

UURBAN V
EUREKA

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Education Boundaries

Summary

This chapter looks at the education system as it stands now, including the different types of thinking it reinforces along with various types of schools that are actively rethinking and challenging the way we educate. The emerging programme theme and reasons for choosing it are also discussed.

CHAPTER 2

Time to Speculate

Summary

This chapter is focused around research into various speculative views of the education system which contributed to the future timeline. Along with pedagogical theory that supports the importance of experiential and on location leaning, this research will form the basis of the emerging programme.

CHAPTER 3

Crossing Boundaries

Summary

Chapter 3 explores similar typologies from formal education spaces to informal 'knowledge sharing' spaces. This done through precedent research and analysis leading to a set of inventory drawings. This chapter also begins to suggest how the Urban Eureka exhibition fits within these typologies.

CHAPTER 4

The New Classroom

Summary

The final chapter Focuses on the venues around Brighton and Hove that will host the Urban Eureka exhibition during the Biennale. This chapter also addresses the emerging programme and Biennale design principles followed by some exhibition precedents.

URBAN EUREKA

EDUCATION

BOUNDARIES

CHAPTER 1:

This chapter of the almanac consists of the research and analysis of previous, as well as, the current education system in order to develop an understanding of how spatial design could be utilised to provide a future thinking, creative addition to the curriculum.



GLOSSARY

Human Behaviour -

“Human behavior refers to the range of behaviors exhibited by humans and which are influenced by culture, attitudes, emotions, values, ethics, authority, rapport, hypnosis, persuasion, coercion and/or genetics.”

Spatial Design -

“An area of design that focuses on the space between interior and exterior environments, both in the private and public realm.”

Storytelling -

“Storytelling describes the social and cultural activity of sharing stories, sometimes with improvisation, theatrics or embellishment.”

Catalyst -

“Something that causes activity between two or more persons or forces without itself being affected.”

Speculative -

“Engaged in, expressing, or based on conjecture rather than knowledge.”

Laws -

“The system of rules which a particular country or community recognises as regulating the actions of its members and which it may enforce by the imposition of penalties.”

Pedagogy -

“The method and practice of teaching, especially as an academic subject or theoretical concept.”

Education -

“The process of teaching and learning, or the organisations such as schools where this process happens.”

Linear System -

“Progressing from one stage to another in a single series of steps; sequential.”

Reductive Thinking -

“Tending to present a subject or problem in a simplified form, especially one viewed as crude.”

System Thinking-

“Systems Thinkers have taught us that a system is a product of the interaction of its parts, not just the sum of its parts.”

Experiential Pedagogy -

“In its simplest form, experiential learning means learning from experience or learning by doing.”

SEMESTER 1 KEYWORDS

Age

Segregation

Relationships

Elderly

Young

Housing

Demographics

Intergenerational Relationships

Stigmas around old age

Generations

Friends

Community



INSTITUTE FOR THE FUTURE

IFTF

*The Institute For The Future
Design Futures with Jake Dunagan*

To introduce this almanac I will outline why we need design futurists, the importance that design can have in our future and how it can benefit the way we speculate our futures. The information below is from the IFTF Ask a Futurist video.

Why we need design futurists?

We haven't been seeing positive futures, people are still suffering in more ways than imaginable, so we need to start designing a positive future for ourselves. How can we bridge the gap between the now and the possible futures we have ahead of us. We are trying to enhance that connection using design, media, performance etc. This consists of designing and physically making an experience that portrays a possible future scenario, so we can gauge an emotional response for it. This research can then be used to present the positives (or negatives) of each scenario which will tell us what direction to go.

Why design?

Incorporating futures with design concepts widens a designers view. By interrogating the world we live in, designers can begin to bring new solutions to existing problems. Designing speculatively allows us to potentially alter the world and the future of those

spaces instead of just designing new versions of nice functional things that already exist.

Designers need to not be afraid of the ridiculous, ideas sometimes need to seem ridiculous in order to bring about change. You can also smuggle in controversial thoughts but put it in a nice package/ plausible medium to help people understand.

Showing research and data through design often generates more emotions and therefore greater responses than charts and diagrams. Designing something that seems real (out in the community) gives an authentic response. People will give their genuine first response, which can be interesting to help us see whether they turn something that seems bad into a positive because they think it's actually real. Immersing people in your design opens them up to thinking about it in more detail.

How can I take this forward?

I felt this initial background research into what future design is and how powerful a tool it can be has given me a greater understanding of the mindset needed to tackle designing from a speculative viewpoint. I hope to develop this skill further and continue to learn how to utilise this mindset affectively through ongoing researching and testing at every stage of the project.

In order to produce a final design or scenario that accurately questions, speculates our future and focuses greatly on how this can be addressed through spatial design there needs to be a deep understanding of the 'ridiculous ideas' that designers are tasked to come up with.

THE O_SSD PRESENTS THE BRIGHTON BIENNALE 2022

The Brighton Biennale 2022 titled 'Emerging Programmes' will exhibit spectacular immersive probable futures; a series of future studies in a crusade for policy change.

"An 'Emerging Programme' is one that does not yet fully exist..., a version of the every day activities for which our spaces are designed to enable, which is now changing."

In this collaboration between the Near Futurists Alliance and O_SSD the biennale will be born. This biennale will "challenge our current knowns and make way for future change". As a member of this collaboration it is my job to be open minded in my research and critical in my approach to what the future needs. Spatial design will become the tool in which we address future scenarios in the hope that the public will respond emotionally.

The future cones exhibit the increase in scope that presenting possible and impossible ideas reach. These are the ones that will provoke real change.

The education system has experienced very few changes over the last hundred years or so,

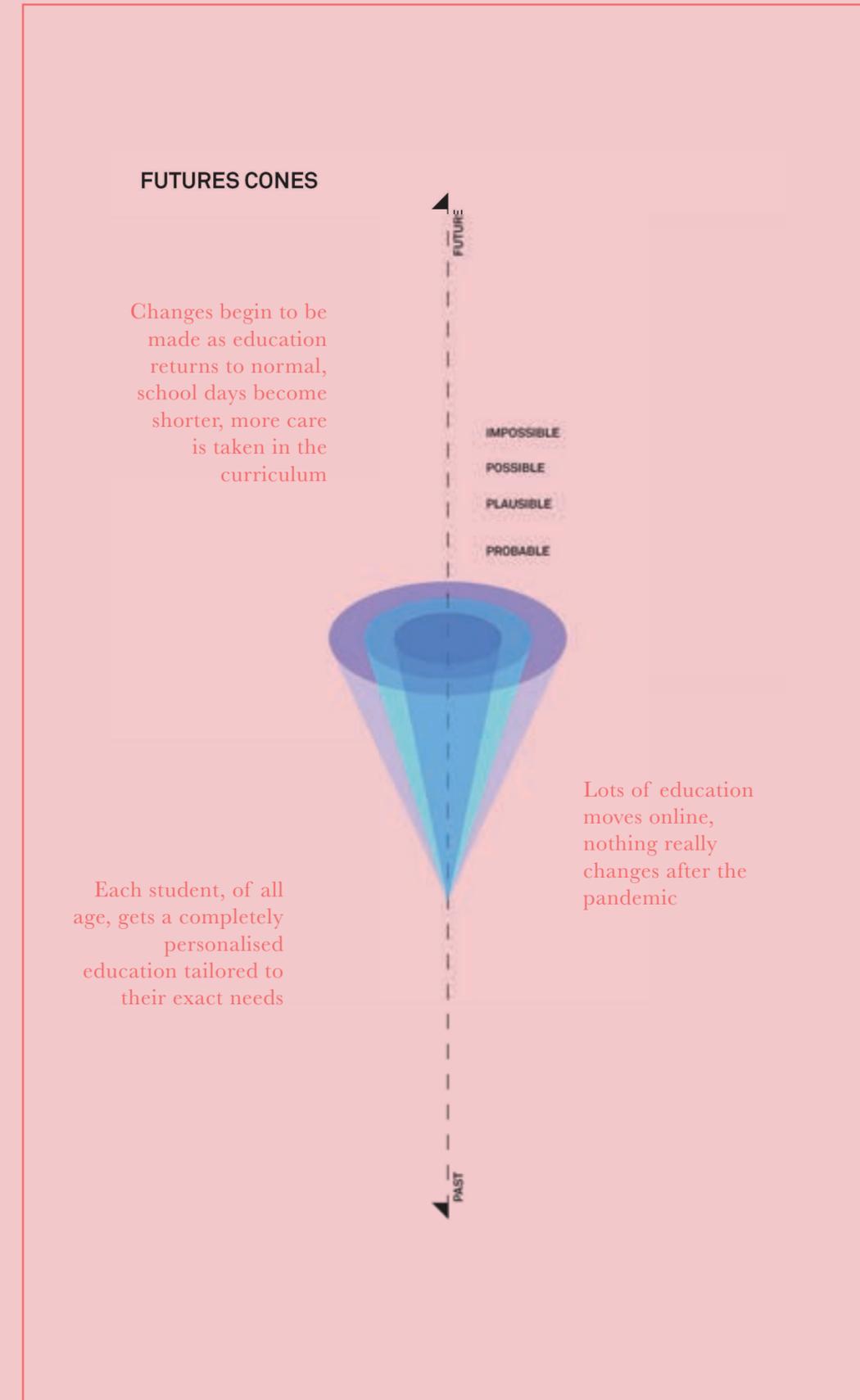
standardised testing has almost always been used and the classroom layout is practically identical to when schools began. With technology advancing, climate change speeding up and ongoing cultural issues there is a demand for a change of mindset. These problems require new ways of thinking, and therefore, new ways of teaching.

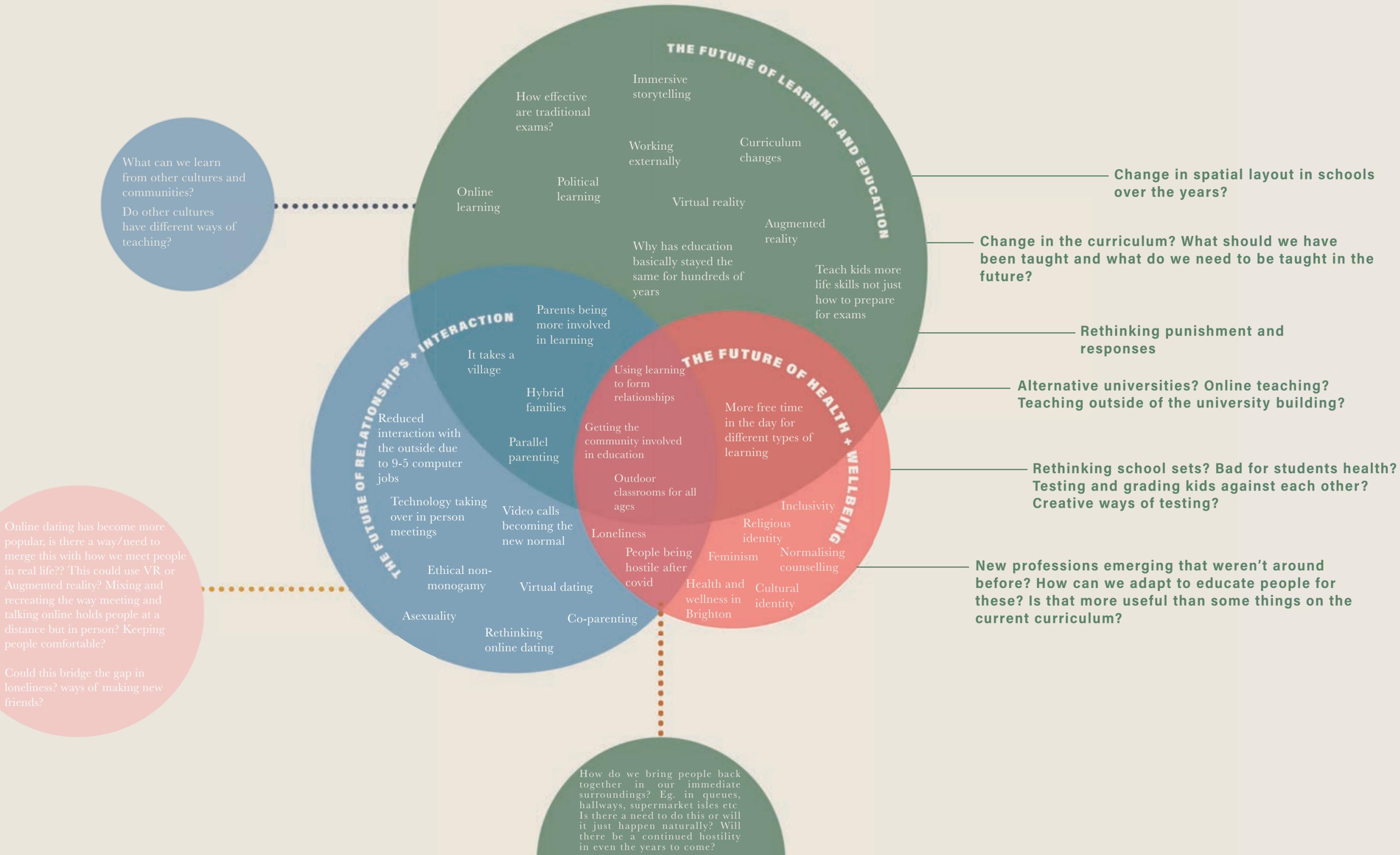
"The problems we have today can't be solved with the same thinking we used when we once created them"

'THE IDEA'

It is for this reason that I have focused this project on researching what we could bring to the education system to better prepare the next generation of students for what the future has to hold. Our professions have been changing for a long time, it's time that education caught up.

The Brighton Biennale in 2022 will host the debut of this new learning experience that will be added to the curriculum to compliment current ways of working. After spending almost a year inside learning from the computer screen it is imperative that we get outside more than ever before, it's time to reconnect with the outside world.





SEMESTER 1

In semester 1 the focus was on bringing together older and younger generations of people through learning a new skill, this consisted of a brick making workshop followed by an event that took place in a pavilion made from the bricks. The aim of this was to close intergenerational gaps and bring the older generation back into the centre of Brighton in the hope that these groups would learn something from each other.

The semester 2 project, focusing on speculative design and emerging programmes, continues the theme of 'learning a new skill' within the community. While the focus has moved from closing the gap between these generations so that they can learn from each other to looking at what people from all generations have learnt throughout their time in education, there is still however a large focus on age groups within this exhibition in terms of how people learn and where people learn. The Age Gap pavilion was left behind after the Brighton Fringe Festival and will become the first community classroom used in the Brighton Biennale in 2022.

I chose to pursue this field of research as it is likely that a lot of generations experienced a very similar education, especially in the primary years of their education. However the jobs at the end of it have changed massively, The Age Gap installation tried to introduced a physical skill that most people would not have learnt before, allowing all generations to learn it together. The brick building workshop taught a skill that has been known for hundreds of years, so the question I ask is, how can we use this same technique of 'workshops' in the community to learn a new skill that may be used for hundreds of years to come. Firstly, these skills need to be identified and I will do this through further research into what the future professions need.

INITIAL RESEARCH

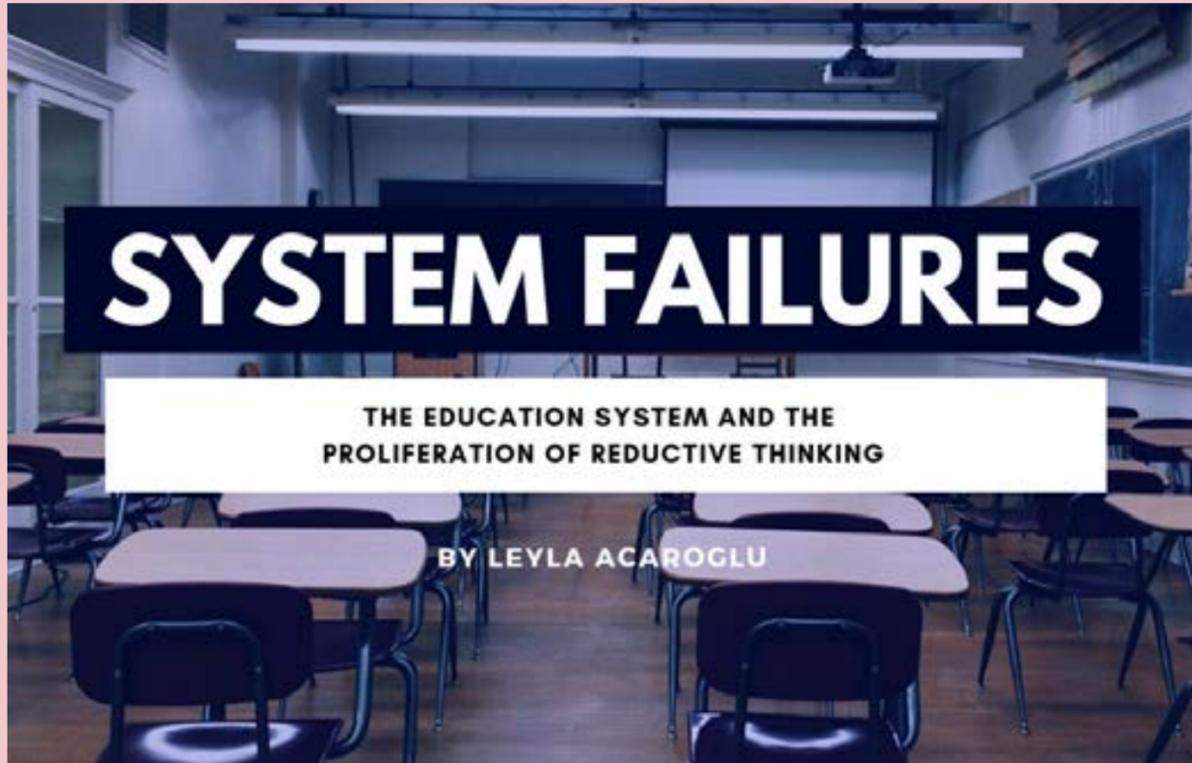
As part of my research I asked a group of people aged 20-22 if there was one subject or part of a subject that you could've been taught at school what would it be? Some of the responses are as follows:

- Finances
- Tax
- Money
- Investment
- Relationships/emotional needs and understanding
- More acknowledgement of LGBTQ+ communities
- Loans, businesses, self employed
- Politics from an unbiased view
- Communication skills
- More rounded design and creative skills
- Mental health education, mindfulness
- Climate studies, sustainability, renewable energy
- Decolonising the curriculum (history)
- Religious studies needs to be more inclusive
- Digital studies, technology, social media
- Advertisement awareness, digital marketing

The purpose of this research was to find out if there were any subjects that stood out above the rest, whether there were specific skills or attributes that a majority of people felt were lacking from their time in education. I found that although there wasn't a single skill there was a lot of focus on what I'd consider 'life' skills, such as managing money, business and mental health. There was also a focus on 'future' skills (skills that are emerging in new professions such as social media related learning and more advanced digital skills). This implies that people don't find the strict academic curriculum is rounded enough in preparing them for 'general' life. Should there be more focus on these areas or are these attributes / skills expected to be learnt outside of formal school?

How can this be taken further?

This initial research gives the impression that there may be a gap in the current curriculum in terms of future/life skills. In order to take this further I need to define the specific attributes that people feel they are lacking. Research into emerging professions will help me to characterise these attributes and give me a platform that allows me to track back and determine ways of 'teaching' them. The next task will be to figure out how this addition could be inserted into the curriculum in a considerate way.



‘The System’

School is often a strict, rigid system that teaches kids how to behave and function. It is a system that was put in place to train factory workers to be good, obedient employees using standardised tests and a plethora of rules. Rules that restrict when you can speak, when you can eat and when you can go to the toilet. This is a suppressive environment for children to grow and develop in.

School isn't always like this however, as we've progressed over the years lots of schools are becoming more rounded in their curriculum and more conscious of the impact their teaching can have on the minds of children, but there is still a long way to go.

The education system began as a reductive system, one that contains “designed-in limitations” (Acaroglu 2018), take the way the different subjects are taught as an example. Schools often categorise subjects splitting up areas of learning into their respective topics; science, maths, geography etc, not allowing these subjects to speak into each other or interact in any way. This

adopts a linear system, a system where if your mind doesn't work in one particular way, the way of memorising and regurgitating information then you are marked down as not succeeding at school through a single letter. **An F.** This viewpoint and methodology suppresses practical and creative people, giving employers the misconception that this group of people aren't good workers because they don't fit the mould society has been manipulated into thinking is the only one.

The current, basically global, production system relies on a linear model.

“In order to maintain a linear economic system of production, extraction and waste that devalues inputs and takes limited responsibility for outputs, you have to reinforce these ‘devalues’ in society, you do this by making young people conform through educative structures that perpetuate the linear system.”

We have moved out of industrial way of workings why haven't we moved away from the industrial way of educating people. Schools should empower and encourage students to think differently if we

want to begin to solve some of the problems we have created we can't use the same thinking we used when we created these problems. Why is it that schools continue to teach the same thing, in the same way to all of its students when there is extensive research showing that there are so many different styles among children today?

“The grandfather of modern education”, John Amos Comenius “called schools the slaughterhouse of the mind.”

Modern schools seem to have a way of trying to promote out of the box thinking but still within the confines of what that teacher says is correct. Students get discouraged when they're told their thinking is wrong because it isn't predefined by the curriculum which leads to them being afraid or nervous to think these thoughts.

“Can you recall the content of a test you took in school?” The challenges we overcame by ourselves became the proud moments that stick in our minds and continue to teach us. These are easier to recall because *“experiences are the building blocks of life”*, interaction with the world is far more useful than sitting in a classroom being talked at.

The Urban Eureka exhibition will foster creativity and curious minds, it will question the current system and provide an addition that addresses the missing links which have been discussed. Focusing on blurring the lines between subjects will help to promote this idea of system thinking, in an aim to move students away from the linear structure that education forms. A greater understanding of the current education system and the intricacies of its methods will help to locate the exact spot that the Urban Eureka exhibition can slide into within this worldwide enterprise.

‘Reductive Thinking’

The world is extremely complex, splitting it up into bite-size pieces can help us to

understand and make sense of it, this view is useful but it results in a reductive way of thinking. The way that subjects are taught in isolation (each subject separately) reinforces this reductionist way of thinking and looking at the world, completely ignoring the interconnectedness that each subject possesses.

Levels of knowledge are often determined using multiple choice tests, questions like these reinforce the idea that there is only one correct answer for each problem, this decreases the open mindset that kids need to have in terms of ‘if the first thing doesn't work then try again’. Or how two people might complete the same task but in different ways, is one of them wrong because it isn't what a higher educational body said was correct even though the overall outcome is actually the same?

Other examples of reductive thinking within the education field are the layout of the classroom, this suggests that the teacher is the only one who can help, they're the knowledge bearer and therefore have a greater hierarchy. This reduces the frequency that students will turn to each other for help, reinforcing natural collaboration between the students. Another example we see is the school bell, the school bell has programmed us to eat and go to the toilet at set times, whilst working in between. This coincides with classic business workdays which don't reflect the multitude of different jobs and professions that are now common.

The Urban Eureka exhibition will actively aim to combat this mindset and way of thinking through taking a holistic approach to ways of teaching. Taking ‘learning’ completely out of this setting might reverse some of these ingrained thinking habits, this research is significant as it begins to take the focus away from the knowledge that is learned to a mindset that is learned. The future doesn't need more knowledge to be memorised, the Urban Eureka focuses on taking influence from ‘school’ whilst standing

alone in terms of the ‘education’ experience.

‘Systems Thinking’

A systems worldview is the opposite of the reductionism view, this view sees the world as a series of complex connected systems that impact everyone. *“We have designed our minds to want simple solutions to complex problems”*, but this is hardly ever the case, we need to think outside of the restrictive box of education in order to think bigger.

It's better for students to know that the future is not defined, that they have the ability to change and influence their own future. We have seen that the education system isn't afraid to try and ‘design out’ these ideals of freedom and replace them with mechanisms of control and order.

This mindset is exactly what the Urban Eureka will look to promote, this could be encouraged through less restriction within a learning process, less rules to follow and more freedom whilst learning. In order to find a way to incorporate this concept into the Urban Eureka more research is needed to find a learning technique that facilitates this thought process. This will be done through looking at case studies where this may already be happening.

Disclaimer:

The purpose of this piece of research is not to belittle or discredit the current education system that is in place in many schools but to get the ball rolling on discussions around improvements that could be made. There is no single way to perfect the system and no one thing that is wrong with it. This seems like a solely negative viewpoint however I have noted that this piece of writing is only discussing one viewpoint and not addressing the times when these creative methods are present.

CASE STUDIES

Across, you will find multiple case studies looking at current schools that have diverted away from ‘traditional’ education methods.

Looking into the ways different groups of people have responded to the lack of change in the education curriculum will help to clarify where the main issues are.

On the next page I begin to discuss some learning techniques that could potentially be introduced into schools to help prepare children for the modern day working world more successfully.

The Urban Eureka exhibition has the same goal as all of these ‘alternative’ forms of education, to find experimental ways of improving schooling for children.

An understanding of existing institutions that are providing alternative teachings will help to increase the validity of the Urban Eureka exhibition in terms of the specifics of the programme being beneficial for the education industry.

STEINER S C H O O L

The Steiner school was founded by Rudolf Steiner with the first school opening in Stuttgart, Germany in 1919. The aim of the school is to help the kids develop a love of learning whilst encouraging an imaginative and unhurried childhood.

Steiner schools teach through story telling and narrative as apposed to using textbooks and worksheets. There is a big focus on learning through doing, with the aim of engaging head, heart and hands in each learning experience.

What does this means for the Urban Eureka exhibtion and the future of education?

‘learning through doing in order to promote rounded skills’

The Urban Eureka exhibition focuses on developing attributes within people that the future professions need. In order to create good future professionals fostering rounded skills in terms of head, heart and hands is important and beneficial to character building. There is great importance to develop your emotional health as well as obtaining knowledge.

Learning about Steiner education has shown me that you can teach in unstructured and unconventional ways with the same, or better, results as using textbooks and lectures.

MONTESSORI S C H O O L

The Montesorri school was founded by Dr. Maria Montessori, a medical doctor who took a big interest in early years education working with children with special needs. Montessori schools are now open for all children to attend for pre-school and nursery with some independent schools teaching all primary years as well.

Unlike ‘normal’ schools, the Montessori school has a lot less structure, instead of following a lesson plan with the subject changing each hour or so the children are allowed to choose what they study and for how long. The teacher is there to guide them, taking advantage every opportunity to teach the children. The children are taught through sensory activities that allow them to utilise their natural instincts to develop their social and emotional skills.

Freedom is a big theme that runs through Montessori teaching, no punishment or reward system is used to allow the children to learn about disciplining themselves.

What does this means for the Urban Eureka exhibtion and the future of education?

The Urban Eureka could learn from this unstructured way of working, with subjects and lesson times flowing together. Crossing these boundaries allows for a more holistic view of world to develop, which feeds into the type of mindset that is becoming desirable in future professions.

Montessori schools also challenge the role of the teacher, bringing them in a supporter rather than having them complete traditional ‘teacher’ roles.

Learning about Montessori schools has taught me about the importance of giving students their own responsibilty and choice to guide their learning in whatever direction they want. This method would eork extremely well within the Urban Eureka exhibition, encouraging people to take control of their own learning.

FOREST S C H O O L

The first Forest school was opened in the UK in 1993 but was originally started earlier in Scandinavia. The aim of the Forest school is to help learners develop in areas other than just gaining knowledge, there is a focus on developing “socially, emotionally, spiritually, physically and intellectually.” Students connection with the world around them is at the centre of learning, with an emphasis on taking risks. This way the students are actively solving real life problems on a day to day basis helping them to develop resilience and a greater belief in their own abilities. Forest schools believe they produce independent thinkers with a creative mindset and deep connection to the world they live in.

What does this means for the Urban Eureka exhibtion and the future of education?

The Urban Eureka challenges the validity of a standard classroom setting, taking values from the focus forest schools have on the connection to the natural environment.

Learning about Forest schools has taught me the importance that having a good mindset has on the development of skills and attributes.

PROBLEM-BASED

L E A R N I N G

Problem based learning begins with presenting the student with a problem that requires solving before actually teaching them the relevant information that they need to solve it. This encourages the students to be fully engaged with solving the problem themselves, this way they need to take initiative and be resourceful. These problems range from being able to be solved in an hour to projects that last a whole term. Teamwork is a big part of problem based learning, collaboration and role delegation can help to prepare students for a very common way of working later in life.

COLLABORATIVE

L E A R N I N G

Collaborative learning encompasses a range of learning techniques, focusing on bringing together mixed ability groups of students to tackle tasks together or teach each other. Attention to detail is needed when using this method, it isn't enough to just put pupils in groups and expect them to work together. In order for it to be effective the task at hand needs to be designed specifically for collaboration, to promote interaction and talking between the group members.

PHENOMENON-BASED

L E A R N I N G

Phenomenon-based learning focuses on growing skills such as critical thinking, being creative and improving communication. The lines between subjects are blurred creating a more holistic way of teaching, the centre of the experience focuses on a single topic that is taught across the boundaries of individual 'subjects'. This teaching method is considered one of the most successful educational models. Teachers play a different role in this learning style, they guide the students and challenge them rather than telling them what they need to know.

What does this mean for the Urban Eureka exhibition and the future of education?

These learning methods support the systems thinking mindset and way of viewing the world.

They also begin to question the role of the teacher which encourages more collaboration rather than competition as students sometimes tend to compete for the teachers approval.

All of these learning styles help to develop skills and attributes that are desirable in emerging future professions

Continuing on, something to consider now would be how Urban Eureka could utilise this method of teaching within the exhibition as the attributes it promotes line up with the aims of the programme.

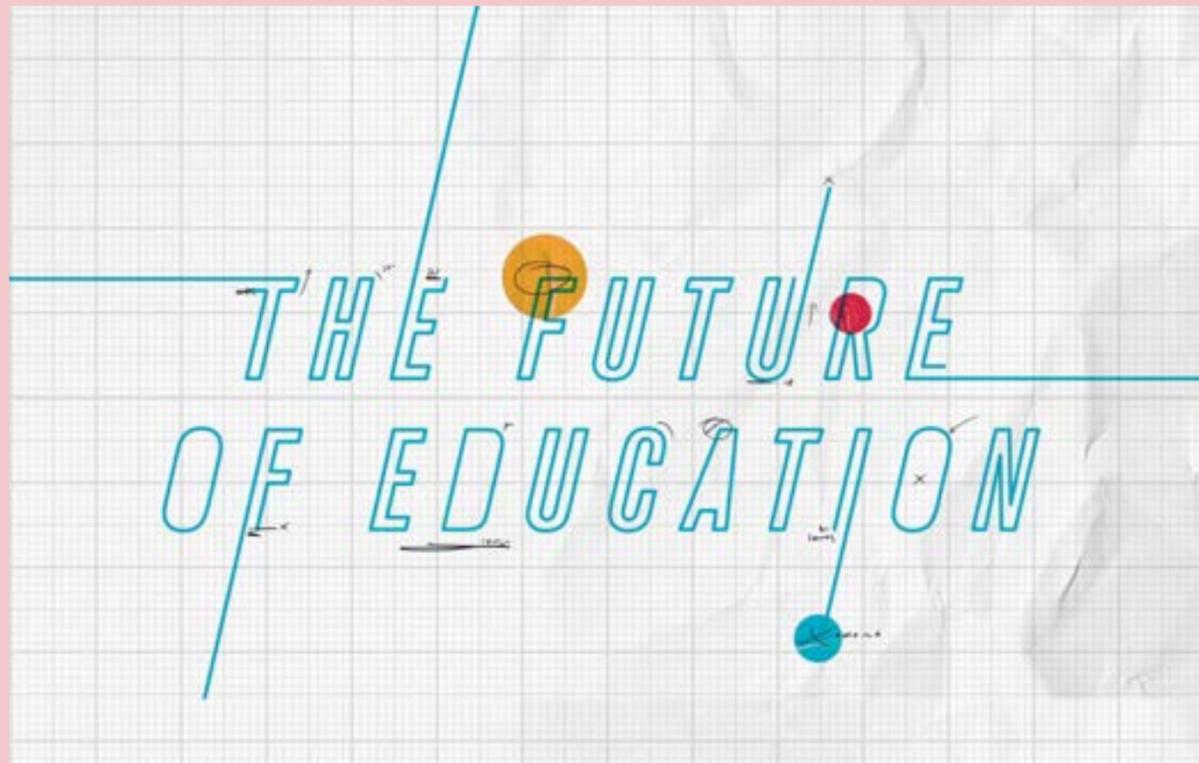
URBAN EUREKA

TIME TO SPECULATE

CHAPTER 2:

I carried out extensive research into some potential futures for the education system that have already been speculated, whilst also considering my own view into what might be in tale for the future of education. Following, is a series of speculations about the future of the professions, future of higher education alongside different ways that learning techniques such as phenomenon or problem based learning may be utilised in the years to come. All of these speculations feed into the Urban Eureka exhibition and programme timeline.





Going into the digital age we no longer need to memorise all the information we have previously been taught, one search into google and we can find almost anything we want to know. But what does this mean to the world of education? The focus of education is beginning to shift towards how can we use this information to advance our skills rather than how many facts we can squeeze into our heads.

Teachers are becoming ‘meddlers’, rather than being taught the information in class students will do their homework in class. By absorbing the appropriate information beforehand students can then come to class to ask questions, put this knowledge to practice and discuss it with other students. The internet now allows us to absorb as much information as we want, whenever and wherever we please. This allows the real learning and progressing to happen inside the classroom.

This phenomenon ridicules the existing classroom layout almost completely useless, there’s no need for students to all face the front if there isn’t a teacher standing there talking. Students can face each other, the people they are discussing with and learning from showing their peers higher levels of engagement and active listening.

Blended learning is becoming more and more popular, especially after the pandemic, educators could make better use of their time if they no longer have to repeat the same lecture every year. This lecture can be pre-recorded and updated as needed allowing more time for discussion and thoughts on the topic during office hours.

This way of learning also allows for greater collaboration, students from different subjects may have some crossover lectures which provides a richer discussion space with a larger margin of viewpoints.

Why is this significant?

This research begins to decrease the validity and necessity of the classroom, leaning towards the idea that not all learning needs to take place in the traditional classroom setting with the discussion between students being the most important part of the learning and understanding process.

This opens up the question that if the future of learning doesn’t happen in the classroom where does it happen? And can it happen in multiple places? The future of learning might be the future of the classroom

“YOU DON’T JUST LEARN IN THE CLASSROOM OR LECTURE HALL, YOU LEARN FROM EACH OTHER, YOU LEARN OUTSIDE, AT THE DINING TABLE OR THE COFFEE SHOP. TWO OR THREE STUDENTS SITTING AROUND A TABLE WITH THEIR LAPTOPS IS A WONDERFUL LEARNING ENVIRONMENT.”

STEFAN JAKOBEC, HOK

THE FUTURE OF THE PROFESSIONS

By
Richard & Daniel Susskind

A large premise that runs through this book is the question, is technology going to take over my job or profession? The answer they give is simple, they say “if technology threatens a professional, he’s doing ‘professional’ wrong. We need to remember that professionals become professionals not because they have the ability to memorise and regurgitate loads of information but because they know “how to tailor that knowledge to each person with whom they work with”.

The question that knowing this sparks is, well how can we educate our children so that they all have the chance to become professionals in the fields they are interested in? Now this opens a lot of doors in a lot of directions but it is beginning to question whether the way we are teaching will always be enough or if we need to adapt it to help better prepare young people for the future world of work.

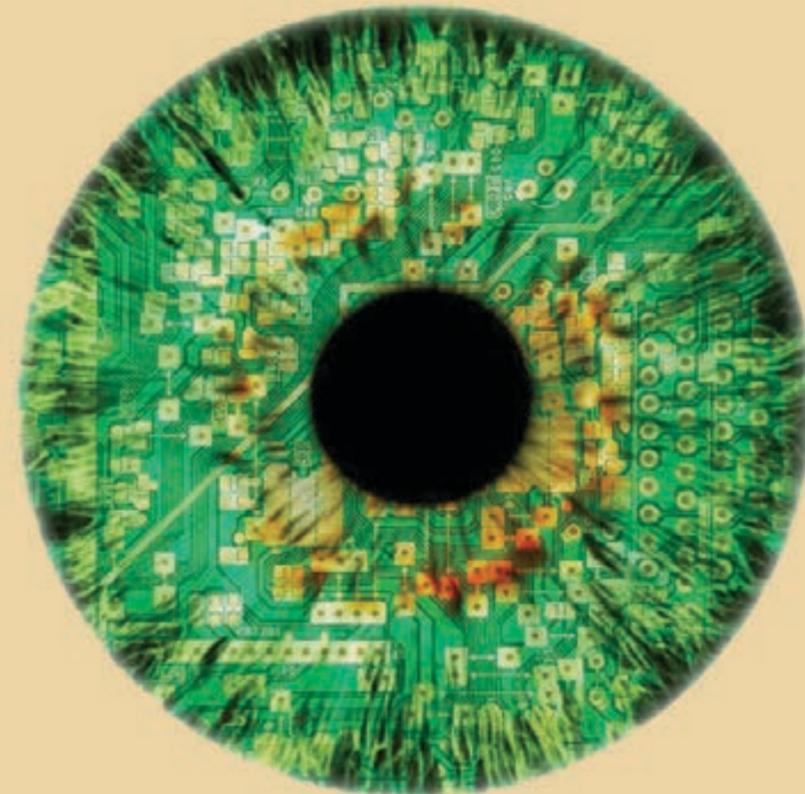
Even though everyday people now have access to ‘professional knowledge’, the

knowledge that once separated ‘professionals’ and ‘normal’ workers, the roles of professionals are not obsolete. Their role is simply changing, education can use this information to progress and develop alternate ways of educating.

This research helped me to begin developing a list of future attributes as well as a greater understanding of the directions that the professions are heading. I will now be able to develop the specific activity that takes place within the Urban Eureka exhibition as a response to these attributes and what the world of work needs from its future employees.

Desirable Future Attributes

- Design thinking
- Creativity
- Innovation
- Collaboration
- Imagination
- Curiosity
- Serendipity
- Adaptability
- Wisdom



SIR KEN ROBINSON

PROFILE

Sir Ken Robinson is an author and expert on education, he is an advocate for creative education having “worked with governments, education systems, international agencies, global corporations and some of the world’s leading cultural organisations to unlock the creative energy of people.” He received a knighthood in 2003 for his work encouraging creative education amongst many other prestigious honours and awards.

Sir Ken Robinson believed that creativity is imperative to a good rounded education and that mainstream schools don’t often have the facilities to nurture this.

I decided to include this profile to demonstrate Sir Ken Robinson’s credibility and his contribution to ensuring creative skills are not overlooked in education.

On location learning

As an introduction to my experiential pedagogy and on location learning research I have outlined one of my sources along with a brief inquiry into what the purpose of education is.

I have included this information as an introduction to the real pedagogical theory that supports the importance and benefits of learning outside.

What is the purpose of education?

- To prepare us for life as well as for work
- To help us learn about ourselves and develop character
- To help us discover what our interests and passions are
- To help us develop resilience and patience
- To learn about understanding other people
- To learn about the world around us and our place in it

Sir Ken Robinson - Five Reasons to Learn Outdoors

- Nature is the most powerful tool for learning in terms of
- Learning through doing, active engagement and practical projects
- Curiosity drives achievement for all ages, filling gaps in our own understanding and the world around us stimulates this
- We are deeply social creatures, learning with others is vital
- Education takes up a lot of time, we need to spend it outside

EXPERIENTIAL PEDAGOGY

How can this idea lead to a spatial solution that encourages 'thoughts' outside? Think about the things that already exist that keep us outside or make us want to go outside.

Learning techniques such as problem based learning are designed to encourage students to develop their own ideas, thoughts and pathways by increasing their interaction with the world around them. This technique can strengthen the relationship students have with their own brain, in turn leading to a better understanding of how they can learn. Phenomenon based learning is another example of a learning technique that is currently being used to contribute to the redesign of educational approaches, this style is used in Finland a lot a country that is renown for having one of the best education systems in the world.

These approaches view the student as individuals who all see and experience the world differently as apposed to some of the current education institutions which view students as empty vessels that need filling with information and behaviours. Experiential learning reinforces the idea that making mistakes and not getting things right on the first try is OK, this embeds critical thinking into the everyday learning environment as people overcome these educational challenges.

We need creative and critical thinkers in the future to help solve the problems that we have created for ourselves, the better a student understands how their own brain thinks and learns the more likely they will be able to achieve this. By designing the Urban Eureka exhibition to have multiple levels or layers to it there may be a way to incorporate more than one learning technique into the experience. I need to take care when doing this to ensure that there is enough detail and understanding of each technique and the thought process it promotes.

For the emerging programme to present a new way of teaching it needs to take the theory of experiential learning one step further. To do this, through utilising spatial design as the tool, there needs to be support from real pedagogical theory, that on location, experiential learning can teach kids and adults certain attributes that can't be taught in the classroom. Attributes that will be needed in the future we are heading into, one where creative and curious people thrive.

Think about the classroom as a space, the different areas it is split into and how this might be reflected in the city. Does each site represent an area of learning or a physical area within the classroom? Think about play, reading, eating etc.

“Fundamentally, the best thing about an experiential approach to learning is that curiosity is fostered rather than suffocated”

*Leyla Acaroglu 2018
Educator*

“Perhaps the best starting point for educational redesign is to focus on a life-learning model where humans are encouraged to see experience as the main provider of educative experiences, where schools are places of exploration, experimentation, and community development – as well as places that teach life skills”

LEYLA ACAROGLU

THE ANARCHISTS

The 2020 coronavirus pandemic has resulted in lots of students having to work from home and miss out on over a year of 'traditional' education. Some of these students were at pinocle moments in their learning, these students will be the first ones to leave school with the specific experience of education that they had. Maybe learning outside of the classroom for a year has benefitted them? Maybe they will no longer fit the mould of 'pleasant workers'?

I left school in 2022, I spent the whole of year 10 at home. Getting away from the classroom for a whole year was an absolute BLESSING! At first I hated learning from home, I got so distracted and didn't engage with anything but I actually learnt more about myself that year than any other school year. I focused more on fulfilling my own needs and learning at my own pace, the best part was being able to focus on what I was most interested in and not just the predetermined curriculum.

I left school in 2021 meaning I lost my last year of secondary education and didn't get a chance to sit my GCSE's, this was good for me because I was never good at exams and probably would've failed them all anyway. When I left school I looked for apprenticeships as I was so fed of school, I enjoyed this a lot more because of the practicality of the learning style which only highlighted more how much my school experienced wasn't right for me. I couldn't stop thinking about how many other students are currently in the same position as I was. If I was to have had the opportunity to learn outside of the classroom I think I would've engaged with the learning experience a lot more! Hence why I have collaborated with my fellow classmates to design an experience that gives students the chance to explore different learning techniques within the traditional education system.

Future attributes that are needed to be successful in future professions:

Design thinking
Creativity
Innovation
Collaboration
Imagination
Curiosity
Serendipity
Adaptability
Wisdom

INITIAL PROGRAMME STATEMENT

The modern education industry is an exceedingly powerful entity, it can be used to enforce or suppress any behaviour that it doesn't deem desirable in society. Early schools aimed to produce obedient and punctual factory workers but with technology and automation predicted to operate almost half of the current work tasks by 2055 we are faced with a sudden need to adapt and refocus our skillset. So, how can we prepare the next generation for a society that doesn't exist yet?

In the modern world we are discovering that although we have more knowledge, we have less solutions. Society will soon require a community that hold greater cognitive abilities than their predecessors such as, problem sensitivity, creativity and logical reasoning.

The Brighton Biennale in 2022 will accommodate the debut of an immersive spatial experience that challenges current ways of teaching by provoking an emotional response within the public.

1. What needs doing?

On reflection of this initial statement it has been noted that there is not enough focus on the future. In order to improve the emerging programme statement and bring a greater focus to the future aspects within the educational field some speculations need to be made. These speculations need to be spatially focused whilst still noting changes within this field of 'tertiary' (university level) education.

2. How will this be done?

Beginning by expanding the research into potential future shifts within the education industry, this can be done by looking at previous changes that have occurred throughout history and compare these with coinciding alterations in the world of work. The education industry is there to serve the working industry, therefore tracking the advancements and needs of this industry will tell us how education needs to adapt. This mapping will create a more detailed, in-depth and focused statement that will facilitate the next steps in the design process.

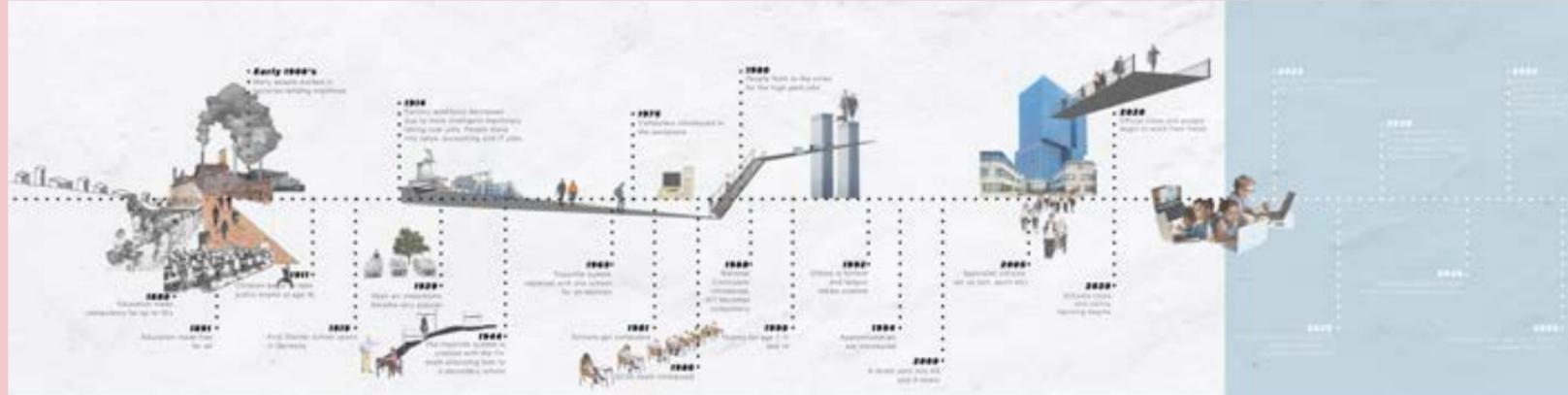
WORKING PROGRAMME STATEMENT

The modern education industry is an exceedingly powerful entity, it can be used to enforce or suppress any behaviour that it doesn't deem desirable in society. Early schools aimed to produce obedient and punctual factory workers but with technology and automation predicted to operate almost half of the current work tasks by 2055 we are faced with a sudden need to adapt and refocus our skillset. So, how can we prepare the next generation for a society that doesn't exist yet?

In the modern world we are discovering that although we have more knowledge, we have less solutions. Society will soon require a community that hold greater cognitive abilities than their predecessors such as, problem sensitivity, creativity and logical reasoning. The future requires people who can think bigger than computers, a new form of tertiary education is emerging that will create an innovative, future thinking generation of graduates.

The professions and world of work are constantly adapting and progressing rendering our out-dated university buildings and oversized lecture halls unnecessary within the everyday learning environment, resulting in the classroom being thrust into the community. Easily accessible and desirable learning spaces will be dotted around the city for people from all disciplines, cultures and walks of life utilising augmented reality to bring communities from around the world together.

The Brighton Biennale in 2022 will accommodate the debut of the first immersive spatial experience that challenges current ways of teaching through provoking an emotional response within the public.



PORTFOLIO REVIEW

When creating a visual version of the historic research and timeline I decided to make a 3D timeline that communicates how each of the elements interact with other events from different time periods. This also helps to show how each element might influence parts of the education industry as well as the work industry in years down the line. I attempted to highlight both the history of work and professions as well as the history of education with the crossovers between them in the centre, however I don't think this is entirely clear and could be refined a lot.

The top timeline was my draft to figure out the order of dates plus some speculation and also begin to visualise them through collage. I will now be exploring a different way to present this information, one that is more clear and concise.

CRITICAL REFLECTION

On reflection I am very happy with the depth and span of the research carried out to develop the emerging programme. Although the research might seem dense in some places, I felt that it was all relevant in showing the different avenues I went down in order to create a rounded programme based on real pedagogical theory that supports the concept of on location or experiential learning. I carried out checks into the authors of the research I included to ensure the validity of the theory, Sir Ken Robinson was a large source for my research hence why I felt the need to include his bio.

I included quotes because I felt they were relevant in steering the direction of the research that led to the emerging programme. Reflecting on this research I think I could've researched more levels of education as I focused mainly on school aged students, more research into the function and future of higher education would've given me a greater understanding of how to tailor the programme to more age groups.

I decided to do small portfolio reviews throughout this almanac to document the portfolio iterations and constant review that I have undertaken to ensure the quality and accuracy of the portfolio. This has helped me to understand the changes I made and why I made them.

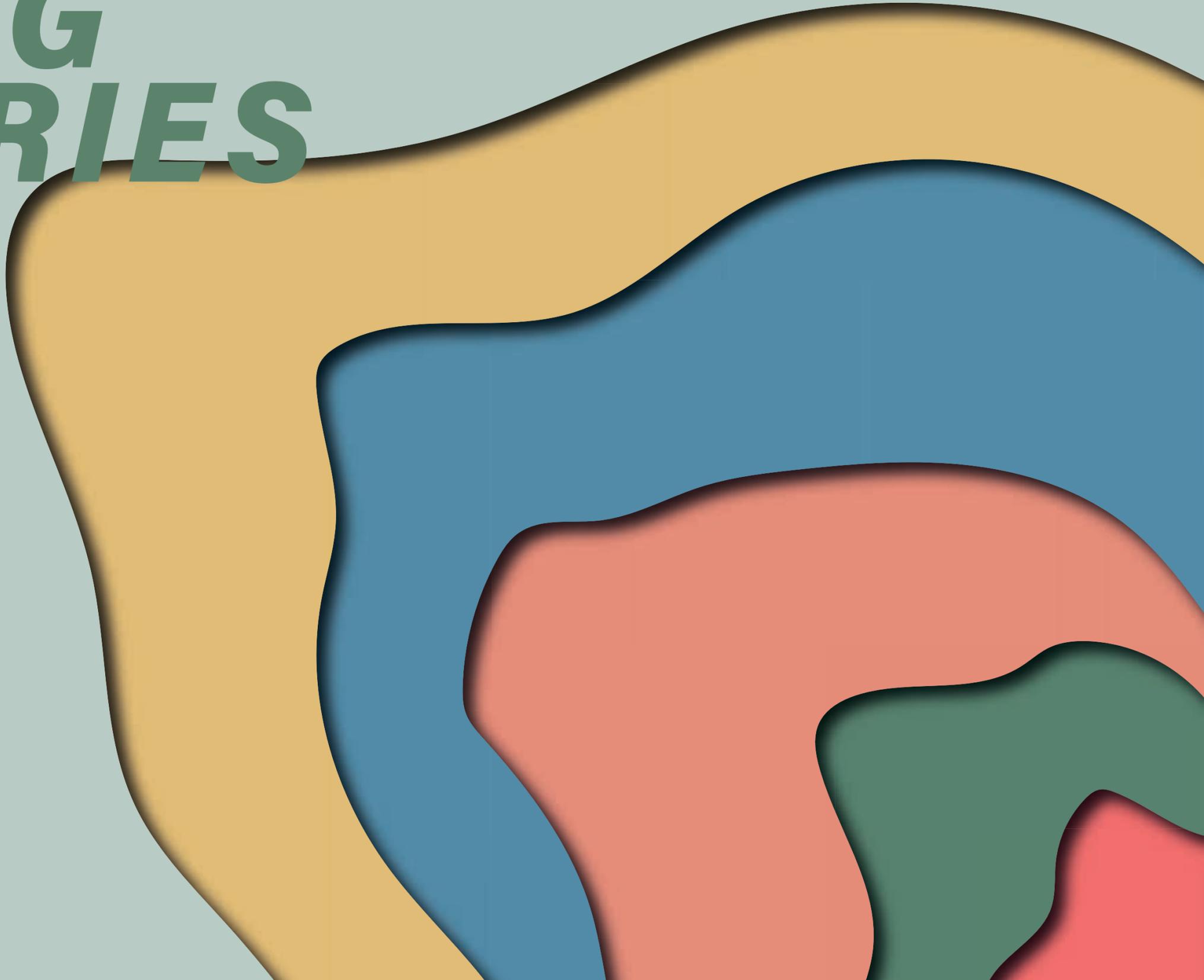
In order to translate this information into a speculative timeline that I could use in my portfolio I included sections on other people's speculation in order to help create a potential future timeline. This led me to speculate two potential futures as we're at a pivotable point in education. Schools have been online for a year and now that they're going back to in classroom learning it's a perfect time for things to change. Reflecting on this section it may have been useful to categorise my research further than the two chapters to show more clearly how this research feeds into the timeline.

Overall I think I have carried out sufficient research which has helped me to develop a detailed and pedagogically accurate programme. I am grateful that I began this project by exploring speculative mindsets as this helped me to view the writing I was doing from the perspective of 'how might this feed into the future'. If I was to carry out this research again I would have liked to have interviewed some industry professionals and gotten their opinion on how the education industry could change or be improved. This would give me an inside insight from someone who has first hand experience with how people respond to teaching.

URBAN EUREKA *CROSSING BOUNDARIES*

CHAPTER 3:

This chapter of the almanac consists of the spatial and building typology studies that lead to a series of inventory drawings. These drawings will define the physical and experiential characteristics of the relevant building typology.



TYPOLGY PRECEDENTS

In this chapter I will begin to define the typology of the Urban Eureka exhibition through precedent research surrounding six conditions, from the physical to experiential.

This will begin with an assessment of formal learning spaces and how they change as the students age. Within the realm of educational buildings there are primary, secondary and tertiary 'schools' as well as many different types of 'school' within these categories. The task at hand is to decipher which of these methods of teaching or architectural design will feed into the structure and experience of the Urban Eureka exhibition.

EDUCATIONAL INSTITUTIONS

On the next few pages I have outlined and defined various types of schools that sit within each learning level. I mapped these out to help me add a higher level of detail to the formal education typology that will be shown through the inventory drawings.

This has taught me to consider the vast range of educational institutions that are all working towards the same goal. This has both broadened and focused the inventory for the formal education typology.

PRIMARY

Montessori School “Encourage independence and self-motivated learning from an early age.”

Home School “Educate at home instead of at school”

Faith school “Mostly run in the same way as other state schools, but the religious education curriculum, admissions criteria and staffing policies may vary.”

Steiner School “Provide an unhurried and creative learning environment focused on children having fun learning.”

Pre-prep school “For children aged 3-7”

Free school “Groups such as charities, universities and parents can set up all-ability, statefunded schools, free from local authority control.”

Academies “Independently managed, all-ability schools that are set up by sponsors from business, faith or voluntary groups with freedom from following the National Curriculum and freedom from local authority control.”

Community and foundation special schools “Special schools for children with specific education needs, such as physical disabilities or learning difficulties.”

Foundation and trust schools “Run by a governing body, which employs staff and sets admissions criteria. The school land and buildings will be owned by the governing body or a charitable foundation.”

State Schools “A school that is funded and controlled by the state and for which no fees are charged.”





SECONDARY

Grammar School “Grammar schools are state schools that are free to attend but select all or most of their pupils on the basis of academic ability.”

Technical College “A University Technical College (UTC) is a type of free school sponsored by a university, further education college or employer”

State school “These are schools that are funded by the Government and provide a free education for children aged 16 and under. They’re inspected by Ofsted, and most of them have to follow the National Curriculum”

Faith school “State faith schools are schools that are affiliated with a certain religion or religious body, such as the Church of England.”

Free school “Free schools are funded by the Government but are run by an independent body such as a charity, business, university, faith or community group, or even a group of parents or teachers.”

Studio schools “This is another type of free school. They’re generally small, with around 300 pupils, and deliver a more vocational, project-based curriculum”

Academics “Academies are state schools that are funded by the Government but run by an academy trust: a charitable body that controls how the budget is spent and how the school is run. They control their own admissions criteria, and don’t have to follow the National Curriculum”

Specialist school “Specialist schools are those that took part in the now defunct Specialist Schools Programme, which provided funding for schools that wanted to become local centres of excellence in their specialist subject. Although the programme no longer exists, 95 per cent of secondary schools are specialist schools.”

Technology college “These are independent schools in urban areas that are free for pupils to attend. They’re owned and funded by businesses as well as the Government, and specialise in practical and technical skills.”

Special school “These are schools for children aged 11 and over with special educational needs”

Independent/private schools “As their name suggests, independent, or private, schools are independent of Government funding or control. They charge fees for pupils to attend. They don’t have to follow the National Curriculum”

Public school “the most exclusive and academic private schools in the UK”

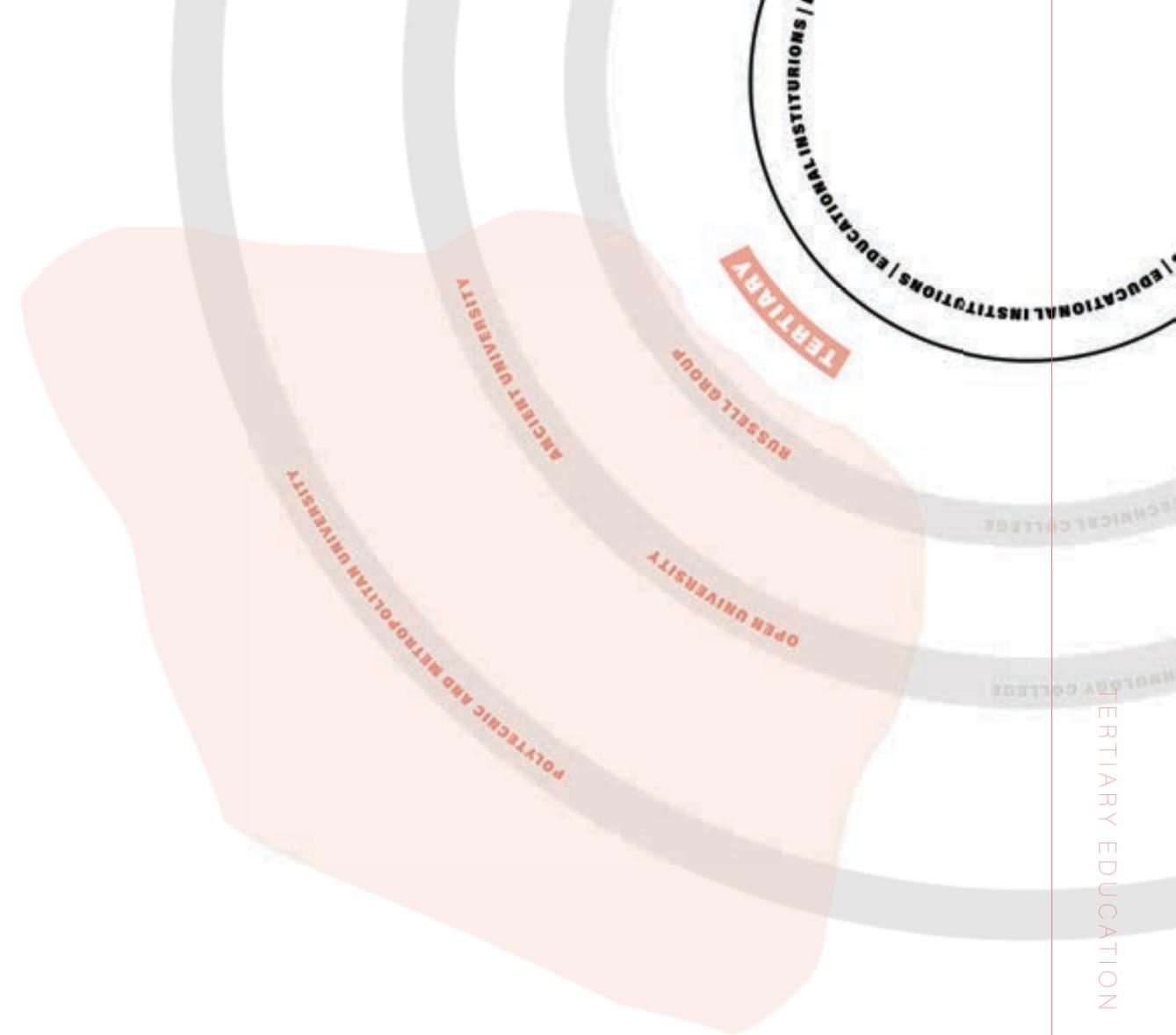
TERTIARY

Russell group “the Russell Group represents 24 leading UK universities that are committed to industry-leading research and an outstanding learning experience for all students.”

Open University “The term open university usually refers to a university with an open-door academic policy, i.e. no entry requirements. That is why open universities are usually ”open” to all students. The initial thought behind open universities was to make higher education accessible for everyone.”

Ancient University “Due to being so historical, these Ancient Universities often have lecture rooms and corridors housed in hundreds of years old buildings.”

Polytechnic and Metropolitan University “These universities have evolved from polytechnics, further education colleges and other higher education institutions to become the popular universities that they are today. In comparison, they’ve received their university status more recently”



FORMAL

The next chapter isolates and analyses the six conditions that define each typology; beginning by speculating the physical and experiential conditions of formal learning spaces.

This research will then feed into building an inventory for each typology.

PHYSICAL

STRUCTURE

Structural and material components of educational and knowledge sharing spaces:

I expect to find that as students get older the size of the building and grounds that they learn in will increase. I also expect that a lot of these buildings will be old, potentially with modern extensions.

SPATIAL

The typical spatial requirements of educational and learning spaces:

I expect the spatial layout to be quite similar between primary and secondary schools but to maybe differ more in tertiary educational buildings.

ENVIRONMENTAL

The typical environmental requirements of educational and learning spaces:

I expect most standard primary and secondary schools to have their own playing field on site and be located close to houses. It's more common to find tertiary educational buildings in cities or on campuses outside of the city.

EXPERIENTIAL

VISUAL

The typical aesthetic external/internal language of educational and learning spaces:

I would expect most primary and secondary schools to use bright colours for their furniture and wall displays whereas tertiary educational buildings may use more muted and less bright colours.

NARRATIVE

The typical experiential setting for educational and learning spaces:

I would expect primary schools to feel the most personal because they usually have less pupils, whereas as secondary schools accommodate a large number of pupils.

CHARACTER

The typical users, characters or inhabitants of educational and learning spaces:

I expect primary and secondary schools to have pupils of the same ages whereas in tertiary education the age range is a lot larger due to people going to university at varying stages of life.

BUILDING TYPOLOGIES

Building typology is the study of set a of buildings that have similar functions or forms, for example; schools, hospitals, retail centres etc.

As the emerging programme is focused around the changes in education and how we can better use it to prepare for the readily changing future of 'work', the building typology study will initially focus on traditional educational spaces. Beginning with a look at the spatial specifications of primary, secondary and tertiary educational spaces.

This will give me an insight into the framework that each type of school has to follow to facilitate different age groups and style of learning. A basic understanding of these components will contribute to the development of how the new emerging programme might sit within and work around these existing institutions. After I have gathered this base of knowledge I can then go on to apply this to other forms of information sharing spaces outside of the traditional school and education industry.

TYPOLGY	PRIMARY
STRUCTURAL / MATERIAL	<ul style="list-style-type: none"> - Often on one level or with minimal stairs to allow easy access and movement throughout the building - Ramps run alongside any stairs to for full accessibility - Long straight corridors to stop people from hiding around corners - Minimal entrances to stop unwanted visitors - Flat roofs should be avoided to stop children from climbing out on them
SPATIAL / FORMAL	<ul style="list-style-type: none"> - Classrooms are grouped together to allow for the sharing of resources and collaboration between kids. - Two thirds of the floor should be carpeted in classrooms, with desks, a sink and store cupboard. Student will keep their belongings in mobile trays. - Visitors entrance is often located near the hall as this is the most common shared space. - Common to have the hall or library in the centre of the building as these spaces are used by all occupants.
ENVIRONMENTAL / CONTEXTUAL	<ul style="list-style-type: none"> - Located away from busy main roads with lots of pedestrian entrances - Access to the grounds often goes straight onto the playground - There may be an area for parents to drop off their kids by car or a bus stop - Often located within housing estates - Paved and grass area surrounding the main building
VISUAL / AESTHETIC	<ul style="list-style-type: none"> - Carpeted areas for children to sit on and to soften the acoustics in large rooms - Lighting that can be dimmed for different activities - Bright colours to keep kids engaged, internally and externally - Large windows to let lots of light in
EXPERIENTIAL / NARRATIVE	<ul style="list-style-type: none"> - Bright open spaces with high ceilings and a mixture of textures - Windows to allow a view of green space - Mixture of quiet, cosy feeling spaces where the kids can relax along with play ares to burn energy
USER / CHARACTER	<ul style="list-style-type: none"> - Young children aged 5 - 11 - Teachers and support staff range in ages

SECONDARY	TERTIARY	TYPOLGY
<ul style="list-style-type: none"> - Long wide corridors so teachers can have a wide view - Multiple forms of entry - Often made up of multiple buildings/blocks 	<ul style="list-style-type: none"> - Facilities are either integrated into a the community often fitted into renovated buildings in and around towns or cities. Or they're based around a campus where each building is built to facilitate a specific programme. - Old buildings with modern extensions - A mixture of different styles of building as often built at different times, constant expansion is common 	<p>STRUCTURAL / MATERIAL</p>
<ul style="list-style-type: none"> - Classrooms often grouped together by subject, arts, science, humanities etc - Each subjects classroom requires a specialised layout for that discipline, i.e labs have benches and sinks whereas an English classroom only requires tables and chairs - Corridors often contain lockers and coat hangers 	<ul style="list-style-type: none"> - Building programme ranges massively from teaching rooms to accommodation and amenities - Teaching rooms consist of large lecture halls alongside computer suites and smaller collaborative rooms for seminars - Creative subjects might have some studio rooms alongside workshops and technical suites 	<p>SPATIAL / FORMAL</p>
<ul style="list-style-type: none"> - Large areas of tarmac and grass along with greater sports facilities (eg. Swimming pool, football pitch, basketball court, running track etc) - Areas for deliveries and larger vehicles to access the building - Usually based within a housing estate to allow people walk in but also along a bus route 	<ul style="list-style-type: none"> - Integrated campus' find themselves in the centre of cities surrounded by public or private buildings - Campus universities become like small villages with a mix of teaching buildings, shops, restaurants, cafes, bars, accommodation, sports facilities etc - Parking often required for students on courses with placements 	<p>ENVIRONMENTAL / CONTEXTUAL</p>
<ul style="list-style-type: none"> - Inspiring wall displays of students work or informational posters - Often older decor in slightly dated buildings 	<ul style="list-style-type: none"> - Modern university buildings contrasted with older style - Large collaborative open spaces - 'Modern' materials 	<p>VISUAL / AESTHETIC</p>
<ul style="list-style-type: none"> - Busy corridors full of kids running to lessons - Clear hierarchy between teachers and students 	<ul style="list-style-type: none"> - Learning spaces are often busy and bustling with conversation - Large open library spaces filled with students of all ages all focusing on specific tasks 	<p>EXPERIENTIAL / NARRATIVE</p>
<ul style="list-style-type: none"> - Children aged 11 - 16 - Teachers and support staff range in ages - Often between 450 and 1200 students 	<ul style="list-style-type: none"> - Open to all age groups, often aged 18+ - Teachers and support staff range in ages 	<p>USER / CHARACTER</p>

SOURCE: The Metric Handbook Planning and Design Data



WILKINSON PRIMARY BY ARCHITYPE

What is it:

Wilkinson Primary School was designed by group Architype. They created the ideal primary school following a lot of the information I have previously stated from the Metric Handbook.

A mainly single storey building, located close to houses, with a mixture of gravel and grass areas. The school is also very colourful to keep the children engaged with playing and learning.

Why did I choose this as a precedent:

I chose to research Wilkinson Primary School as a precedent because it gives visual understanding to the six conditions I researched using the Metric Handbook.

What I learnt:

This precedent got me thinking about how I could condense something this size into an engaging community learning space. It also taught me about the somewhat strict building code that comes with educational buildings much like the curriculum, this is something the Urban Eureka needs to break away from.



SECOND HOME BY SELGAS CANO

What is it:

Second Home By SelgasCano is an office space located in Los Angeles. Surrounded by 112 different species of plant and tree creating a tranquil workspace for members to use. Built on the site of an old carpark in Hollywood housing 250 companies within this co-working space.

Why did I choose this as a precedent:

I chose to look into Second Home as a precedent because of its connection and focus on nature, this workspace begins to hint towards a slightly unconventional way of working through space and location.

What I learnt:

This precedent got me thinking about the idea of bringing the outside world into the workspace, this counteracts my idea of taking the learning/workspace out into the community. I wanted to explore alternative options of what the Urban Eureka could become before solidifying a concept. This taught me to consider different perspectives that might suit more peoples needs.





ELITE ENGLISH TRAINING SCHOOL BY B.L.U.E ARCHITECTURE

The Project

B.L.U.E Architecture designed a work space for The Elite English Training School in Beijing China. The renovation took up three office spaces which I have been knocked together to form a single room. The main concept of this renovation was to create a community feel within the space using 'material' boxes to create spaces of varying function, i.e study space, kitchen space, communal space etc.

The vast quantity of materials used throughout the work area are visually very stimulating forming a clear and cohesive aesthetic throughout the space. Each working pod has a different interior, from furniture type and orientation to lighting and view. This gives the occupants a range of settings to move between which is likely to boost productivity.

A multifaceted workspace would allow a range of teaching styles to occur at one time, people could meet in different sized groups to discuss and tackle problems.

Researching this project has taught me the importance of materials and how they can be used to define a space. The Urban Eureka exhibition could consist of many spaces dotted around the city that each teach a different skill, maybe the materials used in each site could reflect the learning that takes place there?

WILKINSON PRIMARY BY ARCHITYPE

Why I decided not to take it any further:

Wilkinson is a primary school and I've already exhausted the list of 'stereotypical' educational spaces so didn't really need to continue with another one.

I want to focus more on informal learning rather than formal learning, this type of learning happens outside of the classroom. Natural learning that follows the Eureka moment maybe? How we learn and process information better when we leave the classroom, this precedent doesn't reflect this process.

This is also a 'standard' school, in the terms that doesn't really follow any sort of alternative teaching method. If I was to continue looking at traditional learning spaces then I think following a non-traditional pattern of education would be more reflective of the message the Urban Eureka aims to deliver.

What I learnt:

Researching this school taught me a lot about the general space a primary school needs, single level, large grounds surrounded with grass and gravel. This precedent also taught me that I didn't want the exhibition structure to follow this design but to focus more on the informal.

SECOND HOME BY SELGAS CANO

Why I decided not to take it any further:

This precedent was too black and white, I'm not trying to design a workspace I want to design a space/structure that facilitates informal learning, this can't be done in a formal setting such as a collaborative workspace.

Although I did learn from this precedent I didn't feel that it was necessary to include in the inventory despite its contribution to the environmental condition.

What I learnt:

I learnt that it is important to consider different perspectives even if you decide not to take them forward. This precedent also got me thinking about how I can't expect the Urban Eureka to suit the learning styles of every type of person or child, even though personally tailored learning experiences would be ideal in the future. Even just nodding towards a change within the education system is beneficial.

ELITE ENGLISH TRAINING SCHOOL BY B.L.U.E ARCHITECTURE

Why I decided not to take it any further:

This was a helpful precedent, but again I wanted to focus more on the informal learning spaces instead of spaces that were designed for formal learning.

For this reason I didn't think it need to be included in the typology as I shift my focus to spaces that are more relevant to the type of learning that will take place in Urban Eureka exhibition.

I was thinking too much in the direction of designing a workspace/school rather than designing a structure that maybe facilitates natural and spontaneous knowledge sharing.

What I learnt:

I learnt that I could use materials to communicate things about the project or tie a character to a space. I could even use materials to separate each structure/part of the exhibition. I will continue to think about the role that materials might play in the exhibition.

URBAN PAVILION BY INVISIBLE STUDIO

The Project

The Urban Room Pavilion designed by Invisible Studio is an outdoor display space and classroom, built by University of Reading architecture students to give them hands on experience of a real life project. The structure is made from timber arranged in a diamond pattern and covered with a corrugated fibreglass.

This piece of architecture as a learning space would provide students with an immersive learning experience, especially young children learning about nature for example. Placing the student directly in the context that they are learning about will be so much more engaging and fulfilling than any fancy architectural school building. Although simple in its form, it is very complex in its delivery.

This has got me thinking about how the future of tertiary learning spaces could take inspiration from the immersive nature of this piece, primary school children would be intrigued and fascinated by working outside so how can we recreate these emotions within an older generation using spatial design as the tool?

By researching more into the way people connect with the spaces they are in I might be able to decipher a way to use space to facilitate a new form of collaborative learning.



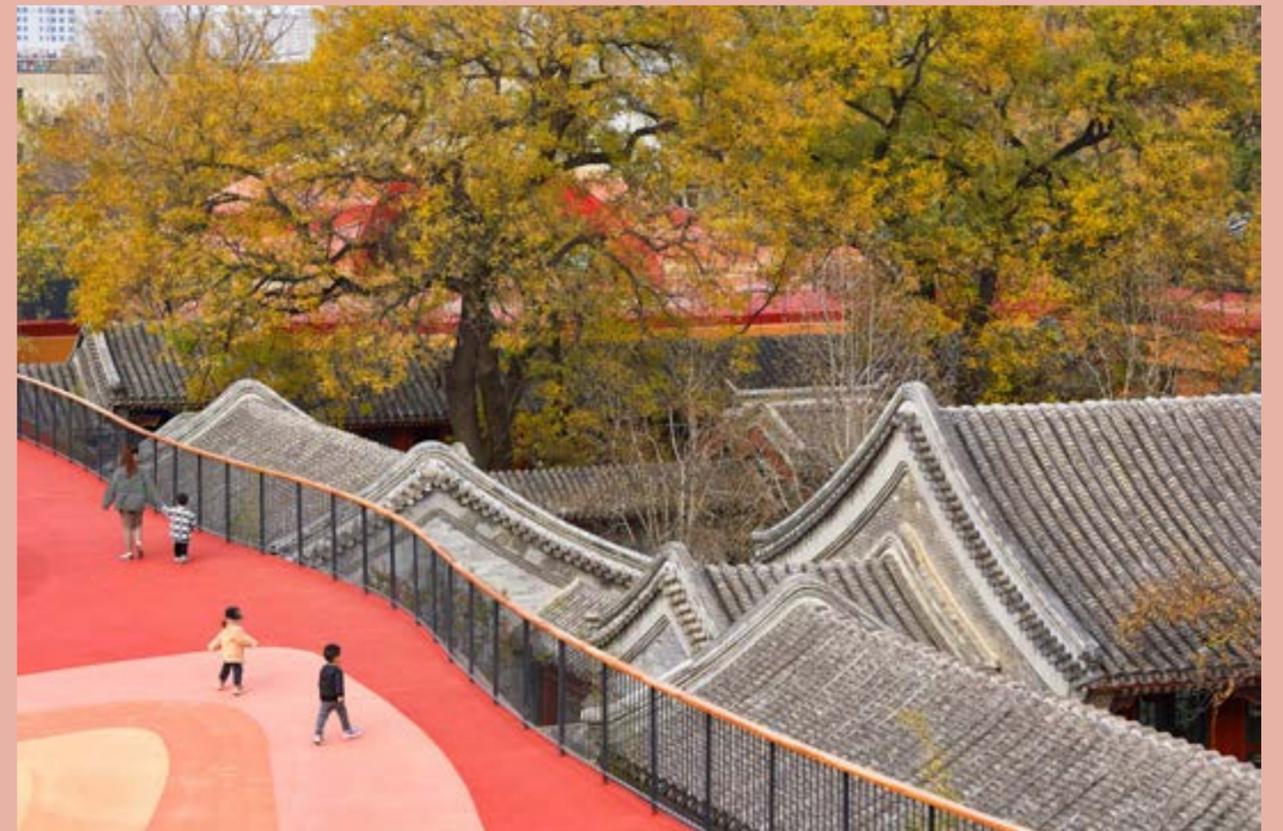
YUECHENG COURTYARD KINDERGARTEN BY STUDIO MAD

The Project

The Chinese architecture studio, MAD, designed the YueCheng Courtyard Kindergarten building around an existing 18th-century building located in the Chaoyang District in Beijing. The space consists of a whole new set of classrooms, teacher's offices and lounges along with a play area situated on the roof.

The kindergarten is located in the centre of a city meaning there is limited space for a playground area, placing this on the roof of the building surrounded by historic structures will help deepen the kids understanding of the 'old' and 'new' and the relationship they have. This space saving method could be utilised in cities that are becoming more and more populated, outdoor space is essential to learning and shouldn't be compromised when the space isn't available.

This precedent got me thinking about better ways to utilise space in terms of where the Urban Eureka exhibition may be placed. The city centre in Brighton is quite compact in some areas, utilising roof space or simply 'air' space that means a structure doesn't occupy the ground below would help to keep the city feeling more 'open'. A future looking education and knowledge sharing space centred around new forms of technology would create a complimentary contrast between the existing and the new.



A LITTLE REFLECTION

After a little bit of reflection on the precedents that I have chosen and exactly how they fit into my work I feel that they could be a little more focused. There needs to be a bit of distance between buildings and structures that are purposefully designed to be educational buildings or teaching spaces.

I have learnt a lot about the environmental, experiential and structural conditions of these specific typologies that I know will feed into my work however, the typology needs to morph a little further to explore structures even further from the traditional.

The aim of the Urban Eureka is to promote attributes and qualities that the future needs rather than teaching specific skills, this expands the typology over and above learning spaces to knowledge sharing/social spaces. I now need to research some further precedents that sit within the new parameters of these conditions.

INFORMAL

I have fewer speculations for the specific typology of informal learning spaces, but that's kind of the point. To have fewer expectations of what these spaces will look like should lead to more natural experiences that differ from how we usually expect to learn.

PHYSICAL

EXPERIENTIAL

STRUCTURE

Structural and material components of knowledge sharing spaces:

I expect there to be less constraints surrounding the specific structure or materials used in informal learning spaces due to the amount they differ depending on the people that occupy them.

SPATIAL

The typical spatial requirements of knowledge sharing spaces:

The spatial requirements are expanded massively in comparison to formal learning spaces. Indoors or outdoors, even to spaces like transport, retail, hospitality etc.

ENVIRONMENTAL

The typical environmental requirements of knowledge sharing spaces:

The environmental requirements are also expanded, informal learning spaces can be in city based or rural.

VISUAL

The typical aesthetic external/internal language of knowledge sharing spaces:

I expect these spaces to have a wide variety of aesthetics, indoor and outdoor.

NARRATIVE

The typical experiential setting for knowledge sharing spaces:

I would expect the experiential nature of knowledge sharing spaces to be friendly and welcoming but also challenging.

CHARACTER

The typical users, characters or inhabitants of knowledge sharing spaces:

This condition is left completely open, the character is whoever is in the space at the time. Someone sharing and someone listening.

SOCIAL HOUSE BY ABERRANT ARCHITECTURE

The Social House by Aberrant Architecture blurs the lines between public and private space by bringing the interior outside and exterior inside. With a stone like render to reflect its location and a pink colour to state the structures presence within the retail world.

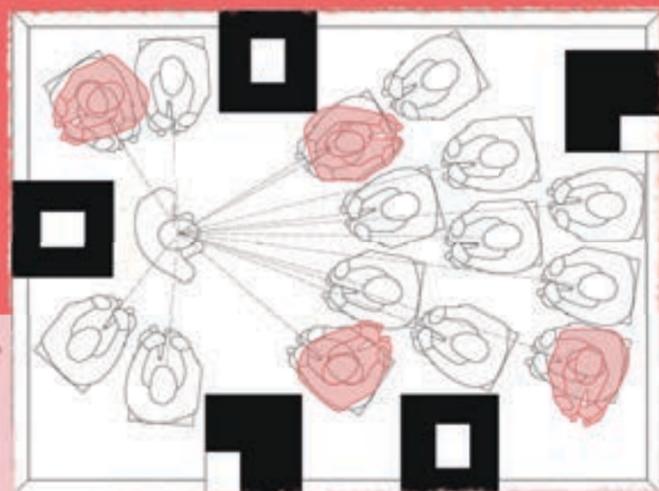
This has brought to light the possibility of using materials to reflect the site that specific exhibition is in, this notion has lead me to consider doing the opposite. By contrasting the materials massively the structures would interact in a different way, especially with the Biennale moving there's no way of knowing if the same materials will be present somewhere else which limits the exhibitions transfer to different cities.

This sort of free-flowing environment is exactly what an addition to the curriculum needs, it would counteract the formality and structure of the school day. Breaking the barrier between interior and exterior gives an essence of transparency that the education system often hides.

This has taught me to look past the traditional and focus more on unorthodox spaces that encourage interaction and knowledge sharing as opposed to a strict teaching schedule. The Social House still nods towards a traditional classroom layout without 'shouting it' through the layout of it seats. The seats however don't have a back to them allowing people to face in any direction instead of using furniture to control which way people face. This method of nodding at the traditional could be something to consider, maybe not within each exhibition but when looking at the site as a whole.



layout similar to traditional classroom



open walls to allow people to walk out into the plaza

seats have no back allowing freedom over seats that people face



INFORMAL PRECEDENT

ROAMING MARKET BY ABERRANT ARCHITECTURE

Roaming Market by Aberrant Architecture was designed as a new market stall to be used in Lower Marsh Market in Waterloo. Made completely out of steel, the market has two levels (one being an 'interior') and wheels allowing it to be towed around to different locations.

This space is very informal which brings a very relaxed feel to the activities that occur here, resulting in the space being a knowledge sharing rather than a learning space. You never know where the market may be as it moves around, this influences the range of visitors you get from people just stumbling across it.

This has taught me that increasing the degree of informality might enrich the information that is shared? This gives me the idea that not specifying each exhibition sites location might spark richer, more natural interactions leading to spontaneous learning within the city.





The University of the Underground is a programme that allows people to obtain free postgraduate design education that “teaches students to design experiences, events and situations that support social change.” The aim of the university is to bring different generations of people together to challenge and question access to higher education institutions through critical reflection and creative practice.

“For the University of the Underground, it is essential to rethink education beyond national borders, but also to build a federation of cooperative schools globally to support the development, identification and empowerments of countercultures in institutions.”



The university is based in underground nightclubs in Amsterdam and London. This has taught me that the location of learning spaces can be anywhere, and even that creative thinking might occur more naturally in unconventional spaces that don't reflect traditional classrooms.

The University of the Underground promotes future thinking and design that will lead to social change, developing the skill of future speculation can happen anywhere. This has gotten me thinking about the locations of the Urban Eureka exhibitions, I initially thought that the learning that takes place in each location around the city should reflect that specific location. This definitely doesn't need to be the case, learning new 'attributes' can occur anywhere, the locations and structures will just facilitate this process rather than determine this process.

URBAN EUREKA

I have decided to outline a potential set of physical and experiential conditions of the Urban Eureka exhibition in response to the precedent research.

This will help me to refine the possible directions that I could take when beginning to design the exhibition structures.

PHYSICAL

STRUCTURE

Structural and material components of the Urban Eureka Exhibition:

The structure of the exhibition is currently undetermined, the sites will promote collaboration and conversation.

SPATIAL

The typical spatial requirements of educational and learning spaces:

The Urban Eureka exhibition sites will be arranged all around the city, the relation they have to each other in regards to location has no connection.

ENVIRONMENTAL

The typical environmental requirements of educational and learning spaces:

The city is the classroom in the Urban Eureka exhibition, this puts an importance on the site that the structures are placed as well as the structure itself. The surroundings are just as important.

EXPERIENTIAL

VISUAL

The typical aesthetic external/internal language of educational and learning spaces:

The Urban Eureka will be bright and eye catching utilising shape, colour and scale through each of the characters.

NARRATIVE

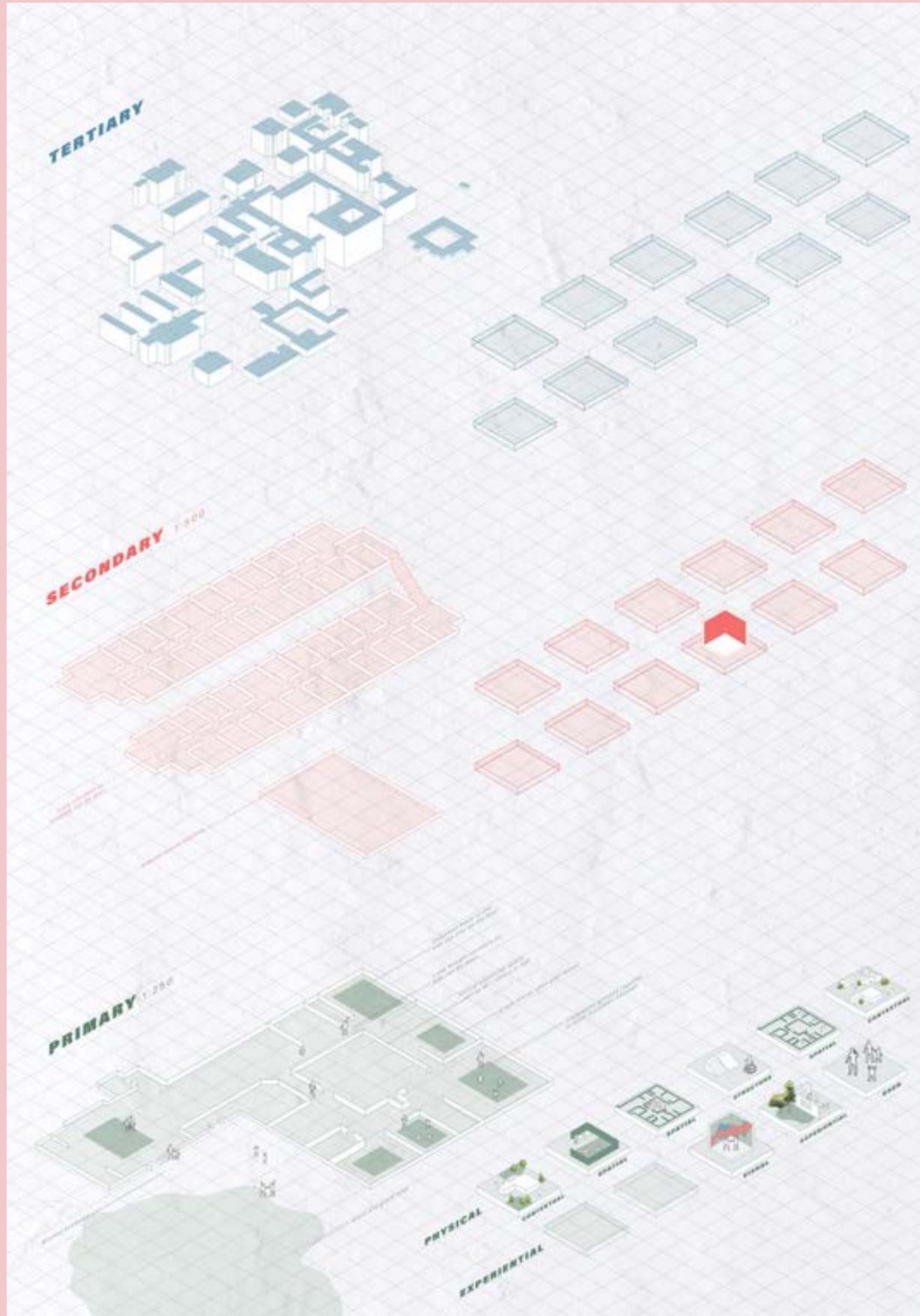
The typical experiential setting for educational and learning spaces:

The Urban Eureka will consist of many sites contributing to the 'class' dynamic of meeting and collaborating with others. Moving from one site to another like you would during a school day.

CHARACTER

The typical users, characters or inhabitants of educational and learning spaces:

The Urban Eureka will be open for all age groups who want to develop these future focused attributes because they aren't learning them in mainstream education or feel that they never did.



PORTFOLIO REVIEW

Change of layout - why?

After completing the research surrounding possible typologies and how they have influenced my design choices it was time to compile some of this information for the portfolio. The inventory drawings consist of one drawing outlining traditional educational spaces (formal) and another drawing outlining more unorthodox learning spaces (informal).

I initially laid out the traditional inventory as shown on the left, however on reflection, I decided to split this into three drawings. The reason for this was that I felt this drawing was becoming a bit too crowded and without any annotation around the conditions the drawing was difficult to understand. Initially there was no reference to the six conditions that defined the typology resulting in the drawing not successfully communicating the relevant information. I think I was also afraid of having too much white space, but after I divided it up I learnt how powerful including white space can be.

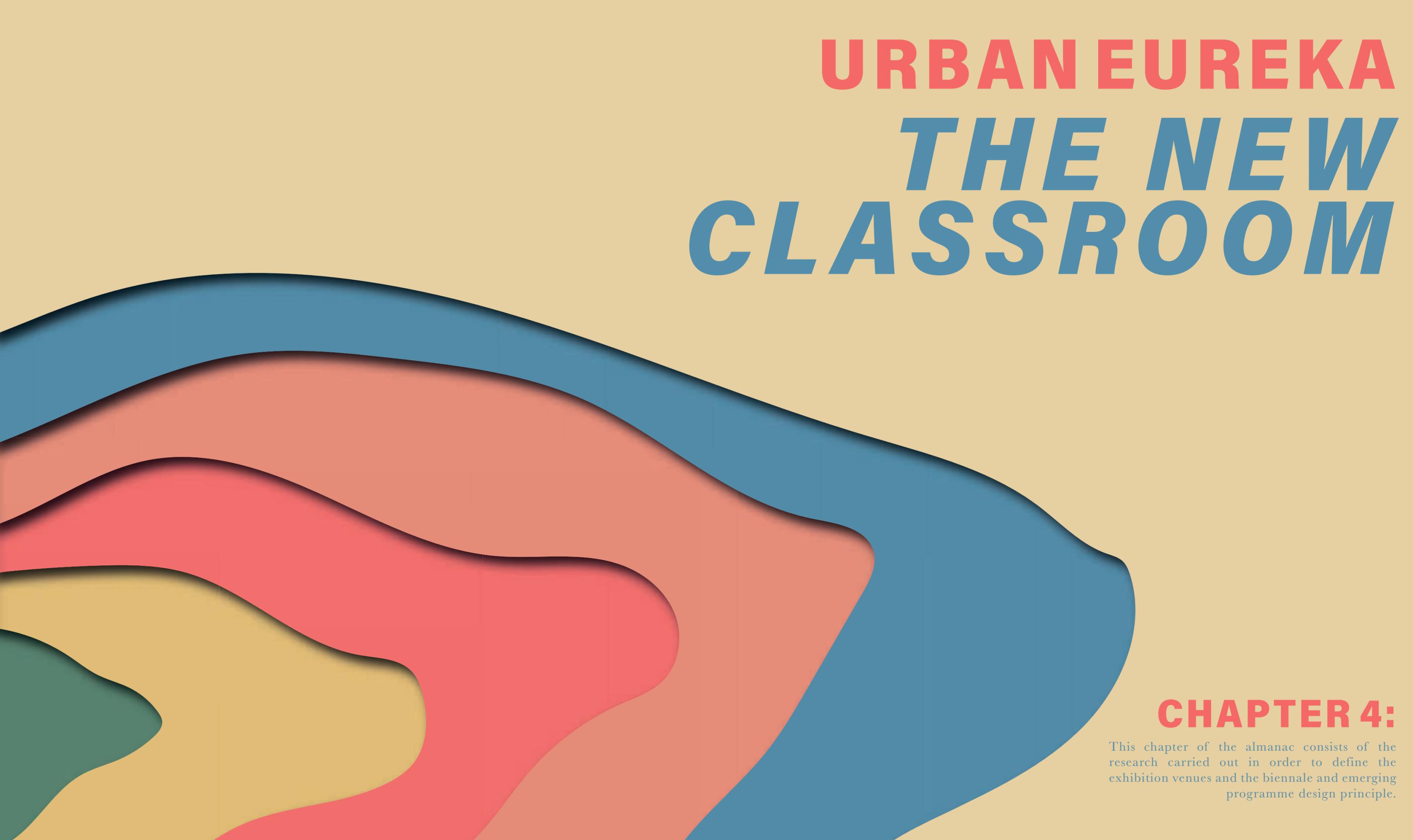
CRITICAL REFLECTION

This chapter went on a few tangents however it managed to find its way in the end. Although I changed my mind about some of the precedents I research I felt that this was crucial in finding the precedents that helped me the most. Even though I decided to not include these in the inventory drawings I would chose to research them if I was to carry out this project again.

I feel that I chose a good variety of precedents once I settled into the type of precedents that I thought defined a typology that reflected the Urban Eureka best. I chose two projects by Aberrant Architecture as these follow a similar typology through the colours they use, the rough size of the installations and the social based programme of each structure. I looked into these for different reasons, Social House because of the programme and Roaming Market because of the 'movement' aspect, this meant that these precedents covered more than one of the typology conditions giving them a greater influence over my work.

I begun this chapter looking at different types of school within the realm of formal education, originally I didn't start by doing this but decided it was necessary to cover all basis within each section (formal, informal) in order to create a full set of inventory drawings. After reviewing the inventory drawings that I had started I realised they only covered one type of formal education instead of addressing the plethora of 'traditional' schools that are popular in the UK. This broadened my research to newer types of school giving me a more detailed set of inventory drawings.

A criticism I have about this chapter would be the layout and order, I have anchored this chapter around the six typology conditions using colour and layout which I feel is relevant but is maybe not shown that clearly. To make this clearer if I was to do this work again I would include a contents page at the start of each chapter to show exactly what is discussed and where it can be found within that chapter.



URBAN EUREKA *THE NEW CLASSROOM*

CHAPTER 4:

This chapter of the almanac consists of the research carried out in order to define the exhibition venues and the biennale and emerging programme design principle.

THE EUREKA MOMENT

The eureka effect refers to the common human experience of suddenly understanding a previously incomprehensible problem or concept.

It is unknown exactly where this response occurs in the brain, this epiphany of knowledge or sudden memory recall. There are two phases of the eureka effect, the first phase consists of learning some new information or trying to solve a problem that you can't understand, a moment of being stuck. This is then followed by a sudden unexpected understanding of the problem, this occurs after a phase of mental relaxation, a break from thinking about the problem can help our brain to understand it.



GRAND PARADE GARAGE

Brief History

The Grand Parade Garage which now consists of a small number of live/work units in the centre of Brighton was once a butchers and slaughterhouse. In the early 1840's the building was extended to provide a separate toilet and washroom between the house and slaughter room. When the property was purchased by a Mr. H Goldberg in 1934 the use changed dramatically, paying around £2,000 for the property he transformed the slaughterhouse into a motor repair garage and engineer business. In 1953 H Goldberg died and left his business to his sons who successfully ran it until it was purchased and converted into the live/work units it is today going by the name Trafalgar Mews.

Why the Garage?

The garage is the site of The Age Gap pavilion that remained after the Brighton Fringe festival. This would be a great place to start the exhibition as it leads on from this skill sharing installation and workshop.

The gates will open to symbolise the start of the 'school day'.

This location is within a large number of other Biennale exhibitions meaning it's a great starting point. This also gives the exhibition an established space within the Biennale.

Intervention Ideas

- An intervention could follow on from The Age Gap exhibition by incorporating the pavilion that was left there?

- An intervention could expand out of the garage and onto the street? It could also play with scale since this is the first site, maybe the character here is something small that is then carried?



Huge mix of materials that the Urban Eureka exhibition can 'play on'/respond to

Also the way the materials interact and overlap could be reflected in the intervention here?

Partially undercover, this could be used to an advantage

EGREMONT GATE

Brief History

Egremont Gate is located in Queen's Park, designed by Francis J May and built in 1890. The gate sits amongst a plethora of historically significant buildings and monuments that can be found in Queen's Park.

Why the Gate?

Egremont Gate is located in Queen's Park which is full of buildings and monuments that have a rich history within Brighton. This environment is great to learn in as there is inspiration all around you.

The architecture of the gate is so strong that it gives a great canvas to work from in terms of imposing some form of intervention.

Intervention Ideas

- An intervention at Egremont Gate could respond to the arches here, or contrasting all the different shapes found in the gate?
- There are lots of opportunities for placement here, maybe it is something that can't be touched and is more something to look at? Could be placed high up?

KEY

■ GREEN SPACE

The gate consists of 3 arches, a large central arch and 2 identical smaller arches either side

A large mix of different shapes and intricate details



THE OLD READING ROOM



A mix of curved and straight arches at the front of the structure

The structure is over two distinct levels

Undercover and inside areas



Intervention Ideas

- The intervention could be slightly larger as there is a lot of space in front of the Reading Room, maybe it is made up of multiple components that are spread out? This could be the site where all the pieces come together?

- The intervention could respond to the different levels that are present here, or utilise the inside space?

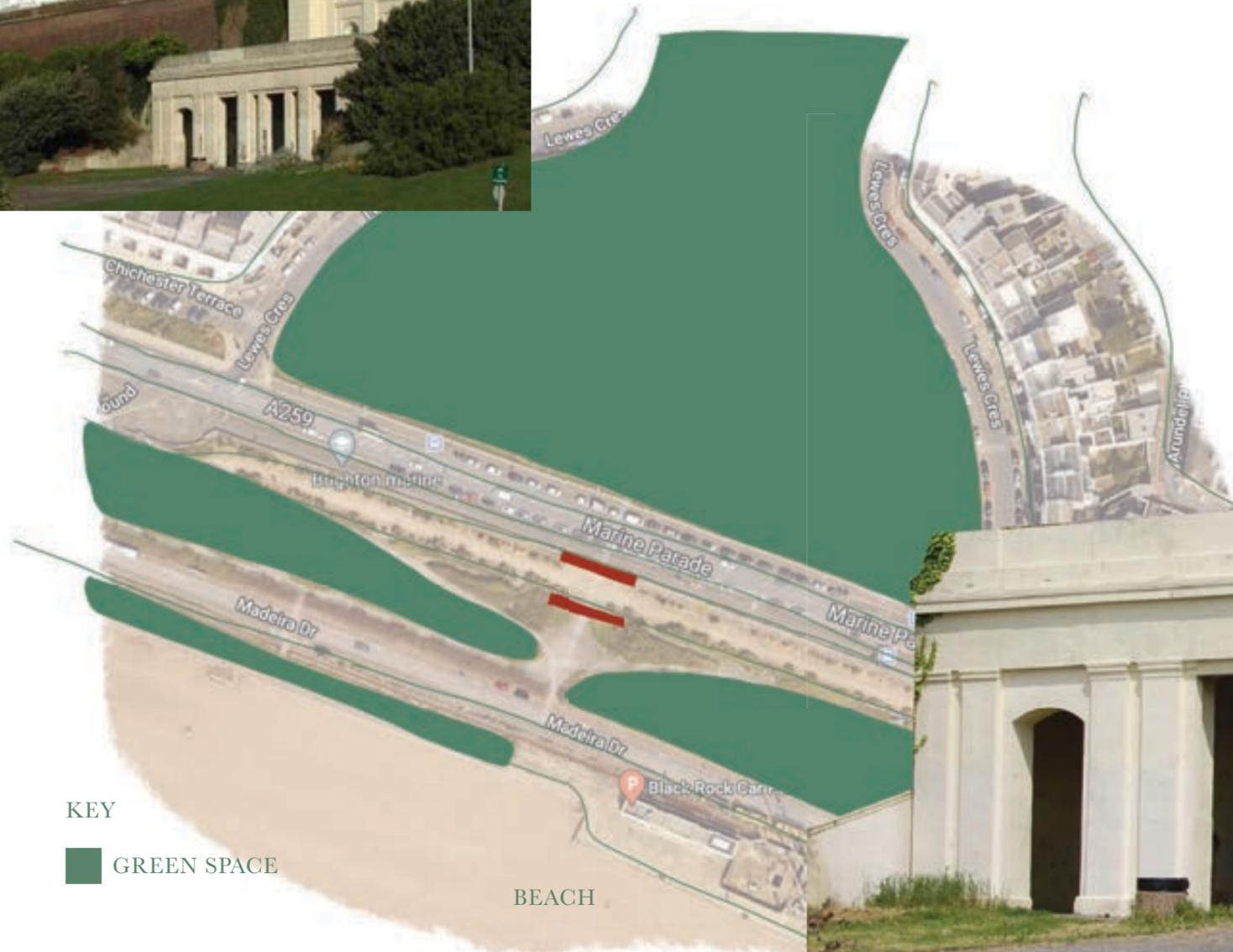
Brief History

The Old Reading Room, was designed by William Kendall, the architect who also designed Madeira Drive and The Temple. Built in 1835 the Old Reading Room was used for committee meetings.

Why the Old Reading Room?

The Old Reading Room has a mix of indoor and outdoor space giving lots of options for the intervention. The indoor space means this site could be used during all weathers.

The Old Reading Room also has a very rich history within the city of Brighton, which will contribute to the emerging programme. The dated architecture will also provide a contrasting back drop to a colourful intervention.



KEY

GREEN SPACE

BEACH

THE TEMPLE

Brief History

The Temple, built in 1835, was designed by William Kendall, the architect who also designed Madeira Drive and the Reading Room.

Why the Temple?

The Temple is slightly hidden and off the beaten track, this will lead to a niche group of locals that will take part in this part of the exhibition.

The Temple has an interesting place and history within the city of Brighton.

The Temple is already contrasting with the other architecture around it, I like the idea of contributing to its 'stand out' reputation.

Intervention Ideas

- An intervention could follow the lines of the existing in the shape of an arch maybe? Or it could juxtapose this feature?

- An intervention could fill the space completely and pour out? Or it could only fill it partially allowing people to enter the Temple?

Isolated so people won't just stumble across it, becomes more exclusive

Old, creating a nice contrasting backdrop for an intervention

Space in front gives the option to expand out of the Temple itself





PORTFOLIO REVIEW

This map needs a lot of improvements and additions in order to communicate enough information. I carried out a review of this drawing to help me correct what was missing.

At the moment the map is difficult to read because there is a lack of context, some key Brighton landmarks would help people to orient where abouts they are. It is also missing a description of each venue along with amenities like toilets. Another helpful thing to include would be a 'distance measure' to map out how far things are away from each other, this would make it a lot easier to decipher where the sites that are far away are situated. There are also too many scales on the map which are making it confusing to read.

I will now go on to edit this map and apply these changes in order to create a clearer and more accurate map of the Biennale.

EXHIBITION PRECEDENTS

I've chosen these exhibition precedents as they each speak into a different part of the Urban Eureka exhibition:

OFFICE S&M - MO-TEL HOUSE
MATERIALS

STUDIO MUTT - OUT OF CHARACTER
NARRATIVE

OFFICE S&M - PUBLIC POCKET PLAYGROUND
INTERACTION WITH THE EXISTING

ABERRANT ARCHITECTURE - TINY TRAVELLING THEATRE
TRANSPORT

ARAM BARTHOM - DEAD DROPS
SCALE

OFFICE S&M

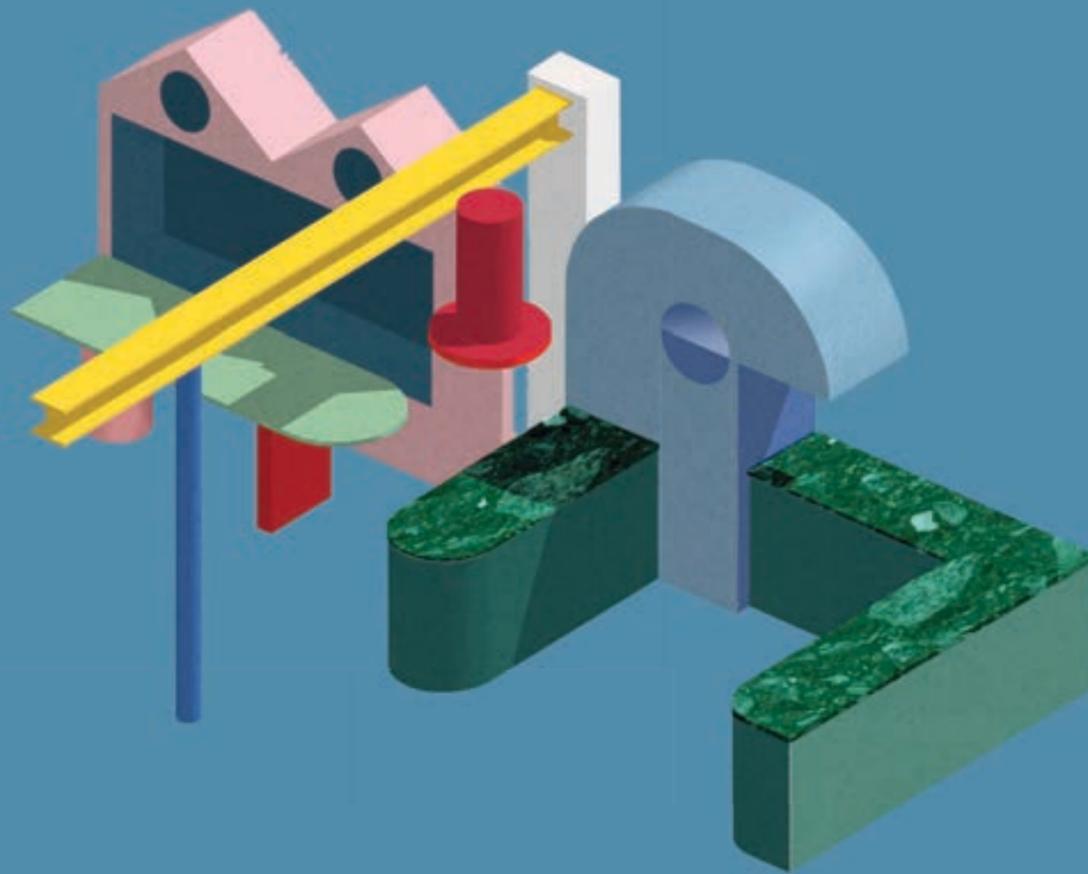
MO-TEL HOUSE

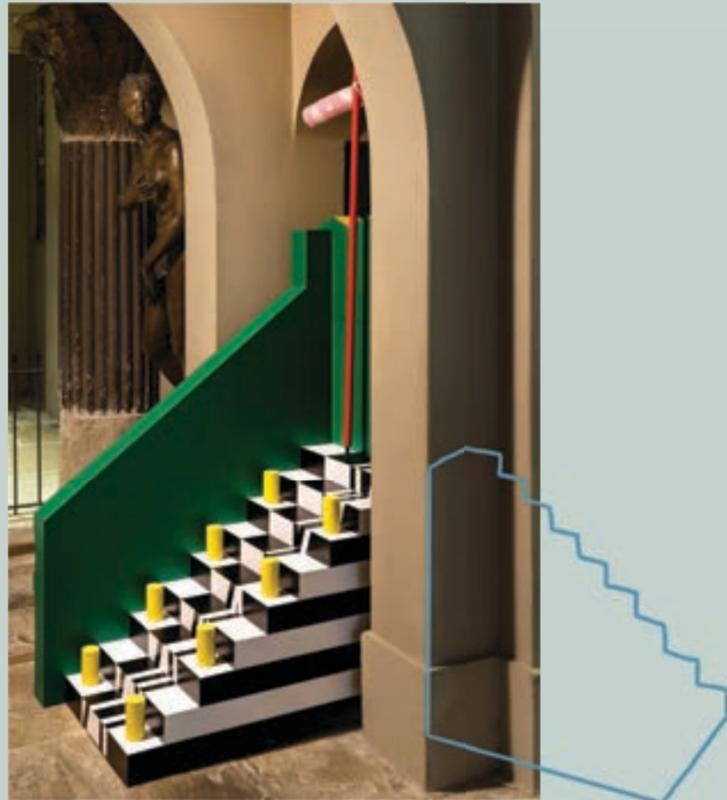
Office S&M renovated a Victorian townhouse in Islington to create Mo-Tel House. Colour, lighting and mirrors were used throughout the space for dramatic effect. There is a big focus on material in this space, “With every material being borrowed, reused and reframed for a new purpose”.

“Office S&M chose materials with a previous existence and a story to tell: surfaces made from melted, discarded milk bottles and chopping boards, to form shiny, luxurious marbled worktops in the WC, bathroom and utility room; green terrazzo for the kitchen is made from marble chips and offcuts; and light pendants from recycled brick grog.”

The thing I love about Mo-Tel House is how playful it is, I was most inspired by the drawings of the house. These reminded me of one of those games for kids where they have to fit all the shapes in the box, lots of modules coming together to build one structure.

This precedent has taught me about how bright colours can be used for more than just ‘child’ related builds. It also got me thinking about how these seemingly isolated shapes come together to form a larger structure.





STUDIO MUTT OUT OF CHARACTER

Out of Character by Studio MUTT consists of a series of “architectural compositions” that were placed in the John Soane museum representing the four characters that Soane wrote about in “Crude Hints towards a History of my House”. The characters take the form of a Lawyer, a Monk, a Magician and an Architect. Studio MUTT brought these characters to life using Soane’s narrative as a base, “the characters are designed to communicate with the spaces they inhabit and the visitors who encounter them”.

What does this mean for Urban Eureka?

To think of the architectural ‘elements’ of the Urban Eureka as sporadic characters that exist within the same narrative would tie the structures together even when they are placed so far apart. This way they all become components of a larger ‘being’, the question then becomes, what connects these characters?

Studio MUTT have used colour and form to illustrate each character’s ‘personality’ and narrative. Careful consideration has been taken to ensure that each character within the Soane Museum communicates with the space it is occupying. Each ‘character’ of the Urban Eureka will occupy a site within Brighton to begin with before going on to other towns and cities, this suggests that potentially each character needs to complement a type of space as opposed to solely a Brighton specific space.



OFFICE S&M

PUBLIC POCKET PLAYGROUND

Public Pocket Park by Office S&M consists of a park, flower shop and BBQ seating area. The aim of the pocket park is to bring some social to a run down side in the centre of Barkingside. This temporary intervention uses low cost, hard waring materials that allow for the pocket park to be dismantled and moved.

I chose to research this precedent because of way the park utilises and slots into the existing in a very conscious way. They've brought colour and life to a 'dying' area.

This precedent has got me thinking about ways the Urban Eureka exhibition can interact with the existing rather than just having the structures plonked randomly.

I've learnt that interacting with the existing is very important if you want an intervention to be accepted in the town, being more consious of the surroundings will help the structures to slot into the city.

The Urban Eureka exhibition has multiple parts to it that are spread out across the city, this gives the structures the opportunity to interact in varying ways. I will continue to research and develop these as the design principles for the Urban Eureka are pieced together.





ABERRANT ARCHITECTURE

TINY TRAVELLING THEATRE

The Tiny Travelling Theatre by Aberrant Architecture was designed as part of Clerkenwell Design Week in 2012, inspired by Thomas Britton's 'Small-Coal-Man's Musick Club'. I looked at this piece as precedent mainly because of the way it is transported around the streets of Clerkenwell, being towed by a VW camper van.

This precedent presents the idea of loading each section of the exhibition on to separate trailers in order to transport them.

I need to consider the size of each character, if they go up in size then how is the smallest one going to be moved? Could it be carried by a person? Is it only the amalgamation of the exhibition structures that are put on a trailer?

The tiny travelling theatre is towed on an open trailer rather than a van, this allows the structure to be viewed as it is being moved. This might spark a curiosity as it drives past maybe, along with adding to the general atmosphere of the city during the Biennale.

Another thing to consider is how the structures will then be transported to other festivals around the country. Are they all then packed into a van or are they still displayed on the trailer?

ARAM BARTHOM

DEAD DROPS

The 'dead drop' installation, started by Aram Bartholl in New York, consists of five USB sticks that have been mounted to walls around boroughs of the city. Since 2010 this installation has expanded to cities in Germany, France, England, Switzerland and more.

The premise of information sharing between people who don't know each other is strong and a theme I'd like to run through the Urban Eureka.

I chose to research Dead Drops as a precedent because I wanted to look into the idea of incorporating tech into the exhibition. This could allow the sites to 'run themselves' without a person or teacher present encouraging people to turn to each other for help or conversation. I was also intrigued by the scale of this installation, such tiny objects spanning such a large area of the city.



URBAN EUREKA

DESIGN PRINCIPLES OF THE EMERGING PROGRAMME

USER ENGAGEMENT

1. The users of the Urban Eureka will engage with each other and the architectural character present at each site. This engagement will be in the form of a different activity/task at each site that will promote the formation of a future attribute.

PLAN/SPATIAL ARRANGEMENT

1. The Urban Eureka site consists of the whole city, this pushes the plan out far and wide. Although each element of the exhibition is far apart they are all connected and part of 'one whole'.

STREET PRESENCE

1. The Urban Eureka must stand out and be eye catching while still be conscious in its response to each of the sites and existing buildings.

DESIGN AND MATERIAL ELEMENTS

1. The specific design must vary between characters, with each having their own personality.
2. The materials of each character must reflect the site that that character resides in.

KEY ACTIVITY OR MOMENT

1. EUREKA!!!

URBAN EUREKA

DESIGN PRINCIPLES OF THE BIENNALE CONTRIBUTION

INSTALLATION

1. *Relationship with the Existing*

The Urban Eureka interventions must not under any circumstances disrupt natural habitats or damage existing buildings. The intervention may rest, cover, juxtapose, or be inserted into an existing structure with great caution. (Greater care must be taken when the existing site is a listed building or structure.) Refer to Public Pocket Park by Office S&M as a precedent.

MATERIALS

1. *Sourcing and Sustainability*

All materials must be sourced sustainably, reused, recycled or consciously produced. The highest levels of creativity must go into the design and production of sed materials. Refer to Mo-Tel House by Office S&M as a precedent.

2. *Construction*

The exhibition structures will be fabricated off site and brought to each location. They will need to be secured to the site or existing structure.

TRANSPORT

1. *Transport within Brighton*

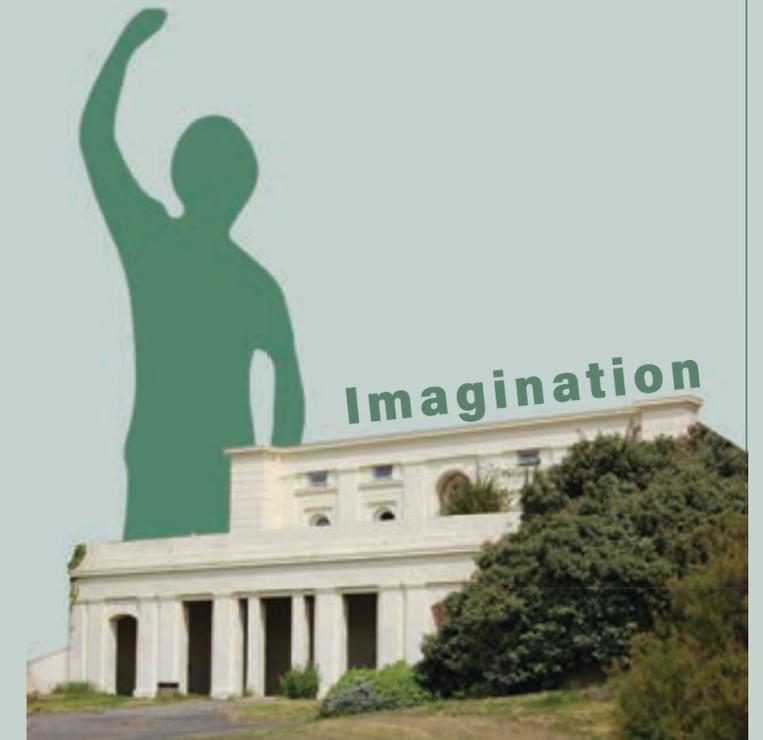
The exhibition will be on display as each element is transported to its site within Brighton/the following Biennale cities. The size of transport will vary depending on the size of the structure, this could be anything from a person transporting it to a bike or car towing it.

2. *Transport between Biennale's*

The collection of architectural character's must fit onto one large transit lorry, they will travel together to reduce carbon emissions and transport time between cities.

THE ANARCHISTS

To give an example of how the exhibition might be put together I have selected a few future attributes and assigned them to a person and location. I have done this to give myself an idea of how I may go on to develop the design. Beginning the design process by giving each location a character is a starting point to designing an architectural character for each of these venues.





SPECULATIVE COLLAGE 1: The Urban Classroom

Collage 1 shows the conceptual intention of the emerging programme along with some user engagement and experience.

Essence: Stepping out of the classroom and into the city
Experience: Students learning within the realms of the city

In this collage I want show the students stepping out of their current classrooms or lecture halls and into the city of Brighton. I played with scale a lot in this collage, making the students that are already in the city the largest to show that the this emerging programme is focused on them.



SPECULATIVE COLLAGE 2: Educational Freedom

Collage 2 focuses on typology and venue, this collage consists of the spatial ingredients of the emerging programme as well as beginning to showcase elements of the chosen venue(s).

Spatial Ingredients: Lots of locations that are spread out across the city
Venue: Grand Parade Garage, The Temple, Old Reading Room, Egremont Gate...

In this collage I want to show the locations within Brighton that the Urban Eureka exhibition will visit while also communicating the theme of being in charge of your own education. I've done this by playing with scale again by enlarging the users and shrinking the sites as if the children are playing with them like they are toys. This is to show that the students are the top priority.



SPECULATIVE COLLAGE 3: Design Principles

Collage 3 explores potential materials, construction techniques, transport and more of the biennale and emerging programme design principles.

Design Principles: Materials, transport, user engagement, installation, construction, street presence...

In this collage I want to show the Urban Eureka design principles through their individual components. I chose to do this as I wanted to start hinting towards the idea that this exhibition is made up of lots of different parts, I feel that this is reflected in the collage through the boxes being able to come together in a variety of ways.

CRITICAL REFLECTION

I began this chapter by defining the eureka effect, I chose to include this as I want to emphasise why I decided on the name Urban Eureka for this emerging programme. This exhibition's aim is to promote future attributes whilst also addressing that some additions or changes need to be made to the current education system to accommodate more learning styles in order to better prepare people for our ever changing future. Maybe the classroom is restricting understanding for some students? Learning in the city could change this.

I tried to choose a variety of venues that had some history within the city of Brighton. I wanted a mixture of buildings and structures as well a range of indoor outdoor space with varying scales. I decided to just focus on four in detail as ideally the exhibition will travel to visit multiple sites, but for the purpose of not overwhelming the project I have focused in on a few locations. I am happy with the venues I have chosen however I feel that I could have been more critical in my selection process, if I was to carry out this research again I would maybe start by researching a larger selection in detail and then whittling this down before going into further detail with these.

On reflection I do feel that I could have been more concise with my research as I may have waffled or repeated myself in a few parts of the document. I reviewed, edited and cut out any areas I didn't feel were relevant however I could've been harsher with this process.

Overall, I am very happy with the outcome of this research document and how I managed my time throughout the process. I am extremely pleased that the concept of on location and experiential learning featured in the exhibition holds ground within real pedagogical theory. The almanac's theme also runs very consistently within the portfolio allowing the work to feel very cohesive.

I will now continue to be critical, utilising the precedent research I have carried out as I go on to design and present the exhibition.

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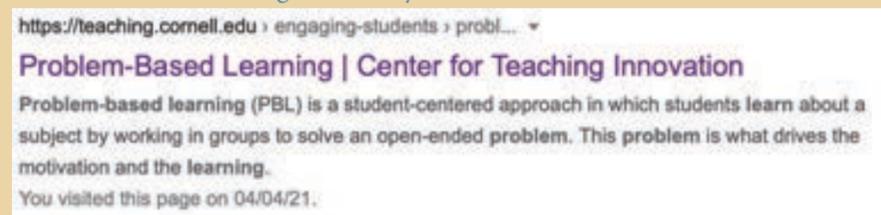
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