

**MANCHESTER SCHOOL
OF ARCHITECTURE**



ARCHIKIDS: ON THE MOVE

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**MSA
LIVE 21**

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Partners

The Architecture School for Children (TASC) is based in Greater Manchester. The school has existed for the past 18 years, and was formerly known as 'Places'. It collaborates with young people of all ages to develop their understanding of the built environment around them, develop their inner creative abilities and to create happy and healthy communities.

TASC, run by Dan Wheatley and Catherine Clements who bring together artists, schools, developers, children, Architects and whole communities, work towards a more creative and stimulating environment. Our partners carry out projects, which not only allow young people to explore the built environment around them but also raise their aspirations and potentially inspire them to pursue careers which would involve the design of the built environment in the future.

The relationships TASC builds are lifelong and continue to improve and benefit communities through several outreach programmes and collaborative work.

The Architecture School for Children also works with the University of Manchester and Manchester Metropolitan University to engage students in directly working with the community around them to really understand the built environment.

Agenda

Archikids: On the Move

We are Archikids - a student led team working collaboratively with TASC to develop an exciting series of mobile pods which stimulate creativity and educational based activities in the Manchester area. These movable pods will allow young people to use them as spaces to design and create in, as well as to play and interact with other young people or members of the community around them. Since the pods will be movable, they can also be used by the wider community, where they can be transported to local parks, schools and used as spaces for young people. As a group, we have decided to design a series of three pods: a Sensory Pod, which activates different senses; a Canvas Pod, which can be used to draw, paint and design on, acting as a real life canvas; the third would be a Model Making Pod where young people could develop model making skills and produce structures and formations. The different typologies aim to engage children with the built environment. These pods were decided upon and finalised after a series of workshops. First and Second Year Architecture students, have learnt many different skills during the event and have received a huge amount of useful tips from Architects who design for children, which they implemented into all designs.

The Canvas Pod will be made of light prefabricated frames, which can be assembled together on site, wherever that would be. This pod will come with several panels, made out of different materials which young people can draw on. These panels can be velcroed onto the frame in many different ways, making the pod adaptable and interchangeable. The Sensory Pod will be designed to stimulate senses through touch, vision, smell or hearing. The pod will also be adaptable and can be taken apart or put together in a series of settings. The third pod is the Model Making Pod where through its multifunctional design, can become a series of Model Making stations as well as cupboards or exhibition spaces. This one too can be folded up, taken apart and put back together.

The pods are designed to be assembled and taken apart by the young people too, not only by adults. Young people can interact with the pods in multiple ways, showing them that they too can have an impact on the environment. The pods will also fulfil community and social values serving as additional external spaces for the local community. This may inspire future projects to emerge and could become a whole series of pods which can travel around local communities around the country.

Our Design Process

The Three Pods

The design process began by understanding the client and the brief. The masters students delivered presentations outlining who TASC are, what they do, and the brief to design mobile pods for children and the community. Our approach to design was inspired by TASC's ethos to think like a child; we put ourselves in the place of a child, imagining how they would explore and engage with spaces. From the onset, we engaged with guest speakers who explored children's play to develop our thinking; guests included Erect Architecture, CAUKIN Studio, and Matt + Fiona.

Following presentations and discussions with the guest speakers, we brainstormed initial ideas on the design of the pods; analysed site conditions, constraints, and opportunities; and set spatial parameters for each pod. Additionally, we researched key regulations and ergonomics for children's play, which was crucial in designing a safe environment for the children.

The team formed three smaller groups to focus on one of the three pods: the canvas pod, the senses pod, and the model making pod. After which, each group chose and analysed a pod precedent which informed initial Photoshop collages

and hand sketches. Throughout the project, MArch students delivered workshops on key skills including AutoCAD, Photoshop, SketchUp, and model making, which proved to be beneficial to all students as the skills learnt were used throughout the project.

Designs were developed through an initial sketch modelling workshop. We sketched ideas over these models and further developed them using 3D software. The whole team would reconvene regularly to discuss the progress of designs and explore how each pod could relate to each other. Key considerations included materiality and mobility; we considered how each pod could be de-constructed, packed, or transported easily.

In the final stages of the project, every team produced plans, elevations, and rendered visualisations for their pods to communicate the spatial qualities, materiality, and use of the pods. We reunited as a whole group to put all the pods on the site in a variety of configurations to show the potential arrangements that TASC could use.

All in all, the project was successful, and the team enjoyed working together, learning new skills, and producing great outputs.

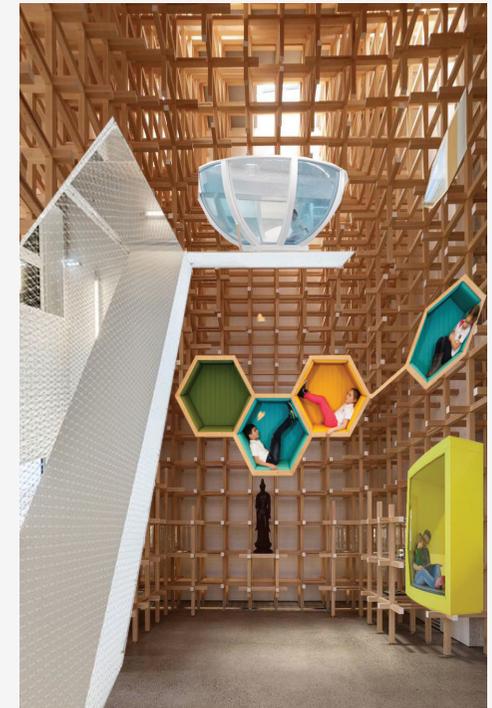


Image Top-Left:
Sensory Pod Collage

Image Middle-Left:
Canvas Pod Collage

Image Bottom-Left:
Model Making Pod Collage

Image Top-Right:
Canvas Pod Collage

Image Middle-Right:
Sensory Pod Collage

Image Bottom-Right:
Canvas Pod Collage

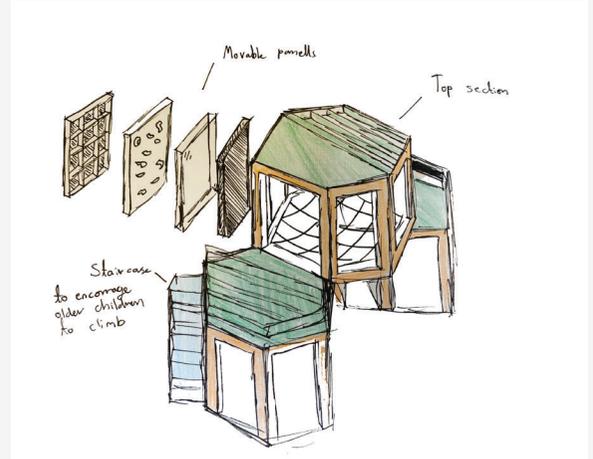
Canvas Pod

This pod explores the use of hexagons, inspired by the Manchester Bee, to create a tiered level structure. This would form dynamic spaces, above, underneath and in-between for children to be creative. Using foam board and wooden dowels the model was really successful in portraying the form and structure of the design proposal.



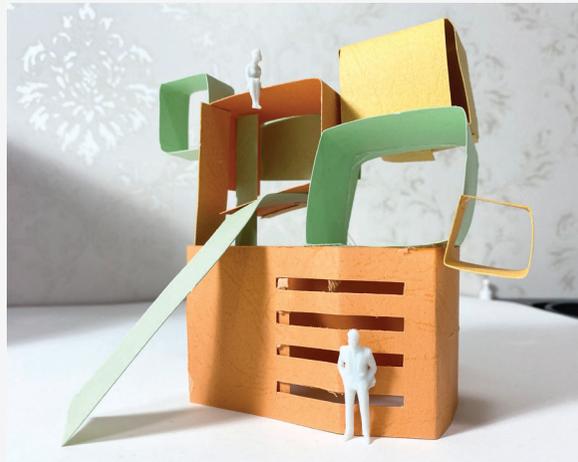
Canvas Pod Sketch

The Canvas Pod sketch incorporates hexagonal shapes, inspired from Manchester's best-known symbol, The Worker Bee. The idea was that these hexagonal structures form a sheltered space as well as a climbing area for the children. Movable panels can be attached to the three structures which the children can draw and write on.



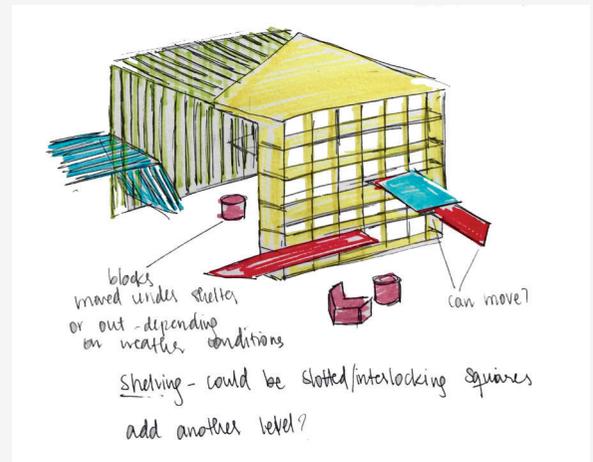
Model Making Pod

Creating an unconventional workspace for children to make and experiment. Varied height surfaces allow children of different ages to do so together. Using paper has allowed a dynamic and quick approach to model making as well as the use of bright colours to indicate possible material choices. Using people for scale also allows us to assess how the pod would be in reality.



Model Making Pod Sketch

The main idea behind the Model Making Pod sketch was the shelving unit where planks of coloured wood could be slotted through the gaps to create seating and tables for the children to work on and model make. Movable blocks could also be used by the children and community to sit on or stack creating their own structure i.e. the pink blocks.



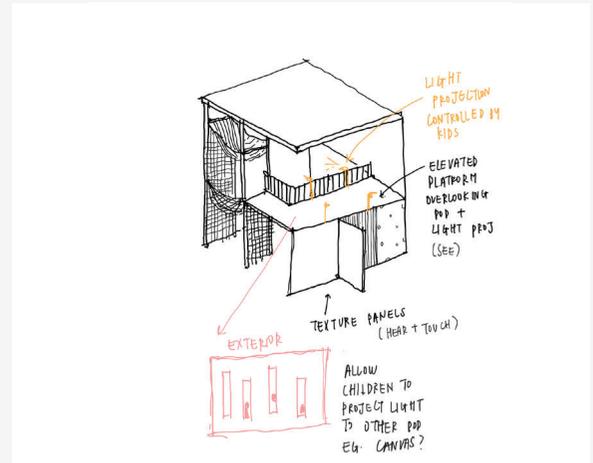
Sensory Pod

Exploring the use of different textures and lighting to create atmospheres which stimulate the senses. Cardboard was used as the main material to plan out structure, then laid on top of a digital screen to stimulate sensory experiences, the model effectively portrayed the desired atmosphere of the pod. Sketching into the image then adds another layer of detail and analysis.



Sensory Pod Sketch

The sketch for the Sensory Pod illustrates the use of different materials i.e. texture panels and ropes, to create a sensory experience. Different levels have also been incorporated into the design to allow children climb, run and play.



The Three Pods

Each pod is used for a specific activity and can function individually. The pods can also connect and create an overlap between the spaces which will increase interactivity between the users. The three pods have been designed taking inspiration from design processes including a Canvas Pod, Sensory Pod and a Model Making Pod.

The Canvas Pod is designed around the physical act of art – drawing, painting and sticking. Whichever way you get those initial ideas on a page, we have designed the space for you. The Pod is the canvas. We have designed the pod with internal and external creative areas that encourage exploration through play via various level changes and spaces. The pod is made from wood that forms an initial exoskeleton structure. We wanted the pod to be entirely creative and customisable, so we created sectioned walls that can be painted on, pinned up, moved around and adapted as the artists see fit.

The Model Making Pod is designed as a space for you to bring together what you have learnt so far and create any ideas into three-dimensional objects. Using a clever design, containing shelving that provides you with a variety of materials and model making equipment. This enables the pod to become a life size model in itself. The model making pod has dual functionality designed within, a table for a 5-year-old can be a chair for a 9-year-old, which can also be used as a step for an adult to reach higher storage compartments. Revolving around a central amenities space with fold down benches at different heights, the space encourages these different ages to work as one.

The Sensory Pod is designed to engage and heighten your sensory cognition throughout playful experiences that target the five senses of sight, smell, sound, taste and touch. The pod has been created using different textures and materials. It explores the possibilities of making sound through different surfaces, creating atmosphere through apertures and lighting. We have even thought about smell through community engagement of growing plants and flowers in each on the pod. The users can reflect on the senses they discover within and how they affect our everyday built environment.

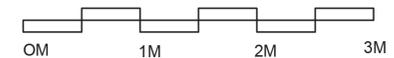
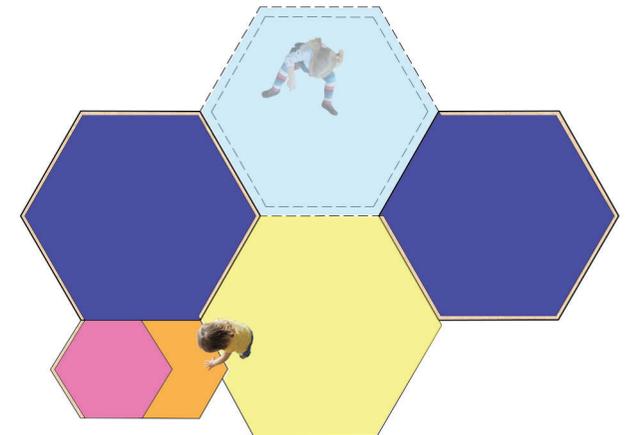
Canvas Pod

Plan

The Canvas Pod utilises hexagonal formations as areas of play and creativity.

Key:

- Ground Hexagonal Structure
- Raised Hexagonal Structure
- Step 1
- Step 2
- Step 3

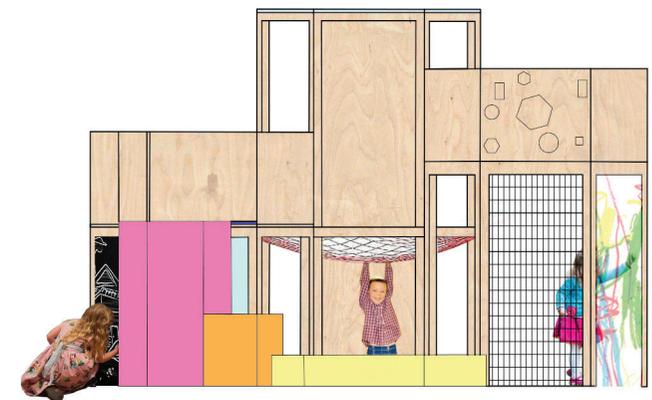


Elevation

The pod provides a view into the world of drawing, play and interaction with spaces.

The elevation shows panels which are attached to the frame of the structure. These frames are to be used by the community to write and draw on.

Additionally, the 3 colourful steps as seen from the drawing can either be used as steps to climb to the first platform or may even be used as seating.



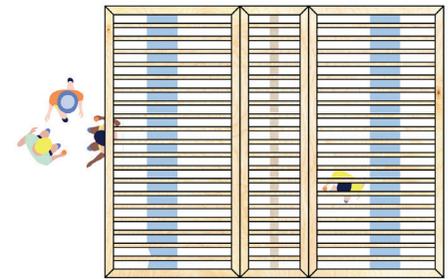


Model Making Pod

Roof Plan

The roof is made up of three wooden frames which are all attached to polycarbonate sheets that protects the pod from rainfall.

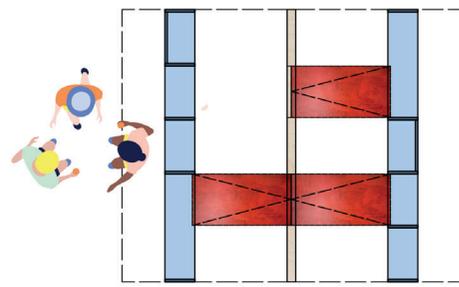
The three roof partitions allow the structure to be folded down quickly and be easily moved or even stored away.



Ground Floor Plan

The remaining structure of the pod includes two timber shelving units with a thinner wall partition in between them.

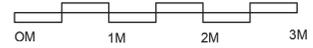
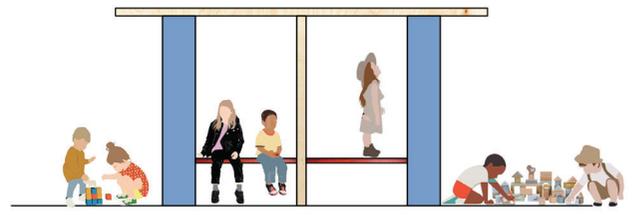
Additionally, the red rectangles on the plan represent wooden panels which will be folded down when needed and attached to the opposite shelving unit to create tables and seats.



Elevation

The Model Making Pod is designed to be a large-scale model, one in which gives its users a sense of achievement and personalisation.

As seen from the elevation the children are using this pod in a creative and fun way.



Sensory Pod

Floor plan

The Sensory Pod is designed to enhance your reality within the world we all thrive and experience.

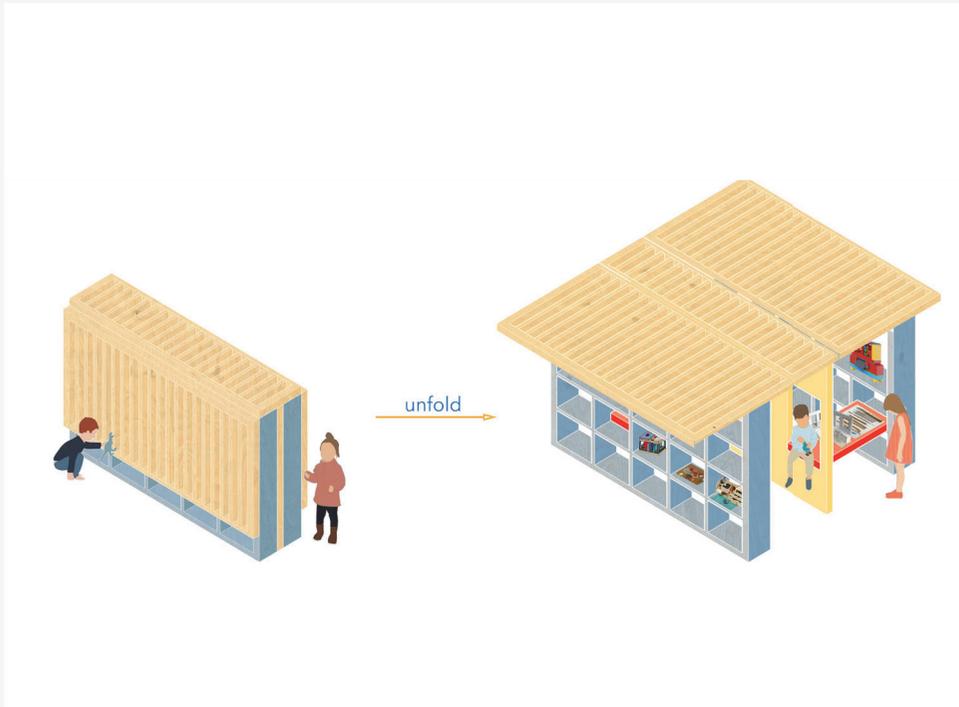
The use of timber frames allows for the structure of the sensory pod to be quickly and easily assembled.

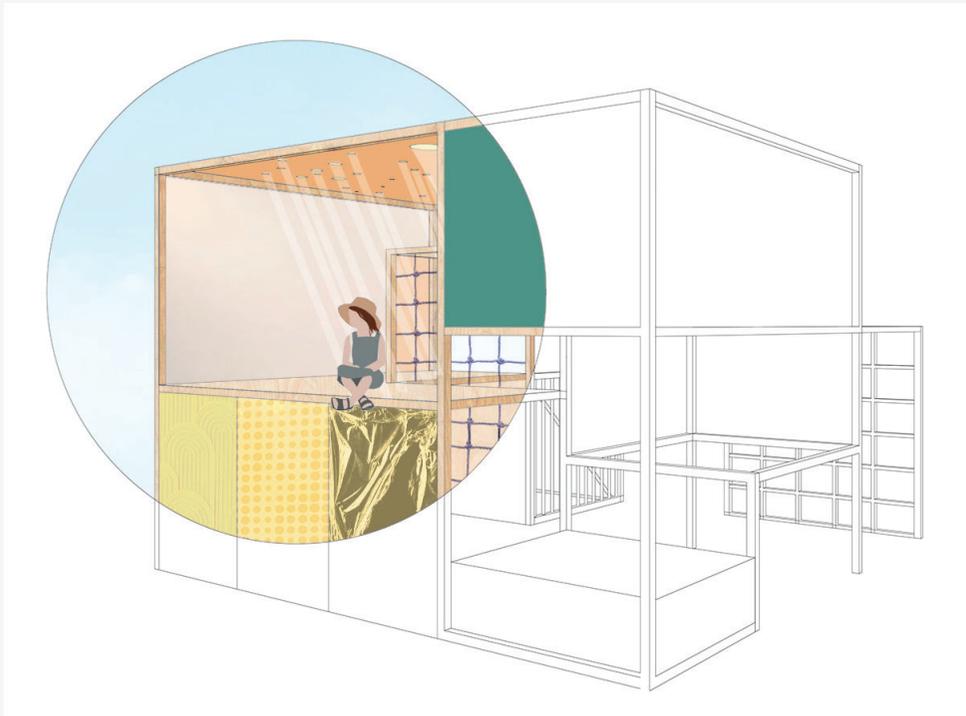
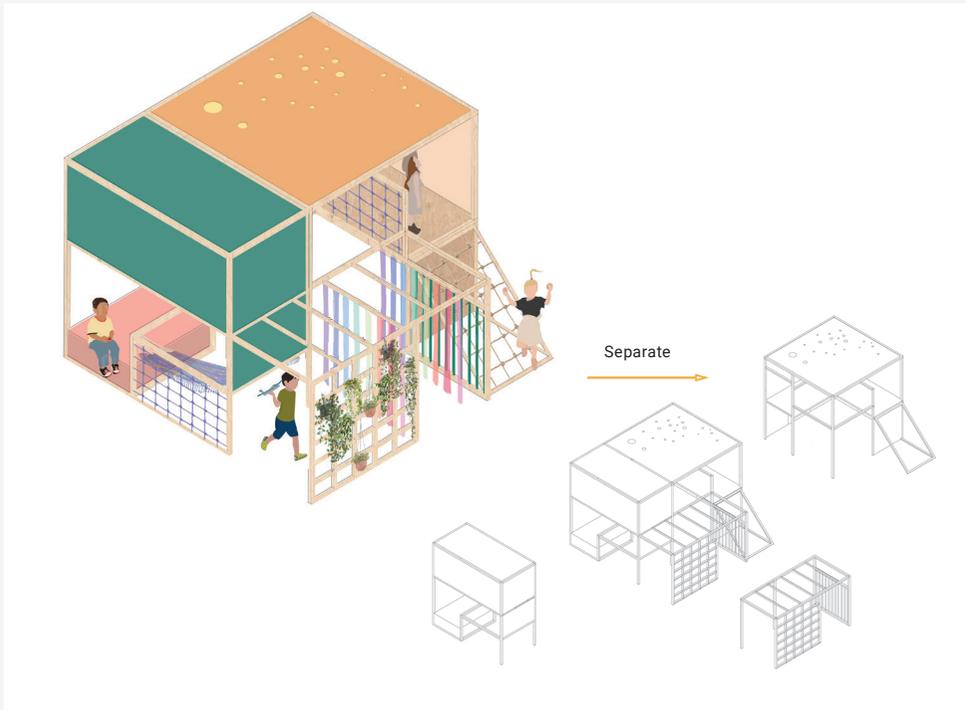
Various objects could also be attached to the structure i.e. plants and hammocks as the timber frame provides a rigid and firm structure.



Elevation

Through the use of various materials and textures as seen in the elevation, users can explore the Sensory Pod through touch, taste, smell, sight and sound.





ABOUT

Each year the MSA Live (formerly Events) programme unites M Arch. year 01 with B Arch. year 01 and 02 and M Land. Arch 01 in mixed-year teams to undertake live projects with external partners to create social impact.

LIVE PROJECTS

All MSA Live projects are live. A live project is where an educational organisation and an external partner develop a brief, timescale, and outcome for their mutual benefit.

SOCIAL IMPACT

All MSA Live projects have social impact. Social impact is the effect an organization's actions have on the well-being of a community. Our agendas are set by our external collaborators.

EXTERNAL PARTNERS

MSA LIVE projects work with many organisations: charities, community groups, social enterprises, community interest companies, researchers, practitioners and educators.

STUDENT-LED

Our MSA masters students take the lead in the project conception, brief development, delivery and co-ordination of a small project. Other cohorts join for an eventful 2 weeks of activities at the end of the academic year.

KNOWLEDGE TRANSFER

Working in teams within and across year groups and courses; MSA students participate in peer to peer learning. In addition, collaborators, participants and students engage in the transfer of tangible and intellectual property, expertise, learning and skills.

LARGE SCALE

This year approximately 600 students from 4 cohorts in MSA will work on 42 projects with partners.

QUESTIONS

For questions about MSA Live 21 contact MSA Live Lead: Becky Sobell: b.sobell@mmu.ac.uk

BLOG

live.msa.ac.uk/2021

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