P/REFERENCES OF DESIGN

PROBLEM-SOLVING APPROACH IN FASHION DESIGN EDUCATION: A CASE STUDY OF STUDENT PROJECT FOSTERING INCLUSIVITY IN FASHION.

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ABSTRACT | Fashion is a powerful tool for self-expression and empowerment. People with disabilities (PwD) however, are often excluded from fashion, as mainstream clothing is often not accessible or adaptable to their needs. The limited awareness surrounding disabilities specifically in fashion education does not help in fostering inclusivity and assimilation within society, which not only requires infrastructural adjustments but also innovations in adaptive clothing solutions. This challenge is particularly pertinent for educators in design disciplines, such as interiors or fashion, who must navigate the complexities of incorporating inclusive practices into their curricula. Design, inherently a problem-solving discipline, often overlooks this aspect when applied to fashion in particular, which instead gravitates towards the celebration of identity and clothing as a form of an artistic communicative language. Addressing this lacuna, the fashion department at a well-known design college initiated the "Body and Diversity" brief for second-year fashion students which delves into the human body as a composite entity, considering its diverse abilities as well as its limitations. Students engage with a spectrum of body types, gaining insights into factors that deviate from the norm. Adapting a personalised client study, students undertake rigorous research, including the collection of primary data and visuals from their clients (who may be PwD), analysis of diverse body requirements, and the subsequent development and delivery of tailored clothing solutions. This paper employs the "Body and Diversity" brief as a case study to elucidate the diverse design approach that can shed light on an innovative learning application.

1. Introduction

Fashion design, operating as both a discipline and a pedagogical framework within fashion education, embodies a multifaceted interplay of contextualisation, technical proficiency, industry orientation, and technological integration. Its dynamic nature necessitates constant innovation in both its approach and delivery. This presents a formidable challenge not only for fashion educators but also for fashion students. The focal point lies in equipping these students with future-proof skills while simultaneously grounding them in historical and cultural contexts. Contemporary discourse within the field emphasises not only the exploration of the "why" and "what" of fashion but increasingly interrogates the "how" of its various manifestations. As articulated by Steven Faerm (2017), this multifaceted inquiry underscores the evolving landscape of fashion education, demanding a nuanced understanding and response to its complexities.

Over the past two decades, fashion education has undergone significant transformation, spurred notably by the prevalent influence of social media. This medium has facilitated the rapid dissemination of ideas, fostering discussions that have propelled certain movements to global prominence. Among these, the notion of sustainability in fashion stands out as a salient example. The emergence of sustainability as a prominent concern within fashion design reflects a conscientious recognition of the industry's immense environmental impact. Various dimensions of sustainability, including recycling and upcycling practices, embrace of make-and-mend approaches, promotion of circularity, emphasis on local sourcing and consumption, appreciation of the value chain, and cultivation of craftsmanship, are being systematically integrated into design pedagogy across diverse educational institutions worldwide. Consequently, academic curricula are being restructured to embrace this newfound imperative, as educators seek to instil in students an ethos of sustainability vis-à-vis clothing and fashion.

The evolving landscape of fashion consumption has propelled an earnest shift in the role of the designer. While consumers continue to seek meaning and self-actualisation through fashion, Maslow's "Hierarchy of Needs" suggests that contemporary consumers, having had their primary needs met, now yearn for deeper forms of non-physical stimulation (Faerm, 2015, p.190-191). Consequently, there is a burgeoning demand for fashion offerings that transcend mere product functionality, eliciting deeper emotional resonance. As posited by Pink (2005, as cited in Faerm, 2015), the future trajectory of fashion design necessitates a departure from mere aesthetic appeal towards the cultivation of narratives that resonate with an increasingly discerning audience. Designers, positioned as creative innovators, are tasked with the pivotal role of "bridging the chasm between thinking and doing because they are passionately committed to the goal of a better life and a better world around them"(Brown, 2009 as cited in Faerm, 2015). In this vein, the design process transcends its conventional confines to emerge as a potent catalyst for societal health, economic prosperity, and personal fulfilment. As Brown (2009, as cited in Faerm 2017) further contends, the elevation of design within this broader paradigm holds the promise of enriching not only individual lives but also the fabric of our collective existence, inculcating it with deeper meaning and purpose.

The acknowledgment of the need for change within the fashion system and education has prompted critical reflection, yet few theorists have explicitly advocated for the integration of a problem-solving approach as a universal design principle within the discipline. This paper seeks to address this gap by providing insights into the potential benefits of incorporating problem-solving methodologies into fashion design pedagogy, thereby advancing inclusive practices in the field of fashion and clothing.
Utilising a qualitative, observational, and case study approach, this paper aims to present evidence of successful project delivery and student reflections that underscore the significance of adapting diverse problem-solving approaches within fashion design education. In doing so, it also aims to expand upon Steven Faerm's argument regarding the evolving role of the fashion designer in the contemporary knowledge-based economy. Faerm's (2017) proposition of the "Designer-As-Social-Scientist"(p.6) underscores the necessity for designers to transcend traditional boundaries of aesthetic creation and instead engage with the psychosocial needs and desires of their audience. By crafting narratives and design processes that strategically address both practical and emotional aspects of consumption, designers can better resonate with their target consumers.

2. Introduction of Facts and Figures of PwD and Diverse Body Types, Issues, Concerns: The Case of 'Why' This is Essential

According to UNDP (2018, p.3) 'Persons with disabilities are one of the largest minority groups in the world, estimated to represent over 15 percent (approximately 1.5 billion people) of the world's population. 3 out of 5 persons with disabilities are women and disability is more common among children and adults who are poor. 80 percent of persons with disabilities live in UNDP programme countries. Persons with disabilities face challenges to fully participate in society which is further heightened by discriminatory social attitudes – this culminates in marginalisation and significant barriers to their inclusion and participation in society and in development. The extent of inequalities experienced by persons with disabilities in all areas of development is often the result of shortcomings in the structural, social, political, and cultural environments in which they reside, including lack of accessibility to physical and virtual environments; institutional and attitudinal barriers; exclusion; and unequal opportunities.'

This demographic reveals the urgency for fostering inclusivity and assimilation within society, necessitating not only infrastructural adjustments but also innovations in spatial design and adaptive clothing solutions.

2.1 What Do We Understand by Inclusive Environments in General

When discussing an inclusive environment we take into consideration race, ethnicity, gender, sexual orientation, age, religion, disability, socio-economic status and how space (physical) and an environment (sensory and emotional included) is deemed fit and wholesome for every person who may inhabit that space. While inclusivity and diversity are outlined in various theoretical frameworks and government documents in most countries, the practical implementation often lags behind. Policies and documents advocate for equal opportunities and anti-discriminatory measures, yet the ground reality reveals persistent barriers. Addressing disability as a human-centric issue involves tackling spatial, accessibility, and clothing challenges. Across the world, efforts are being made to enhance infrastructure for better mobility, such as wheelchair ramps and accessible public spaces. Initiatives also aim to create awareness, dispel stereotypes, and foster a more inclusive mindset within communities. In the realm of clothing as well there is a growing realisation for the need for adaptive designs to cater to the diverse body requirements of PwD.

2.2 Bringing Focus to Clothing, Fashion and Fashion Design Education

Fashion is a powerful tool for self-expression and empowerment. People with disabilities, however, are often excluded from fashion, as mainstream clothing is often not accessible or adaptable to their needs. Adaptive fashion is clothing that is designed to be easy to put on and take off, and to accommodate the needs of people with disabilities, especially in the case of mobility concerns. It is an important part of creating a more inclusive and accessible society.

Fashion courses worldwide often prioritise trends and the pursuit of idealised body types, perpetuating a narrow definition of beauty. Within these courses, students are encouraged to explore the interplay between materials and forms, with an emphasis on innovation and the creation of unique designs. The curriculum typically revolves around techniques for enhancing the aesthetics of clothing, often overlooking the broader implications of design beyond mere appearance. There is a growing recognition of the need for inclusivity within the industry, spurred by awareness campaigns advocating for representation of diverse skin tones and body sizes. Despite efforts to diversify representation within the fashion industry, there is still a pervasive focus on conforming to traditional standards of beauty. This perpetuates an exclusionary environment that fails to celebrate the full spectrum of human diversity. While strides have been made in acknowledging the importance of representation, with the inclusion of dark-skinned and plus-size models, the overarching emphasis remains on materiality and form whereas true inclusivity requires a fundamental shift in the way fashion education is approached.

In her manifesto, ANTI_FASHION: A manifesto for the next decade, trend forecaster Li Edelkoort claims that most fashion institutions encourage student designers to become unique individuals who aspire to future roles as celebrity runway designers for luxury brands (Edelkoort, 2014, as cited in Sala, 2016. It would be fair to state that central to the teaching and learning of fashion is the cultivation of a discerning eye for aesthetics, serving as the cornerstone of the discipline. Within this realm, students are tasked with not only honing their ability to critically assess designs but also to recognize emerging trends and craft their own unique design aesthetics, drawing from their personal perspectives and experiences. While problem-solving skills are often emphasised in garment construction and form exploration, there exists a tendency to overlook the broader context of addressing functional needs of clients or real individuals, thereby neglecting to identify potential design gaps.

Sala (2016) in her paper further

> "discusses ideas of progress, innovation and possibilities for transformation present in fashion education practice and learning, specifically in reference to the fashion educator's role in enabling student designers to become critically aware of their place within the current fashion system. To transform ideas, to encourage or experience a shift in paradigm, requires the recognition and reinterpretation of what has come before".

(Williams & Askland, 2011, as cited in Faerm, 2015, p.197-198) have raised a similar point

> "To prepare their future graduates, many design schools are moving away from teaching to the mere 'artifact', into pedagogy that increasingly emphasizes the design process, the interrelationships between creator and audience, and the role of (often implicit) rules and boundaries. This is a more contextualist approach as it considers the interactive engagement between the individual and the social environment. The New Design Education, then, is one that encourages and facilitates partnerships between design and the social sciences. After all, design is, on many levels, a service to society and end-users."

Despite the presence of leading design schools and prestigious fashion programs worldwide, there remains a conspicuous absence of specialised courses catering to adaptive clothing, which is particularly noteworthy given the industry's obligation to inclusivity and accessibility. The dearth of focus on adaptive clothing within fashion education is not surprising, considering that fashion designers typically do not enter the field with the explicit intention of catering exclusively to individuals with disabilities. However, it is imperative to acknowledge that fashion design, as a subset of the broader design discipline, possesses inherent problem-solving capabilities and should be adept at addressing diverse societal needs.

2.3 What Does Design and Design Teaching Mean: Are We Applying the Same Principles of Design Pedagogy to Fashion as in Other Disciplines?

Early literature on design or the process of designing has laid the groundwork by proposing several definitions or approaches, each offering unique insights into the nature of design. Some of them as quoted below from Jones' book 'Design Methods' (1992, p.3) elaborate upon this very approach:

- "A goal-directed problem-solving activity (Archer, 1965)": This definition highlights design as a deliberate and purposeful endeavour aimed at solving specific problems or achieving predefined objectives. It underscores the importance of intentionality and direction in the design process.
- "The conditioning factor for those parts of the product which come into contact with people (Farr, 1966)": Here, design is viewed as a determinant of the user experience, particularly focusing on the aspects of a product that interact directly with individuals. This perspective emphasises the human-centered nature of design and its role in shaping interactions between people and products.

- "Relating product with situation to give satisfaction (Gregory, 1966)": Gregory's definition emphasises the contextual nature of design, highlighting its function in establishing a harmonious relationship between products and their intended environments. Design is seen as a means of enhancing user satisfaction by aligning products with specific situational requirements or contexts.

- "The optimum solution to the sum of the true needs of a particular set of circumstances (Matchett, 1968)": This definition underscores the idea of design as a process aimed at identifying and fulfilling the genuine needs of a given situation or context. It suggests that effective design involves finding the most suitable solution that addresses the inherent requirements and constraints of a particular scenario.

- "A creative activity - it involves bringing into being something new and useful that has not existed previously (Reswick, 1965)": Reswick's definition highlights the innovative aspect of design, emphasising its role in generating novel solutions that serve practical purposes. Design is portrayed as a creative endeavour that manifests new ideas into tangible forms, thereby contributing to the advancement of human knowledge and utility.

These early perspectives on design lay the foundation for understanding its multifaceted nature, encompassing elements of problem-solving, user experience, contextual adaptation, needs fulfilment, and creative innovation. Jones' statement "The objectives of designing become less concerned with the product itself and more concerned with the changes that manufacturers, distributors, users and society as a whole, are expected to make in order to adapt to, and benefit from, the new design" offers a profound perspective on the evolving role of design. While Jones's observations were originally framed within the context of architecture, engineering, or industrial design, they underscore a fundamental truth applicable to design across various disciplines.

Design, as a principle, should indeed be grounded in certain universal parameters and deliverables, irrespective of the specific field—its essence remains rooted in creativity and problem-solving. Therefore, while the objectives and focus areas of design may vary depending on the context, there exists a foundational framework that defines its fundamental purpose.

In the realm of teaching and learning within the visual arts and creative disciplines, there exists a notable emphasis on cultivating a rich contextual understanding and translating it into tangible outcomes through an exploratory process. The expectation is that students will become independent, self-analytical, critical thinkers that inform the entire period in higher education from the start of the course (Drew et al., 2002, pg 346). They have made a strong case of the role educational research can play in the development of thinking concerning pedagogical issues. Their approach to Martin and Saljo's (as cited in Drew et al. 2002) seminal work on deep and surface approaches in the visual arts, as well as their subsequent study (2002), provides valuable insights into effective pedagogical strategies within creative education. Among the four approaches identified, one stands out: a 'concept-focused strategy with the intention of developing the student's own response and ideas in relation to the project, ultimately a search for intrinsic personal meaning'. This approach aligns with the concept of cultivation of students' intrinsic motivation and personal engagement with the subject matter. Furthermore, it serves as a conduit for promoting the development of Personal and Professional Development (PPD) or Personal Development Planning (PDP) outcomes, underscoring the holistic nature of learning within creative disciplines.

> "When it comes to assessment as well, there have been criticisms in visual arts being subjective and lacking in rigour, where tutors usually arrive at grades after discussion with each other, in a process that is rigorous but socially negotiated and includes unwritten criteria. Further it is stated that 'In order for students to understand the assessment process and develop the capacity for effective self-evaluation and development, opportunities must be provided for them to understand assessment practices through formal explication and through social learning. This

can enable students to benefit and learn from assessment rather than seeing it as something that is 'done to them'" (p.350).

In some cases of industry live briefs, especially in the higher levels and master's programs, this engagement most often takes place, but this is still via the understanding of fashion as the students know it. As a case in point, if fashion students were designing for a PwD and if this understanding was built around a problem-solving approach where student was designing for a real-life client, the feedback would be real time, in-person and objective, specific to the outcomes that were to be achieved. This approach is further elaborated in the specific case study below.

3. Body and Diversity: A Case Study of Students' Design Project Fostering Inclusivity in Fashion

Addressing this lacuna identified above, the Fashion department at the Indian Institute of Art and Design (IIAD) initiated the "Body and Diversity" yearly project for second-year (level 4) fashion students in 2017. Spanning 6-8 weeks, this project delves into the human body as a composite entity, considering its diverse abilities as well as its limitations. Students engage with a spectrum of body types, gaining insights into factors that deviate from the norm, including but not limited to body types, shapes & sizes, differently-abled, gender studies, etc. and their association with clothing and fashion. Emphasising on a personalised client study, students undertake rigorous research, including the collection of primary data and visuals from their clients (who may be PwD), analysis of diverse body requirements, and the subsequent development and delivery of tailored clothing solutions as a live project with a real-life client.

3.1 Details of the Project with Its Aims, Learning Outcomes, Objectives, Student Work, and Reflections Expanded Upon Below

Aims:

- To empathise with human needs and user focussed concerns (Process 1)
- To enable students to explore their own status as future design professionals (PPD 1)

Learning Outcomes:

- Analyse the relationship(s) between contexts & design outcomes (CONTEXT1)
- Identify the user needs through research and iterative design development (PROCESS1)
- Study diverse processes & agents of design realization within the relevant ethos (DESIGN OUTCOME1)
- Reflect on being aware & ethical students of design (PPD1)

Learning Objectives:

- Research: Conduct in-depth research into the experiences, needs, and preferences of PwD in relation to clothing and fashion.
- Ideation: Generate creative and inclusive design concepts that address the identified challenges and requirements.
- Prototyping: Develop toiles/prototypes of fashion designs tailored to the specific needs of PwD, incorporating feedback and iteration.
- Test fitting: Collaborate with PwD and relevant stakeholders to test and evaluate the toiles/prototypes in real-world settings.

- Learning and Reflection: Reflect on the design process, outcomes, and learnings, considering both successes and areas for improvement.

To explain the brief comprehensively, it is divided into 3 sub themes under the overarching theme of 'the Body' where a student's understanding is built with respect to the whole body, its physical, emotional and physiological attributes.

Body and diversity (overarching) is built around the wide spectrum of body variations: from varied body shapes and sizes to people with special needs, it could be people who wear prosthetics or people who identify with a different gender, etc. To further the understanding of the body, students look at the body through different lenses - from body as a form to finally interrogating the relationship between body and fashion, discussing both the historical perspective as well as present scenarios of how the body has been perceived. This would include covering *body* in the arts, in history, in clothing from the earliest time known etc. They question normative body ideals, and how the culture influences how we feel about our bodies.

Table 1. This segment is further divided into 3 subparts that are primarily based around class discussions and individual reflections.

Part I - Body as self and as the other, Vitruvian Man, Body as physical (torso, limb, face - senses & expressions), Body as an emotional being	**Part II** - Body in arts, sculptures, nudity, sexuality, armours, etc.	**Part III** - Ideal body image, mannerisms, body language & attitude, positivity, self-portraits, selfies, facial recognition

The next part of the brief focuses on understanding 'Body and gender' where the aim is to expose and sensitise students to gender studies and the social issues surrounding these. From looking at the body as a form to seeing the body as gender and then finally interrogating the relationship between body and fashion, discussing both the historical perspective as well as present scenarios they question how they feel about their bodies and gender. In the process of building a unique contextual narrative around the renewed understanding of gender, students chart out our own pathway by assimilating parallels between factors that have been defining gender till now, sieving through the newer viewpoints on the subject and by questioning the structures in the societies & within our own mindscapes. They methodically construct a curated context around the relationship between "Mind, Body & Gender". Within this they understand the difference between *Unisex* and *Androgyny* and what design approach they may have to undertake to design for either of the categories. Building a technical understanding of the placket, collar or yoke for example, and how its application shifts when addressing different gender types.

The last part of the brief is understanding 'Body and movement' and its role in a garment, for example - how different professions require different garments. Answering questions like 'Does movement play an important role in defining a certain occupation? Does the movement of a dancer and corporate employee differ? How does it affect their clothing? Ever wondered what costume designers keep in mind while designing for dancers and performers?' and then moving onto restriction of movements because of mental or physical ailments, as well as for differently-abled people or people with disabilities, and how these can turn into problem solving approaches for students of fashion. A masterclass and workshop on understanding anthropometrics and its relevance in this topic is integrated. They also understand how movement of body may be impacted if someone is physically challenged, or when the body is fit but the person is mentally not fully fit and what kind of interventions may be required in either case.

3.2 Deliverables

By culminating the above learnings, their main task (described below) is to identify a client who is facing challenges in movement or is PwD, or is struggling to identify with rigid gender norms. They look and seek within their surroundings - family, friends, immediate and close circle or through known contacts to build a prospective group of 'clients' from whom they then shortlist one that they will be designing for. They arrive at the 'design problem' in the way of this live client engagement and this sets a premise to base their design context and design process on.

The final deliverable is supported by lots of other supporting tasks and learnings (in addition to the core aims, learning outcomes, and objectives outlined in the project as stated above) to ensure a holistic and enriching educational experience for students:

- Client Profiling: Students learn how to conduct thorough client profiling, understanding the unique characteristics, preferences, and needs of the target audience, particularly Persons with Disabilities (PwD). This process involves gathering detailed information through interviews with the client and their families or support staff, observations, and research to inform the design process effectively.

- Context Building: Emphasis is placed on building a strong contextual framework to guide the design process. Students explore the broader societal, cultural, and environmental factors that influence fashion and inclusivity, enabling them to develop designs that are not only aesthetically appealing but also culturally sensitive and socially relevant.

- Iterative Process: Students engage in a rigorous iterative process to refine their designs and arrive at successful outcomes. This iterative approach involves continuous evaluation, feedback, and refinement, allowing students to address challenges, experiment with new ideas, and achieve optimal design solutions.

- Technical Construction: Students learn the technical components of garment construction, including pattern-making, sewing techniques, and fabric manipulation. Some are covered as charrettes and some as a continuation of design discussion, students also learn why volume, ease or other elements of addition may be required in the form. They look at pleats, tucks, shirring, gussets, godets, trims such as Velcro and snap buttons etc. to bring in required elements within their iterations.

- Representation Skills: Students acquire proficiency in representing their design concepts through various mediums, including hand sketches, computer-aided design (CAD) software, and body scanning technologies. This multi-modal approach enables students to effectively communicate their ideas and visions to stakeholders and collaborators.

- Soft Skills Development: Through interactions with clients and stakeholders, students develop essential soft skills such as communication, empathy, and active listening. They learn to engage in meaningful dialogues with clients, demonstrating empathy and understanding to address their specific needs and preferences sensitively.

- Reflection and Awareness: Reflective practice is integral to the learning process, with students documenting their progress, insights, and reflections through reflective logs. This process encourages introspection and self-awareness, fostering a deeper understanding of their creative process, as well as their physical and emotional surroundings.

By integrating these additional learnings into the project, students are provided with a comprehensive and immersive learning experience (figures 1-8) that goes beyond technical skills to encompass critical thinking, empathy, and cultural awareness. As a result, they emerge as well-rounded and socially conscious

designers equipped to make meaningful contributions to the fashion industry and society at large. All the above are covered via various teaching and learning methods such as lectures, small group discussions, large classroom discussions, panel discussions, peer engagements, masterclasses and guest lectures, in order to build a strong foundation for the design premise.

"The role of the future fashion designer, then, is not merely one of 'aesthetic provider' but as a practitioner who approaches the design process with deeper levels of empathy, sociological pattern-recognition, innovation, and big-picture capabilities" (Faerm, 2015, p.193). This brief compels design students to think beyond basics of form and material while really integrating a thinking and intervention possibility.

3.3 Example of Work

One student's work is presented below as an example of the brief culmination. There is an identification of a '*design problem*', engaging with an iterative '*design process*' and thinking of possible '*design solutions*'. The initial context building and design development happens by hand. These are supported by many hand drawing sessions of 'the body' its movement, its gestures, curves, fold, wrinkles, skin colour etc. This is a final submission therefore does not capture an explicit design process however it does evidence a new design thinking approach (many journal pages and process sheets are omitted due to space constraints).
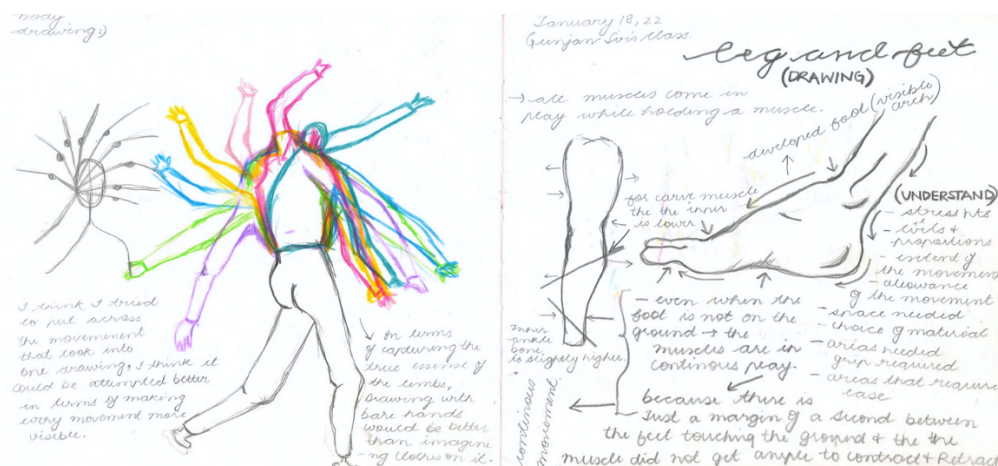
Figure 1. Journal entry, understanding the design problem – studying movement of the body.
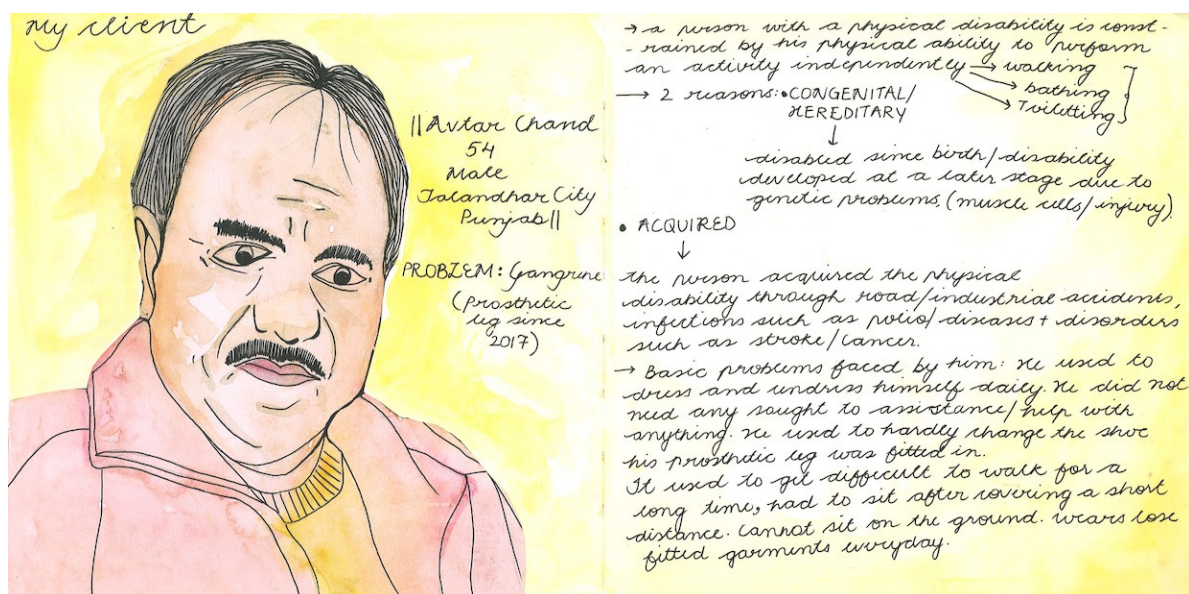

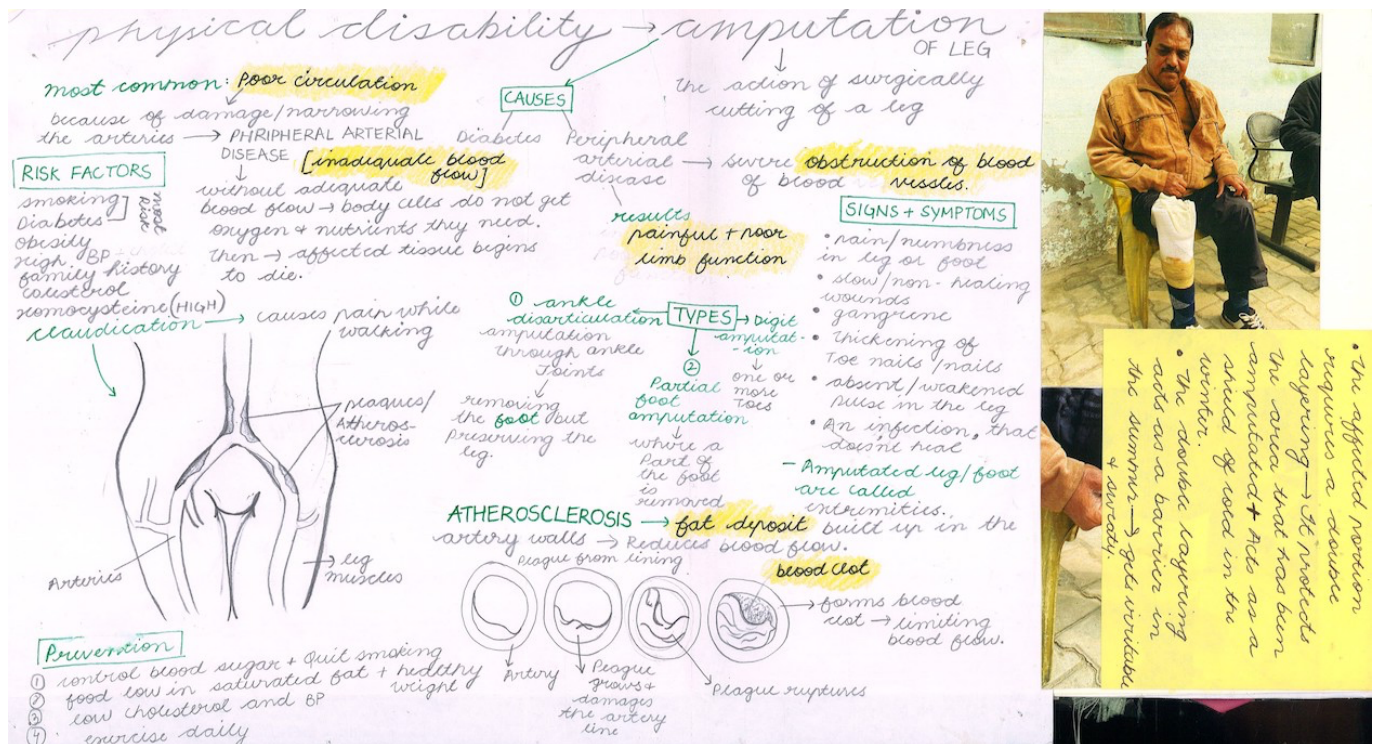Figure 2. Journal entry, understanding the design problem.

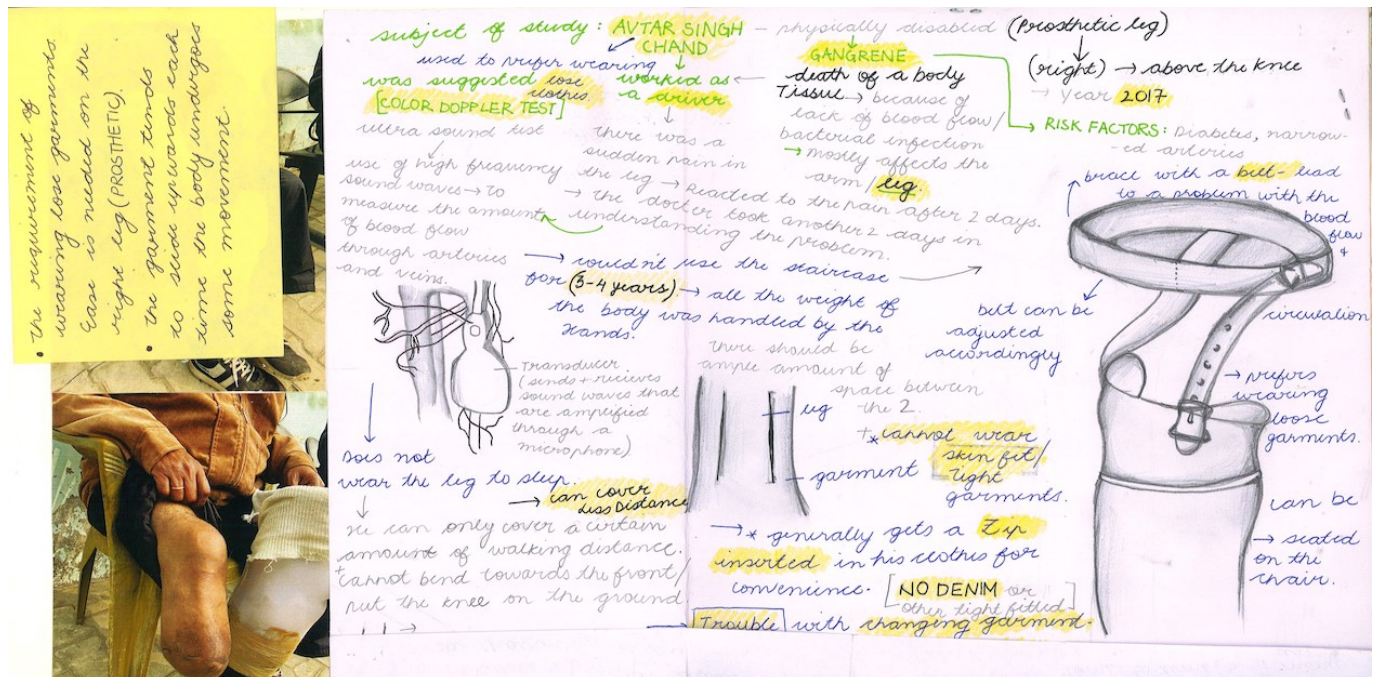Figure 3. Journal entry, understanding the design problem.

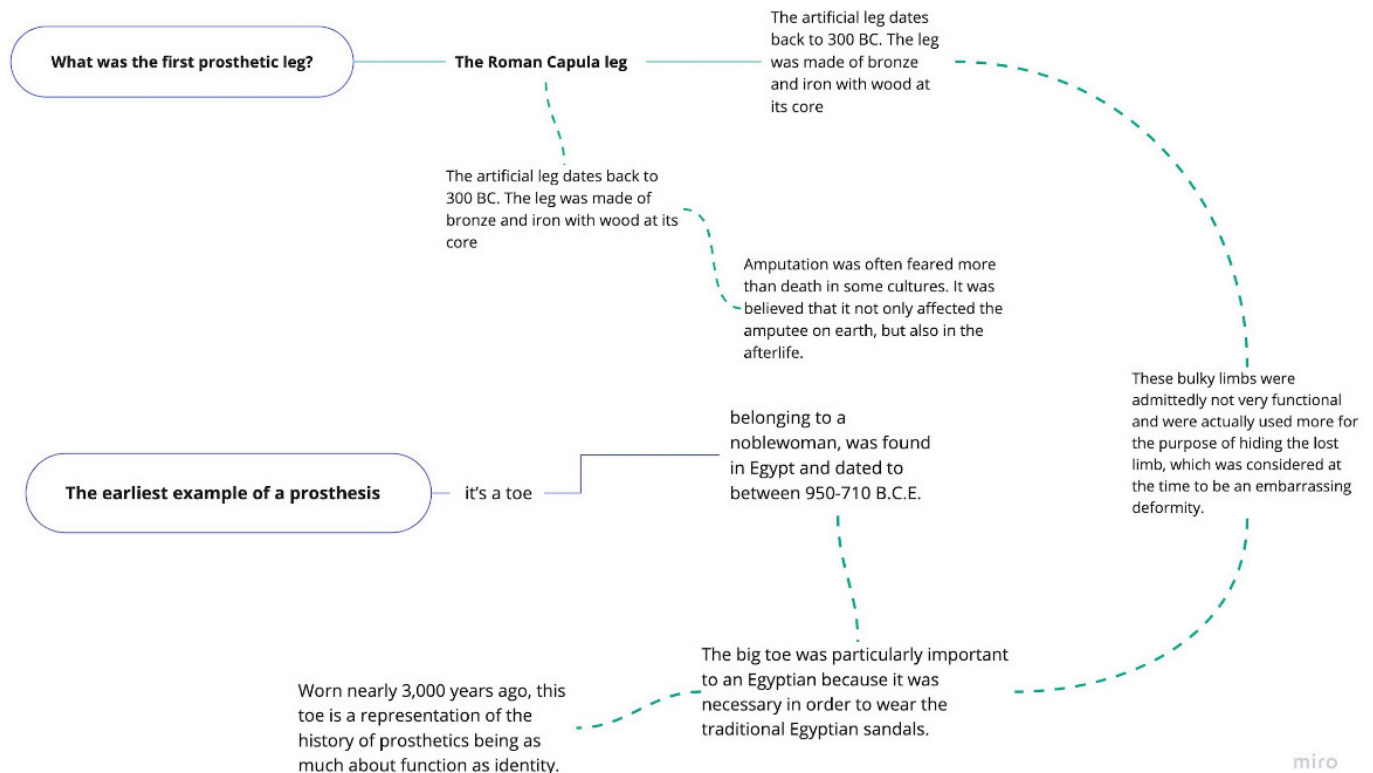Figure 4. Journal entry, understanding the design problem.
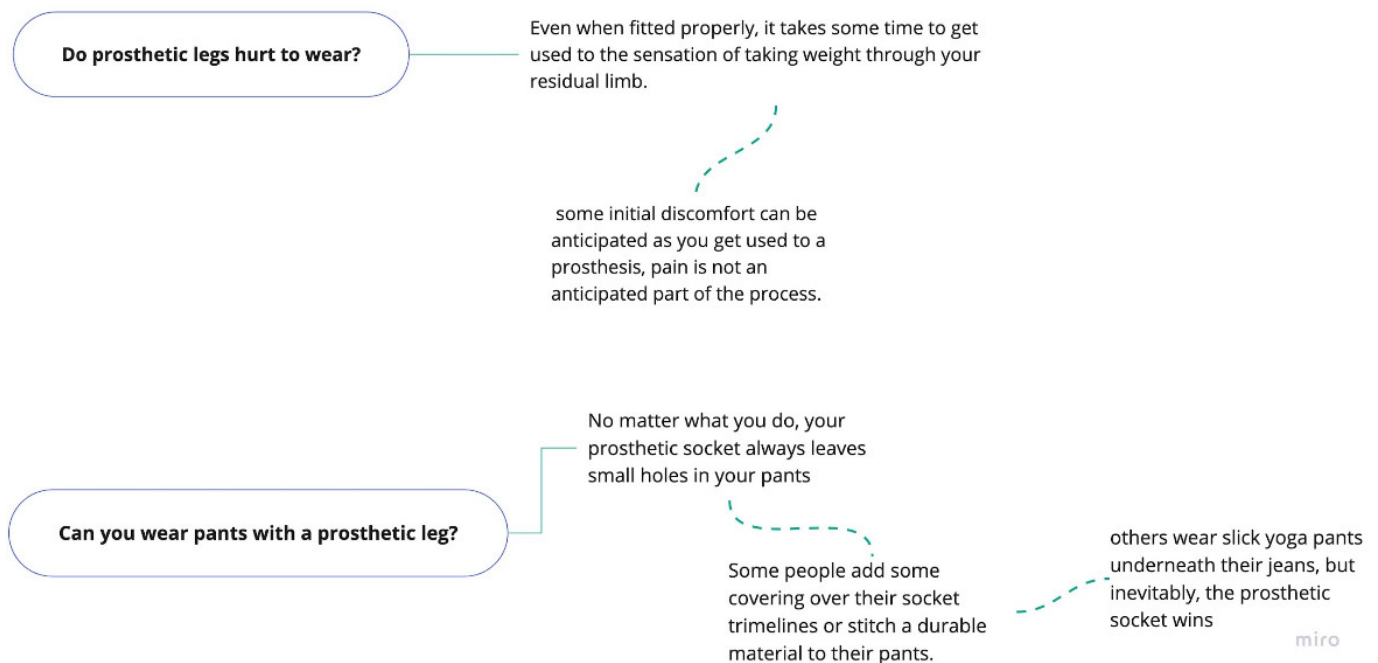
Figure 5. Online journal entry, research and analysis.

Figure 6. Online journal entry, research and analysis.

What do you wear with a prosthetic leg?

wool, terry towelling, cotton or nylon

Use a clean
sock every day

residual limb may change in size
and shape, which could mean that
you have to add or take off socks to
help the artificial limb fit more
comfortably

miro

Figure 7. Online journal entry, *research and analysis*.

ITERATION 1

ITERATION 2

ITERATION 3

ITERATION 4

ITERATION 7

ITERATION 6

ITERATION 5
Pull up/roll up trousers
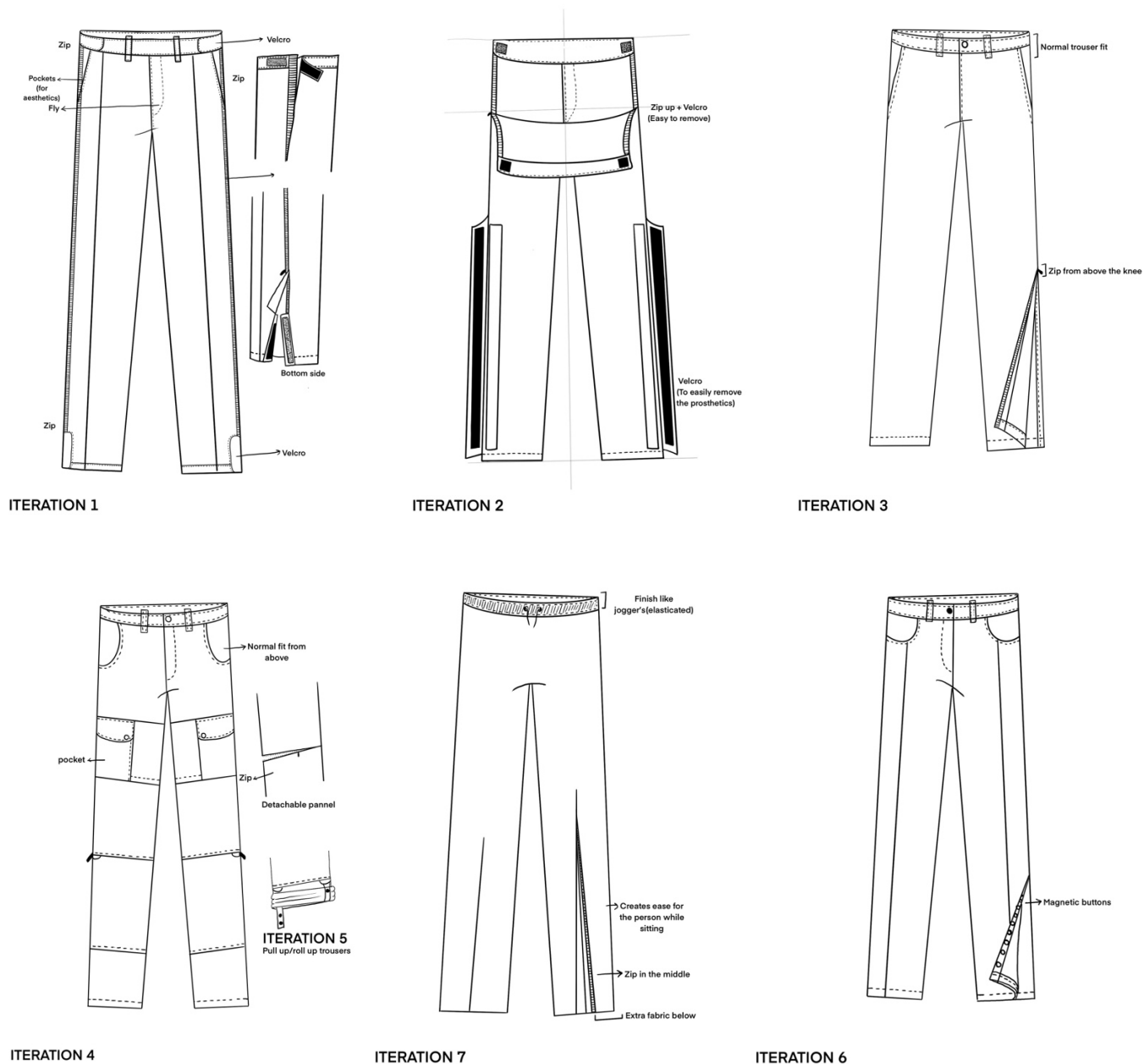
Figure 8. Finding a design solution – *iterations for the client.*

Student's self-reflection during the submission is quoted below:

> "Understanding body as a totality and understanding someone else's body was an interesting task to take on. From developing a basic framework in my head of what really is, the perspective did not remain constant at even one stage of the brief. My opinion kept shaping and changing from day to day. This brief was not just intuitive and sensitive towards certain topics but also helped us understand that vulnerability lies within us all. It was the most draining task to understand what really could be helpful for a man with prosthetic leg and how I could make his life simpler and also not make him feel excluded. I have gained so much through the course of this project and certainly think that my technical skills have improved because of making the final garment during this brief."

3.4 Student Survey and Feedback on the Brief

A survey was conducted with the L6 (final year) students who had attempted the brief when they were in L4. This cohort is now in their final graduation term (doing their MDP or Major design project) and now as independent learners they were asked to reflect on the brief. This was to assess if according to them the brief had been relevant, created value and if it is helping them approach design from a more robust perspective right now. It is pertinent to note here that while this brief was on, this cohort had struggled with the amount of primary and secondary research and data they had needed to collect in order to build their context. Keeping in mind this point, question 4 was added so one could get feedback on the brief within the curriculum as a whole and to assess if the students had changed their mind as they have become more 'seasoned designers'.

The questionnaire was as below:

1. Did you find the approach of body and diversity brief to be a problem-solving approach?
2. As a designer do you think the above approach equipped you with building a competence that would encourage you to take on difficult design problems in the future?
3. Did you find it challenging to engage with the context building because it required you to go in-depth into research and client engagement?
4. If you think this brief developed good understanding and wholesome learning and should stay as a part of the course, could you please elaborate on that as well?

Some of the replies received are presented below:

1. Did you find the approach of body and diversity brief to be a problem-solving approach?
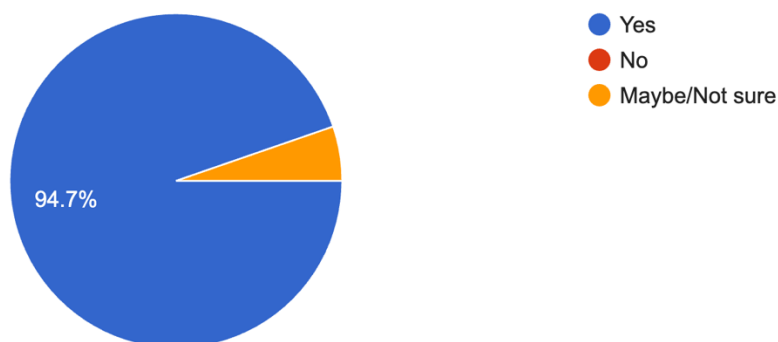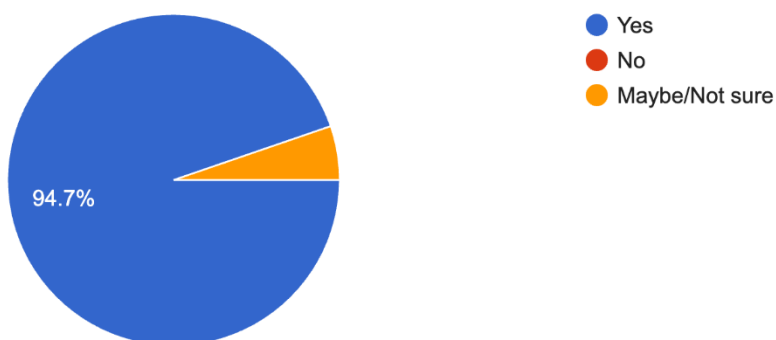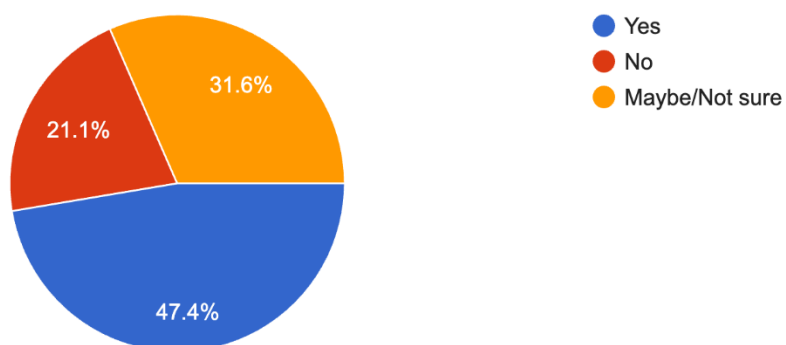

Figure 9. Gathered result from question 1.

2. As a designer do you think the above approach equipped you with building a competence that would encourage you to take on difficult design problems in the future?

Figure 10. Gathered result from question 2.

3. Did you find it challenging to engage with the context building because it required you to go in-depth into research and client engagement?

 Figure 11. Gathered result from question 3.

4. If you think this brief developed good understanding and wholesome learning and should stay as a part of the course, could you please elaborate on that as well?

It is a good introduction to working with a real client for the first time in the course l, it is important since as designers, we have to cater to problems in the future and provide with what's needed.

Because by understanding bodies beyond the limited standard size helped me learn various design approach and solutions and also challenged me to create designs that are different, multi-functional and body inclusive. It also helped me understand the customer needs and how a garment could be playful yet functional for the wearer making their lives easier. I think it's important to know and learn about body/form, to be able to understand a garment as well or how one fabric falls different on different bodies that's were the learning started.

Figure 12. Gathered result from question 4 (contd).

I think it is necessary to know problem solving as a design practitioner and also the understanding of body is of the uttermost importance and should be there since L4. We see different boy types, structures daily but are not able to very exactly imagine garments on it because of the in-depth understanding of the body. Through my understanding of briefs in the past 2 years, I feel that the continuous sketching and understanding of body is important, for all briefs that line up after, even while the internship period. It makes planning the garment easier not just in terms of openings, closures, problem solving but most importantly understanding that every client is different.

As a designer we all have responsibilities. We are problem solvers but for a while fashion designers are only thought of beautification and making pretty dresses. But the responsibility reaches far beyond into having contributions in all sectors of life.

I didn't knew the right meaning of problem solving as a designer before this brief came up. It changed the way i used to think about clothing. A type of clothing which can actually make a difference in someone's life. I understood about consumer market and diversity of people who are in need for adaptive clothing. Interacting with a client was the major part of understanding someone's personal need that we wont get or understand through secondary research. Even the conceptual based designs became easy when I discussed with the client which helped me to get through the designing phase conceptually. Technical part was a bit difficult because making a shirt was a big task. Execution became quite easy because my ideology and purpose was clear.

Figure 13. Gathered result from question 4 (contd).

These type of projects are also important for fashion students because it help student to understand what people need from their clothes and help in practical application of what they have learnt. These projects help students to create garments that not only look good but also feel good to wear, comfort, better at problem solving thinking.

it's a requirement to understand how to do a project based on client needs as this will also widen the understanding and learning to working with clients as well as opening our minds and opportunity in adaptive clothing

As a fashion design student it is really important to understand a human body, the basis of our design and body and diversity as a project really immersed us into the understanding of it and creating design solutions to make it easier and accepted by the diversity in bodies around. To constantly evolve and upgrade these solutions.

I think a lot of learning about body and adaptive clothing begins with the help of this project.
A crucial part of this project is research which gets stronger in this project.
Introduction to clients and how to study them also adds to the learning which we don't do in other projects.

Figure 14. Gathered result from question 4.

4. Conclusion

This brief not only adds layers of complexity to students' thought processes but also cultivates empathy for diverse human experiences. It contributes to the creation of an inclusive environment within the academic setting and prepares students to tackle clothing challenges with a human-centric approach as future design practitioners and entrepreneurs. By expanding the scope of fashion education to encompass societal living and holistic design solutions, we can equip future designers with the tools and insights necessary to create meaningful and impactful contributions to the industry. Ultimately, fashion design should strive to bridge the gap between aesthetics and functionality, recognizing that clothing is not merely about "dressing up" but also about facilitating self-expression, comfort, and accessibility for all individuals.

As one of the student's reflection during the feedback survey (below) evidences the same:

> "Adaptive clothing is something that I got to know of from this project only. It has made me think of my future choice in this industry, which helped me to think how many people are suffering and still people working with fashion or clothing are yet not engaged enough with it. It is also about choice what a person makes and to continue with something that could mean everything to someone at a point of time. It is an emotional and strongest brief at the same time because you get to understand what the person has been through and how he is standing tough and dealing with those things both physically and mentally as well as spiritually. Every era that was taught and discussed at that time made me think about how a body figure that we know from Vitruvian man is now so diverse that we are now standing between GenZ and millennials. It's a lot to study and a very vast topic to undertand body and diversity."

There is a pressing need for fashion courses to place greater emphasis on diversity and inclusion as well as rethinking gender norms, both in terms of representation and design philosophy. This involves challenging existing norms and expanding the definition of beauty to encompass a wider range of identities and experiences. By doing so, fashion education can evolve into a more inclusive and equitable space that celebrates the richness of human diversity. "This also requires a shift in thinking from taking away from our world, community, economy, and environment to giving to it" (Doyon, 2016, as cited in Sala, 2016).

As educators and mentors in the field of fashion, it is incumbent upon us to integrate these critical conversations into our curricula and projects. By doing so, we can provide students with a more comprehensive understanding of the multifaceted nature of design and the role of fashion within it. It is essential for students to grasp that fashion encompasses more than just clothing; it is an expression of identity and inclusion that transcends gender, ability, and societal norms.

Through this exploration, the paper is attempting to illustrate how the incorporation of problem-solving approaches in fashion design education can stimulate alternative perspectives and nurture a more holistic understanding of the design process. If the aims and learning outcomes of the module state this is as a learning requirement, the approach of design pedagogy can cater to this existing need. Ultimately, this paper aims to contribute to the evolution of fashion education by advocating for a paradigm shift towards problem-solving-oriented pedagogy, thereby preparing future designers to meet the demands of an ever-evolving industry landscape.

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P/REFERENCES OF DESIGN

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