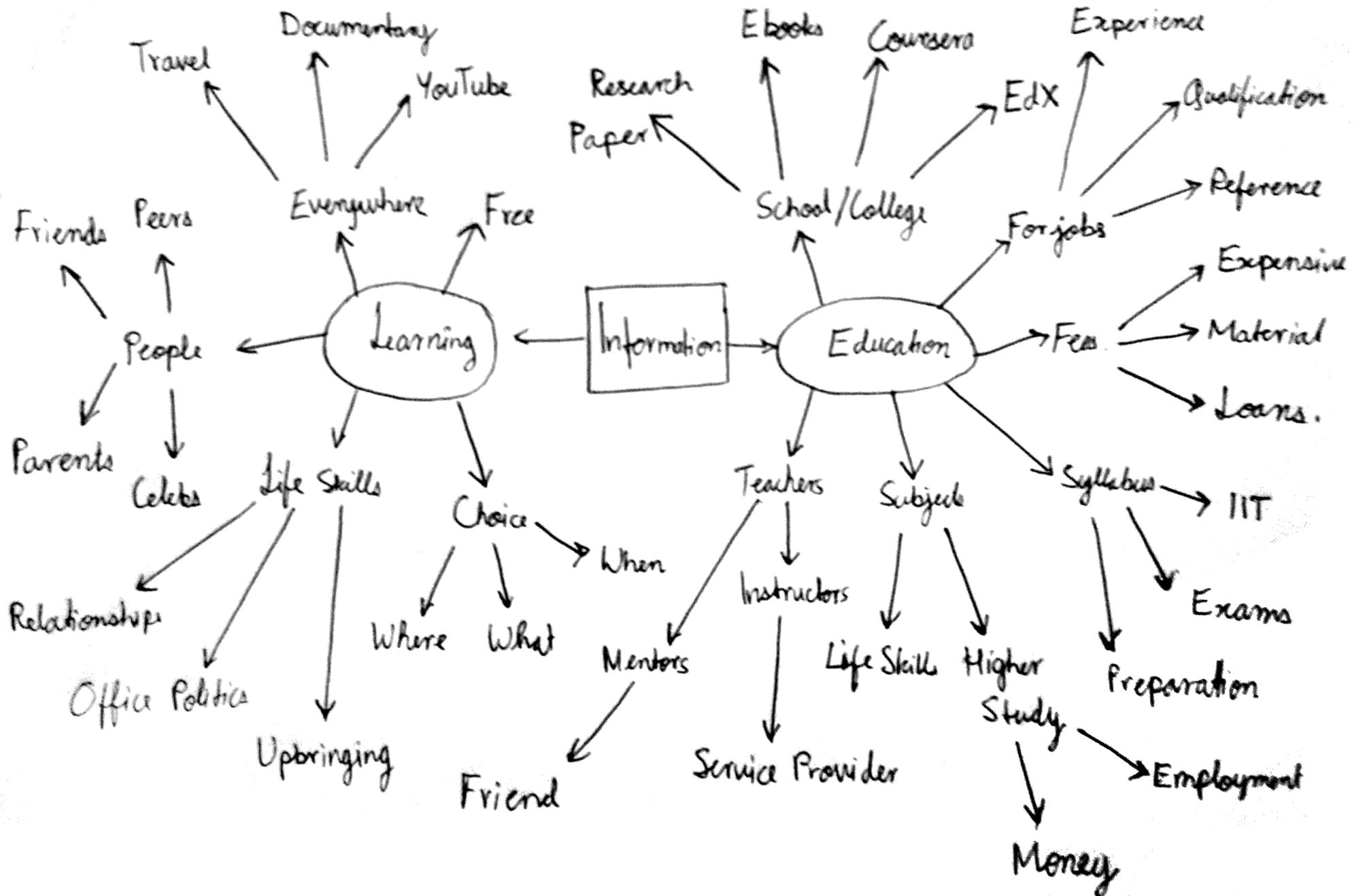
CONCEPTUAL ASSOCIATION MAPS

The responses of the subjects for the talk along interviews were mapped out individually. These maps were meant to follow the train of thought and associations in the conversation linked to the particular concepts. These maps were helpful in arriving at major themes recurring in the conversations and to understand the motivations and connections behind these themes and why they were important to the participants. Association maps proved better than open world keyword generation tool as they followed lines of thoughts instead of letting a predisposed researcher pick up keywords from a conversation. This prevents a subconscious bias from creeping into the process of analysis.



Respondents taking part in Talk Along Interviews
Source: Author's Photo

Opposite: Example of Conceptual Association Map drawn from center-out for one of the respondents.



ASSOCIATIVE SPATIO-TEMPORAL MENTAL PROJECTION

Gender	Total	16-20 yrs	21-25 yrs	26-30 yrs
Males	10	2	5	3
Females	10	4	5	1

SPATIAL CONSTRUCTION MATRIX (s1i2p3e1)

SCALE

Superhuman
Monolithic

Ex - Large halls with high ceilings

Humanistic
Comfortable

Ex - Normal sized rooms, study etc.

Sub-human
Cramped

Ex - Inside boxes, cupboards, etc.

Gaia, Open-world or
Anomalous

Ex - Forest, Matrix, Floating Void

ILLUMINATION

Sharp Cool Artificial

Ex - Fluorescent lighting, Lab like

Dark, Poor Visibility

Ex - Dark room, night time.

Dim, Warm Natural

Ex - Indoors in afternoons,

Dim, Warm Artificial

Ex - Evening, candlelit, bulbs

Bright Natural Sun

Ex - Open field, Near a window

PLACEMENT OF SELF

Close Follow

Ex - Third Person Observer in
Proximity

Dynamic Surveillance

Ex - Third Person, Shifting focus and
viewpoints.

Embodied Regular

Ex - First person, walking, sitting

Embodied Fantastic

Ex - First person, floating, flying

ELEMENT POPULATION

Dynamic focus
based limited

Ex - Scenes in focus populated

Detailed restrained
population

Ex - Few objects but detailed.

Generic Crowded

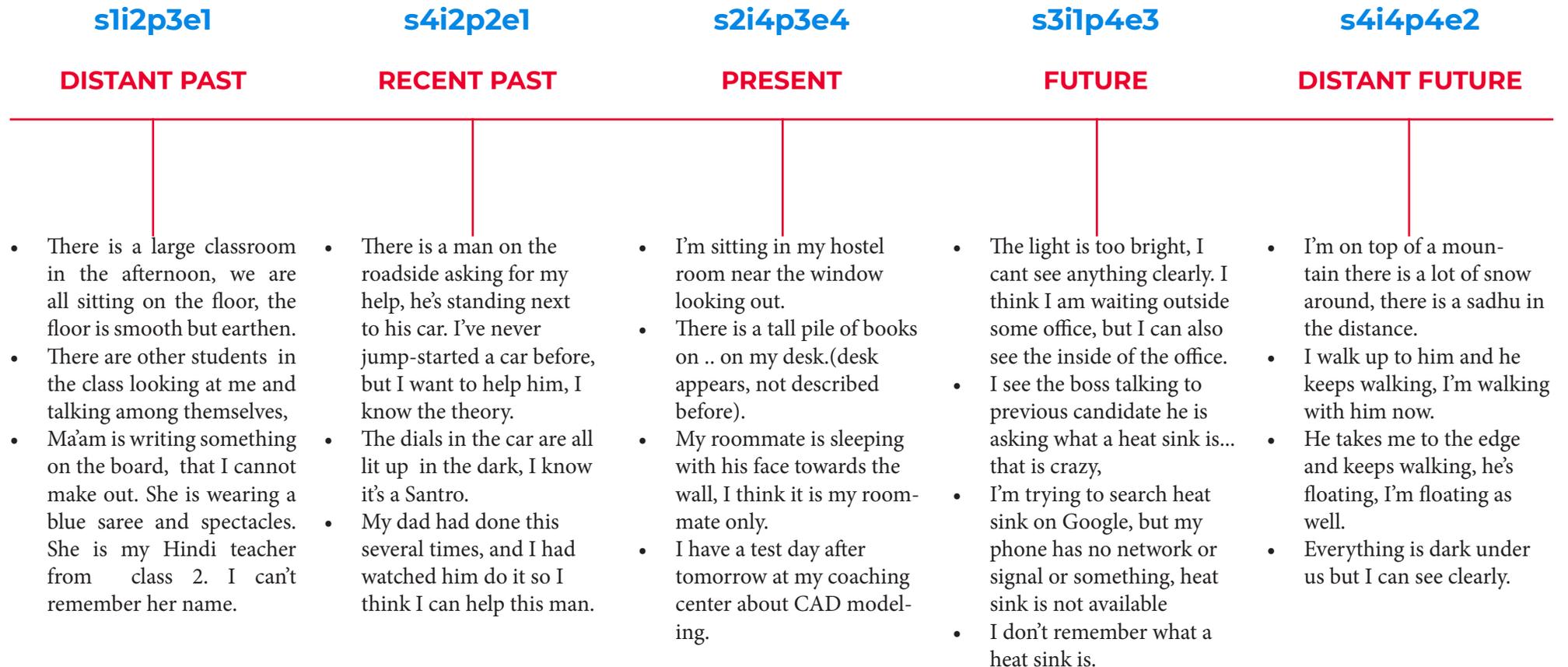
Ex - Loads of elements, undetailed

Empty, sparse,
minimal

Ex - Only one or two elements

TEMPORAL OVERLAY + SEMIOTIC ASSOCIATION

Example (Male 23)



MODIFIED METAPHOR ELICITATION

The images from each of the subjects were composed into a digital collage. Pictures picked first or described more took up a larger percentage of the standard size of collage. They were also arranged in a clockwise pattern starting from top left. The comments were annotated as comments on a digital whiteboard for each image, that could be accessed on hovering the pointer.

ANALYSIS

Every composition was analyzed as a whole and then each of the images was deconstructed into elements like color, texture, theme, perspective, associated metaphors, subject dominance etc. Each image upon analysis revealed that a lot of subjects had picked images responding to conscious themes. However availability of multiple images on similar themes when corroborated with the descriptions of the participants gave insights into the subconscious triggers that had caused them to select those particular images. Assistance of other researchers was also sought to understand their interpretations.

The images were sorted in two ways, frequency and common connections. A lot of people picked similar images, but a lot of people also gave similar descriptions for different images.

RESULT

Sets of recurrent keywords and metaphors that are common to a lot of respondents. These are analyzed with the results of TAIs and ASTMP and reinterpreted to derive insights.

COMMON THEMES

NOTE: *Frequency tagging*

The number on a picture represents the number of times the picture was chosen in a group of 20 users.
 Example: If the number on the image is 4 it means 4 out of 20 user picked the image for their collages.

Gender	Total	16-20 yrs	21-25 yrs	26-30 yrs
Males	10	2	5	3
Females	10	4	5	1

DIVERSITY: Various parts coming together as a whole



DIVIDE-DETACHMENT: Loss of interest or connection



NOTE: *Frequency tagging*

The number on a picture represents the number of times the picture was chosen in a group of 20 users.

Example: If the number on the image is 4 it means 4 out of 20 user picked the image for their collages.

NOSTALGIA: Making and reliving memories



BONDING: Connecting with and supporting



TIME: Pressed for time, no time for self



DIRECTION: Need for focus and guidance towards goals



NOTE: *Frequency tagging*

The number on a picture represents the number of times the picture was chosen in a group of 20 users.

Example: If the number on the image is 4 it means 4 out of 20 user picked the image for their collages.

ACHIEVEMENT: Sense of accomplishment in life



SHARING: Using the currency of our self to transact

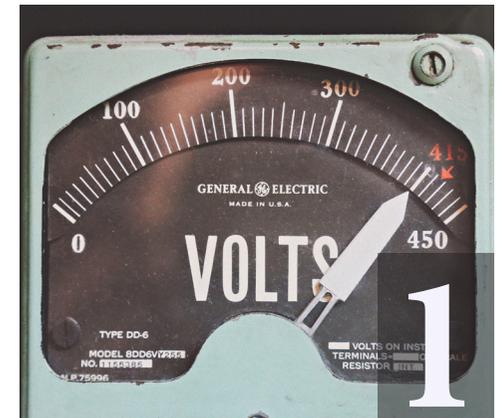
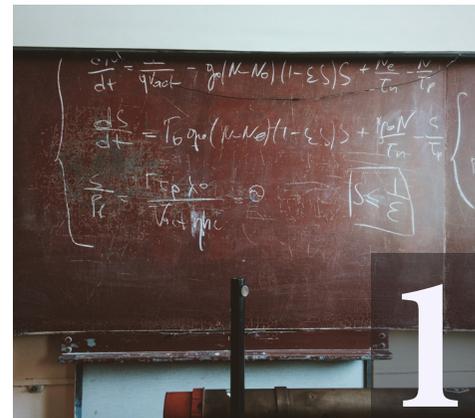


OUTLIERS - PICKED ONLY ONCE BY USERS

UNRELATED: Travel, seeking out news things, memories



MECHANIZED INTERACTIONS: Lack of human touch



MAKING CONNECTIONS

01 | PARA-ACADEMIC LEARNING

Learning beyond the classroom

A majority of students look at learning and education as distinct from each other. They are left with the feeling that their education system has stopped contributing to their learning. The report high levels of congruence between the two terms when they talk about their schooling or foundational years. Once they leave schools and get into intermediate or undergraduate colleges, education for them becomes primarily a rung in the ladder to simply climb the next one.

Learning however is something they believe happens lifelong. The nature of the lessons that they get and the knowledge that they gain changes with their stage in life. When speaking of learning a majority of participants in the research referred to life lessons like the ability to handle particular situations or relationships. Upon insistence they said that learning also covered skill based tasks and interests for them like playing a music instrument, cooking a dish or attaining a skill level in some sport. They also admitted to these aspects of their learning taking a back-seat in their lives and being left for times when they have little else to do.

Resultantly, in spite of recognizing that formal education and learning hold different weight and importance in their lives, a majority of learner are not able to pursue their para-academic learning goals. Learning gets limited to subjects studied in classrooms or with peers, or picking up some related skill (like machine learning for computer science students) from an online course.

“Learning and education are not same for me, I study in class, but I can learn anywhere”

“My friend teaches me guitar in my hostel, does that count as learning or studying?”

“Seekh to mai YouTube per bhi lu, Job milegi kya?”

I can even learn on YouTube, but will it get me a job?

“My two best friends in 9th are the reason I passed, they used to come home to help me with preparations”

“Who hasn’t heard the meme about Sharma ji ka Ladka? I studied hard because I was angry!”

Who hasn’t heard the meme about the neighbor’s son?

MAJOR INSIGHTS

02 | LEARNING AS A SOCIAL ACTIVITY

Learning together is always better than learning alone

The foundations of the behaviors and social individuals that human beings become is laid in the years they spend learning at home and schools from a young age. On an average, a student spends around 15000-17000 hours in classes by the time they finish school. Schools give us our first social groups in life and we often form lasting friendships with the people we meet there. This peer-group also brings with itself competition, motivation and connection.

A lot of participants recall their friendships, and escapades with friends from their school days when asked about learning. Most of the knowledge that they retained, and skills that they picked up were actually the once they demonstrated or picked up from a friend. From seemingly silly tricks with strings, fingers, paper toys and rules of childhood games, to shortcuts for mathematical equations or for memorizing the periodic table, most of the respondents recall picking up tidbits in short quick sessions with their friends. They also find that these skills find little academic relevant, but oftentimes play important roles in getting them out of sticky situations.

Peer groups also provided the much needed competition and enabled self scrutiny & evaluation. Since they would be held to the standards of their peers by teachers and parents alike, they would often drive the will from the motivation, or sometimes even the negative criticism meted out to them through comparison with their peers. The achievements of peer groups often helped them pushed the limits of what they believed possible.

03 | DISENGAGEMENT WITH CONTENT

Attention, Interaction & flair keep students hooked to classes

Students often get disengaged with the curriculum. This can be triggered by several things, a genuine lack of interest the foremost. This lack of interest is often fostered by poor teaching ability, ill-planned lessons and a wide gap between the knowledge level at which the individual and the class are operating.

Talented educators have the ability to make the mundane sound interesting and adapt their delivery on the go to make sure that the lessons cater to the needs of all the students within a class. However in the absence of such educators, the students are more or less left to deal with the overload of content by themselves. The lesson doesn't pause to collect feedback and respond to the progress made by the students. A critical part of what the educator brings to the class also goes away with them.

Teachers also over the years develop unique methodologies and styles of teaching. Some bring interesting material to the class or arrange field trips, while others might even rap in class to entertain the students over a boring topic. The amount of passion for learning that a teacher can inspire with their personality in the student is insurmountable. The same bond is showcased in the movie "Dead Poet's Society". Everyone has had at least one teacher who has gone beyond the call of duty to make learning fun for us.

The lack of an interactive teacher to guide and support the students' explorative journey, or simply disinterest on the part of a teacher can cause the student to get disengaged.

*"Insaan insaan se seekhte
hain beta, computer screen se
nahi"*

Humans learn from humans son, not computer
screens

*"My history sir used to do an
amazing impression of Adolf
Hitler, I still remember him"*

“Who wants to study after
a week full of classes?
Weekends are to chill and
hang out”

“No way... I met most of my
friend group at a club, I don't
want to be left out!”

“School was fun, *din mein
padho, shaam ko khelo*”

School was fun, study in the day, play in the
evening

04 | LEARNING IS WORK - CAN BE PLAY

Changing the association with learning as simply studying

All members of the society today, irrespective of their age or profession lead extremely busy lives today. Even a school going student spends his day attending classes, tuitions, doing their homework etc. As professionals the humdrum of a daily life means that we are always short on time. The little time that the respondents were able to take out from their daily schedules was often spent on activities they considered relaxing and socially rewarding. They would often sit home and relax, binge watching movies or television series on the internet. If they head out they would go out with friends to eat or go “clubbing”. The free time not for learning, as it seems to be a task that would require a lot of time and effort.

They aren't entirely wrong because the number of options and opportunities they have to engage in productive learning experiences on the go, which are fun, engaging and a reprieve from their hectic lives, are limited. Most avenues for learning something new require us to devote time and energy exclusively towards growing our knowledge base. School like environments or informal settings where work and playfulness co-exist are rare. Respondents report that they often feel wistful when they visit their school campuses with friends after several years at having left it.

The level of active engagement, the short bursts of activity with lighter cognitive loads combined with new things to learn, provided an intellectually stimulating environment. They recognize the fact that they have given up on actively seeking out opportunities to engage in playful and informal learning, because it is too much of a hassle.

05 | COMMITMENT PHOBIA

Long term involvement dissuades prospective learners

The current generation of students and young adults; millennials, have a deep set phobia of commitment to anything and everything that demands extended involvement. Brought up in a world of instant gratification they are used to having everything delivered fast. Traditional learning is something that is not delivered instantaneously and the results of it are seen only after having spend a lot of time. They grow up being indoctrinated into mainstream education methodologies so they do not consider time invested there as an effort and make their peace with it as the mainstay of their lives. This creates an effort-reward cycle not in sync with the behavioral habits of the modern learner.

Since learners view all kinds of learning as time-taking, they tend to avoid that which they deem not necessary. Only when they are faced with the need to address a problem that is unaddressable for the lack of picking up a new skill are they willing to invest time and energy into doing “just enough” to put out the current fire. A lot of times they would even go as far as to find someone else who would do their work and commission their services.

Even if the course are free of cost and online, a lot of the respondents report lack of motivation or commitment to completing the courses. In a spurt of enthusiasm they do start with a course that they find interesting. But once the initial momentum is lost they would much rather spend their time in more immediately rewarding activities. Other than vacations, they lead lives where they are genuinely pressed for time, and can see a long course as eating too much into their daily lives and giving back too little.

“Bro, I don’t wait more than 5 minutes even for my Uber”

“Who wants to learn how to cook? First learn, then buy groceries, then cook, then eat, then wash utensils.
One word, Dominos”

“I get off work at 9:30pm and I leave home at 10am in the morning, where’s the time?”

“I’m at Level 9 in Clash of Clans, I have unlocked Dragons”

“Assume that I finished my free course on EdX, now what? Wait for a situation to use it?”

06 | I WANT SOMETHING TO SHOW FOR IT

Seeking achievement and accomplishment in Learning

Following the previous line of inquiry, the analyses further reveals that interaction with learning, through years of conventional education has become highly transactional. Respondents report doing a sub-conscious cost-benefit analysis each time they need to learn something. “Imagine if you were told after school is over - that was all, you’re done, go whatever you want to do with your life now?” said one respondent. The need for education and by association learning to make sense in the scheme of life is present in every learner.

The respondents have had learning processes throughout their lives end in achievements or towards logical progression; after finishing studies for standard 8th successfully, they were promoted to standard 9th. While this system is still at work in formal settings (promotion, certification, qualification etc.), learners shy away from informal learning experiences because “they do not amount to much”. Participants in the research who had enrolled in online courses have reported lack of achievement or progression as one of the major reasons for giving up on the course. Khan Academy a popular MOOC platform has introduced “learning streaks” which reward regular learners with experience points. But one still has to maintain a profile and continue learning in order to feel accomplished.

The same thing also works in the converse situation, where the student is in the place of an instructor. Because of deep rooted connotations, they often end up seeking monetary remuneration. A lot of respondents claimed that they really didn’t need the money, but they wanted something to show for the time and effort they put in.

07 | I LOVE YOU TEACHER, NO REALLY!

Peer groups are vulnerable to unfavorable personal equations

Respondents have as a common theme reported feelings of deep respect and love for one or another of their teachers throughout their lives. The bond between the student and teacher is something that is unique in its nature and gives both the teacher and the student a deeper sense of fulfillment in their lives. However this bond takes upon several variations at different times in the student life. This has been closely related to the age difference of the student and teacher in question.

Traditionally for most of the duration of schooling, the age gap between the student and the teacher is always at least 15-20 years. However the age difference can go down to under a 10 years: First when in high school during adolescence the student might be taught by a teacher at their school who might be a fresh graduate. Second, when they join postgraduate courses, they might have a limited age difference with some of the junior faculty, and might also look upon themselves as performing adults and hence social equals.

Such scenarios are more common in non-institutional situations. These often lead to liaisons developing between the student and the teacher that are romantic in nature. It could range from anywhere between a mild crush to lasting obsessions. On such occasions the spirit and quality of learning is often compromised and thus safeguards must exist to prevent such fallouts. In environments where knowledge is exchanged between peers in social settings, the likelihood of it devolving into romantic dating, stalking and in some cases harassment is also probable.

“Yes, I do check out unknown profiles on Insta, It’s a good pastime”

“I used to go to class for my History teacher, I swear I didn’t study a thing that year.”

“We became Facebook friends when I was on exchange, never really spoke in person, but he texts me randomly”

“It might be obvious to the instructor, but no... I don't know how to use 'follow me' in the Sketchup software, I'll have to search for it for another half an hour before I can get back to the tutorial”

08 | LAST MILE LEARNING

Online learning doesn't solve simple or practical doubts

In modern methodologies of e-learning, knowledge has been made free and easily accessible to all students. The content is developed to carefully provide as much information, in as consumable a format as possible. However to students used to classroom learning and spoon-feeding, learning can often hit a roadblock. Whether it is a concept they can't really understand, or there is a knowledge barrier or the material has simply become too uninteresting for them to consume, several reasons can cause the learning marathon or sprint to stop short of completion.

On such occasions, the students must resort to secondary research online from a variety of sites. This process is very time consuming and the veracity of the information they find can also be questionable. More often than not, they will simply not be able to move beyond that particular block and leave it unresolved till they chance upon a solution.

Respondents have reported seeking out experts of the field or peers who have attained proficiency in similar topics with requests for clarifications. A simple video-conferencing based doubt-clearing session, with the aid of digital collaboration tools has proved useful for many of the learners. Forums also prove helpful for software/technical issues, but the query response engagement is time taking and not interactive/conversational.

This last mile is a gap that students often have to run themselves. They are able to find little to no support or guidance towards these kinds of requirements.

09 | SO YOU THINK YOU CAN'T TEACH?

Students are unaware of their value as potential teachers

Respondents were often unaware of the fact that they are a potential knowledge resource for someone else. Unless they are explicitly informed of someone else who needs to learn something that they are proficient in, they do not recognize their knowledge as having value to other people. This inward outlook prevents them from sharing their skills or making them known to their peer groups. They also associate teaching with a formal delivery of systematized content that they might not necessarily be capable of.

The result is that rich skill and knowledge pools exist in close proximity without people become aware of them. The level of social interaction out of immediate social groups (often defined by the organizations they represent) is almost negligible. Any chance encounters with peers from a different social group/ specialization happen in contexts that are dissociated from learning. The tendency to pay for the fish rather than learning how to fish already exists, so very few people are actually interested in teaching fishing as a skill.

“What will I teach here? 9th-10th ke bacche thode hi hain yahan!”

What will I teach here? There are no standard 9th or 10th kids around here!

“Everyone knows PowerPoint no one will want to ‘learn’ it”

“I offered to teach a senior once, he paid me to finish his project instead”

“When I can have on-demand boyfriends with a swipe, why should I risk going out and meeting random people? ”

“I don't really feel the need to talk to people anymore, I can watch sitcoms or fool around with Siri if I'm really bored, and that's it, I'm good.”

10 | REAL VS VIRTUAL PEOPLE

Interacting only virtually with people is easy and harmful

The growing dependence on technology of the millennial crowd has seen them become progressively poorer at real world social skills. The majority of respondents had over a 1000 friends online but had not interacted with a fresh acquaintance in person in over a year. They feel that the depth of their bonds do not matter much, as anyway people do not seek deep connections with everyone. Their social experience is limited to the virtual world.

In addition to this is the vast availability and popularity of smartphones equipped with social networking apps and high speed internet. They are able to simulate real time social connection with their friends by sharing live streams and getting likes and responses to every little thing they do. However no amount of virtual appreciation or bonding ever replaces the biochemical responses and the fulfillment from real world relationships. Several respondents have tried to repeatedly fill the voids with more and more in the virtual world, as they find themselves handicapped in real world reactions and can't sustain them anymore.

Originally intended to extend the real world connection, technology has started substituting it, acting as a gatekeeper to all our social interactions. People are willing to meet online acquaintances in the real world, but believe they are ill equipped to handle the interactions without resorting to the easy and prevalent paradigms of dating and pickups.

KEY CONCEPTS

Refining Insights into major themes

01 | PARA-ACADEMIC LEARNING

02 | LEARNING AS A SOCIAL ACTIVITY

03 | DISENGAGEMENT IS COMMON

04 | LEARNING IS WORK - CAN BE PLAY

05 | COMMITMENT PHOBIA

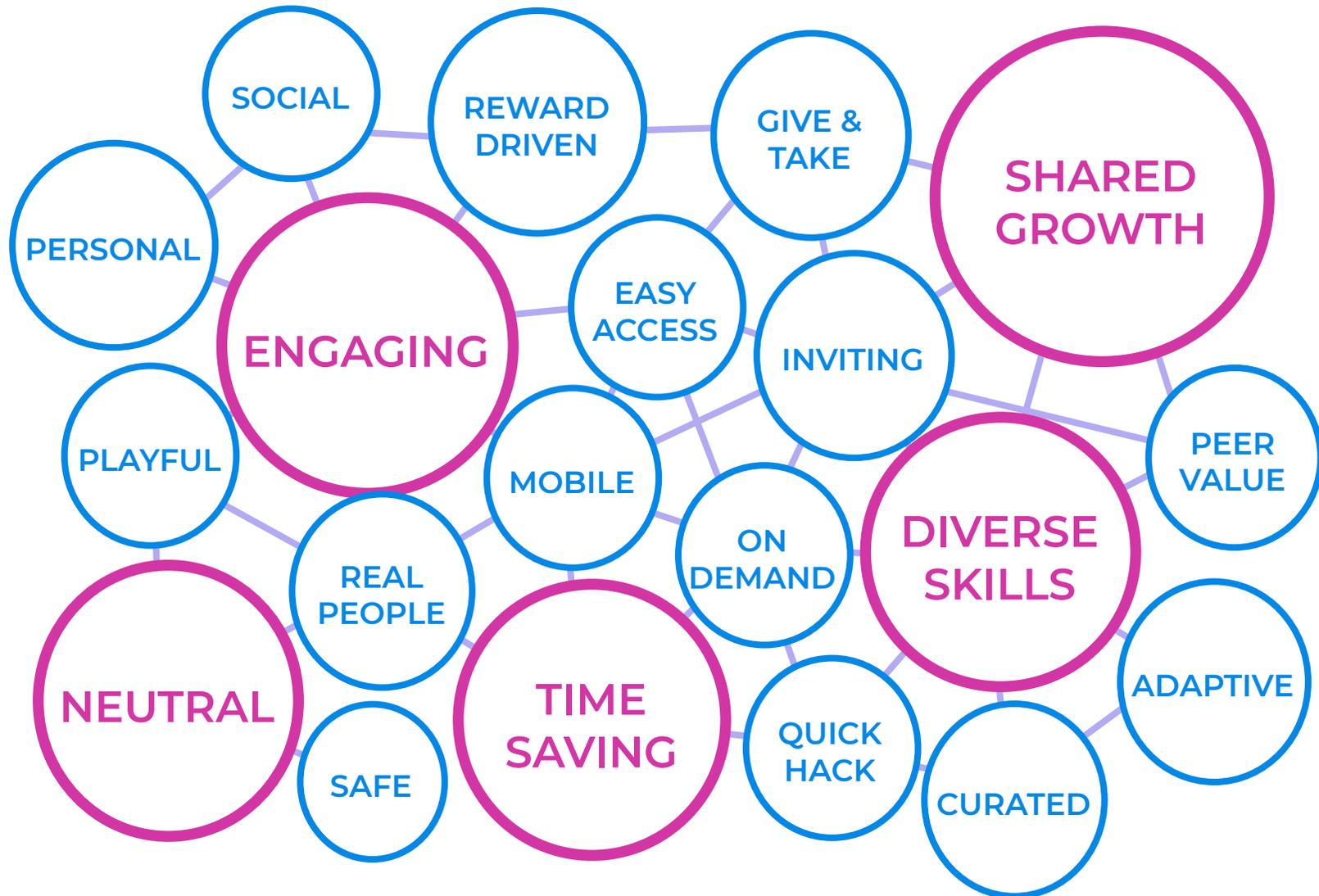
06 | WANT SOMETHING TO SHOW FOR IT

07 | I LOVE YOU TEACHER, NO REALLY!

08 | LAST MILE LEARNING

09 | SO YOU THINK YOU CAN'T TEACH

10 | REAL VS VIRTUAL PEOPLE



MOVING FORWARD

Refining the deliverable of the project

Keeping the original intent of the project intact and informing it with research, analysis and insights, the deliverable is narrowed down. The redefined brief has gone through an evolutionary process to capture all the elements discovered through explorations into the users, and their subconscious journeys of learning. All discovered attributes might not be explicitly stated in the deliverable statement at hand, but the final outcome must keep them in consideration.

This deliverable statement is meant to serve as the guiding direction for the design undertaking here onwards. It is to be used as a baseline to refer to when developing goals and tasks that the platform must accomplish to satisfy the discovered and emergent needs of the consumer arrived at through the distillation of the insights from the research.

HMM..



ALMOST THERE..



VOILA!



Make something that is accessible to all learners that makes them actively want to go out and learn from people around them

A digital platform where people can find out who they can meet and what they can learn from someone they befriend, near them, without the taboo association of dating them .

A MOBILE PLATFORM THAT LETS PEERS DISCOVER, REQUEST & OFFER MULTI -DISCIPLINARY OFFLINE MICRO-LEARNING EXPERIENCES NEAR THEM IN A NEUTRAL CONTEXT