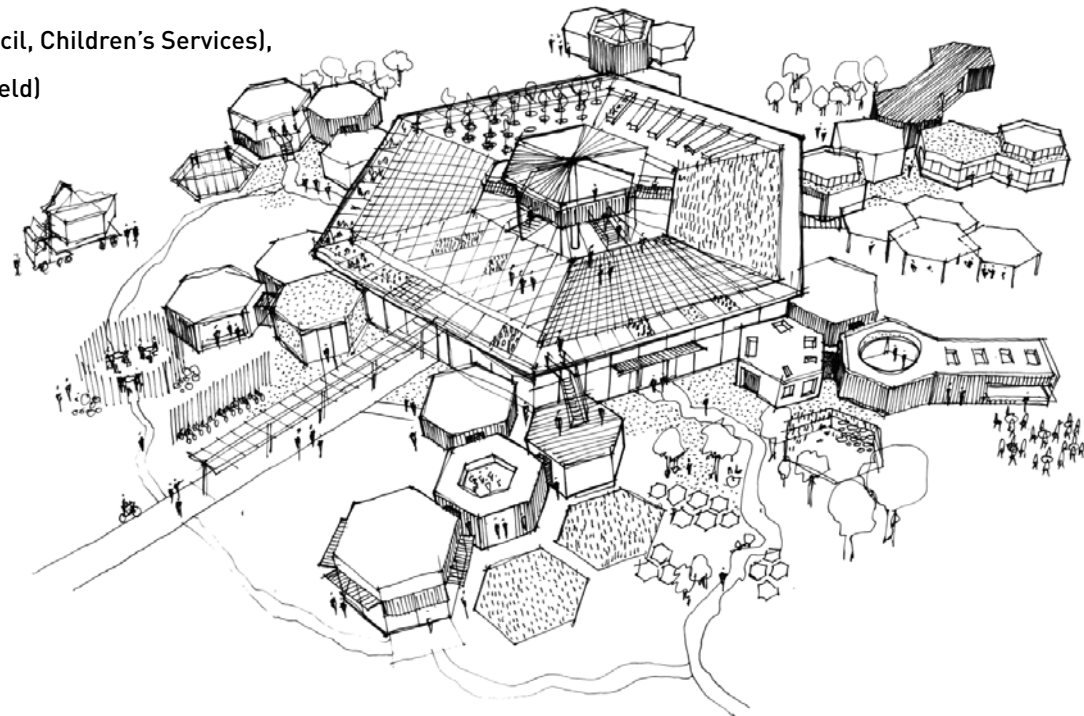# 'Live-lab Academy': a hypothetical case study

A provocation paper on designing for both current requirements and future transformation

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The following document is aimed at stimulating conversation and debate relating to the pressing challenge of meeting the dual needs of designing new educational spaces that are both suitable for delivering existing statutory requirements, yet incorporating design aspects that enable longer term transformation in learning, teaching, relationships and approaches. This burning question is facing everyone involved in the design and delivery of new learning spaces and is an inherent dichotomy within a system that has to pursue existing standardised measurements of educational utility whilst at the same time supporting systemic transformation and appropriate spaces for doing so.

The scenario set out in this document is developed around an 'imaginary' Academy and includes illustrative sketches to aid thinking rather than detailed designs. It is meant as a stimulus for discussion and **is not** presented as a proposed or specific approach that should be pursued. Rather, it offers a loose sketch of some initial thoughts to stimulate debate and thinking. The scenario arose from a brief discussion about the challenge faced by educationalists and how they might begin to think about addressing the conundrum, and how they might design spaces and curricula, and embed an approach to longer term Continuing Professional Development (CPD) and ongoing innovation leading to a transformed set of practices.

The vision and function

The hypothetical 'Live-lab Academy' intends to be a global reference site for innovative learning and teaching, with links and connections to a range of national and international research and development organisations.

There is an emphasis on developing 21st century learning skills and competencies. 'Learning by doing' through real, engaging and meaningful practices and experiences is uppermost.

The Academy has a specialism of Research and Development with a 'Live-lab' operating from the centre of the learning space. Throughout there is emphasis on research and development skills and techniques.

Currently the Academy is for 11-18 year olds but has longer term plans to extend to include 0-11 year olds provision and a studio school as part of a full service extended campus.

Transformation is embedded within the ethos and day to day practice and considered an ongoing and evolving process. Alongside this is an ongoing and rich CPD programme, with regular up-skilling and ongoing training. Pupils, teachers and other 'experts' from the wider community play roles in mentoring processes with distinctions between more traditional and fixed roles being blurred.

However, in the shorter term, senior leadership are aware that they need to have a rigorous approach to delivering against current performance metrics and political imperatives whilst they evolve the practice and professional development necessary for a radically transformed future.

This has been a point of fierce debate and something that none of the staff feel totally at ease with. Nonetheless, they have signed up to this approach with the clear understanding that it is one necessary step in delivering their educational vision of the future.

The Academy staff will focus specifically on immediate school improvement metrics and hard objective measures with years 11, 12 and 13. They intend to enhance the likelihood of surpassing targets whilst also increasing exposure to media skills, by creatively engaging pupils in creating and sharing a repository of learning and revision materials through a range of new media. There will also be a sharing of learning and teaching with partner schools via video conferencing. Moreover, younger pupils in the academy (years 9 and 10) will support them in creating, reflecting on and sharing these resources, and in so doing will get exposure to a range of competencies and skills.

Years 9 and 10 will begin to have more exposure to more emergent curriculum and practices. Staff will be engaged with ongoing CPD through educational experts based in the Live-lab, who will feed in different and new approaches and materials to be incorporated into practice.

A key set of staff are responsible for teaching years 7 and 8. These 'transformation leaders' will work intensively with years 7 and 8 to undertake innovative and creative approaches to learning and teaching with pupils being encouraged to seek out their own negotiated learning pathways in collaboration with the transformation leaders. These staff will work extensively with Live-lab experts to develop new and creative practice and to deliver CPD and diffuse new practice within the school, and the wider education community. They have positioned themselves as key staff for new and emerging practice with several government departments and agencies, and are undertaking professional development studies accredited by local universities. The overall aim is to diffuse new practice throughout the school so that within 3-5 years all staff are delivering a new model of learning. The spaces required to achieve this were incorporated into the design features of the Academy.

A number of people, or 'scene shifters', work within the learning space. These are a mixture of pupils and adults who take on responsibilities for moving furniture and space and also offer learning support as 'achievement mentors'. These mentors offer broad educational support for learners in diverse ways and are actively studying research, development and broad information literacy skills within the institution. These skills are accredited by the nearby HE and FE institutions and extend the range of subjects and areas for independent study offered.

From its conception, the Academy has pushed to recruit and train teachers as learning mentors and support their professional development as researchers and as innovators in teaching and the use of technology to suit a broad range of learning skills and experiences.
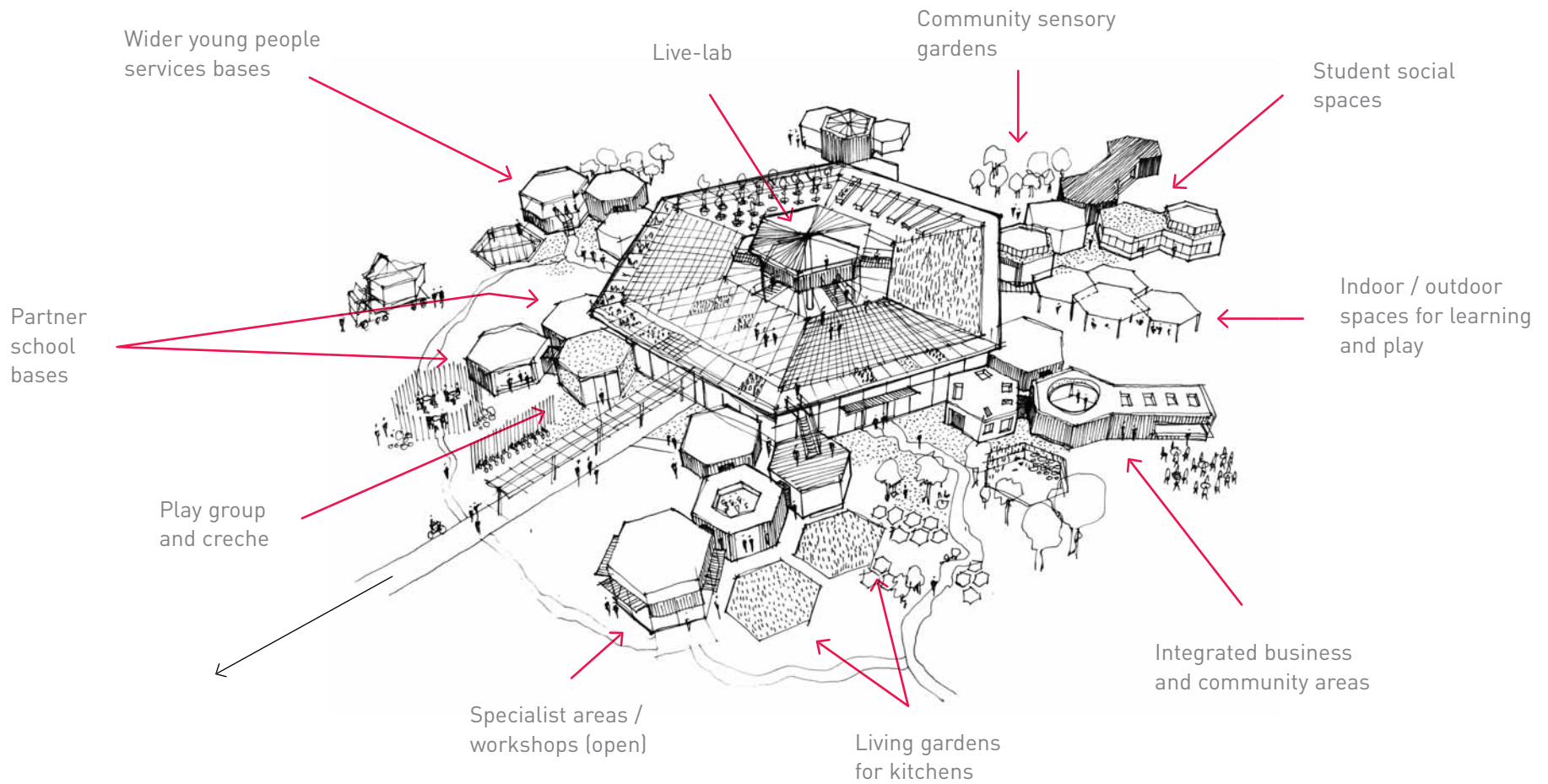
There is an emphasis on meaningful and tangible learning, with pupils encouraged to produce content and artefacts that are displayed around the space or utilised by others. These range from digital displays, the creation of learning and support materials or other artefacts made in various workshops. The emphasis on content creation, review, reflection and further development creates an engaging environment and reduces 'high stakes, fear of failure' activities.

Business offers a range of placement and internment opportunities and the Academy aims to recruit existing students in their broader learning and research network, which also helps to blur roles between adults and pupils, the outside world and what is traditionally thought of as 'school'. There are integrated business and community areas on the site where various work experience and placements occur.

There are a range of links between the Academy, other FE and HE institutions with a diverse range of qualifications and learning routes offered to pupils. There are also spaces for wider children and young people's services on the site. Similarly there are a number of live links and relationships between the Academy and partner schools, including primaries.

The Academy offers wider community provision on the site, and also, in turn, makes use of a range of various community based spaces and learning opportunities to diversify the range of possibilities offered to pupils off site. New technologies enable the capture and analysis of learning episodes from a range of sites and support the development of personalised pathways for learners.

The Academy is constantly working toward a new set of 'performance metrics' and standards suited to the learning needs of the pupils and other learners such as those in the local community, and is active in exploring and trialling new ways for learners to capture, evidence and display learning for reflection and review with others, including mentoring based on feedback and interaction with their peers.

Wider young people
services bases

Live-lab

Community sensory
gardens

Student social
spaces

Partner
school
bases

Indoor / outdoor
spaces for learning
and play

Play group
and creche

Integrated business
and community areas

Specialist areas /
workshops (open)

Living gardens
for kitchens

Design features

The design is based on 'concentric hexagons', with corridors at each angle that lead to the central atrium area. The partition walls separating each section of the hexagon are movable and there are smaller readily constructed 'divider' walls in each that offer greater variation of spatial design depending on needs and emerging function and practice.


Moveable walls in each section
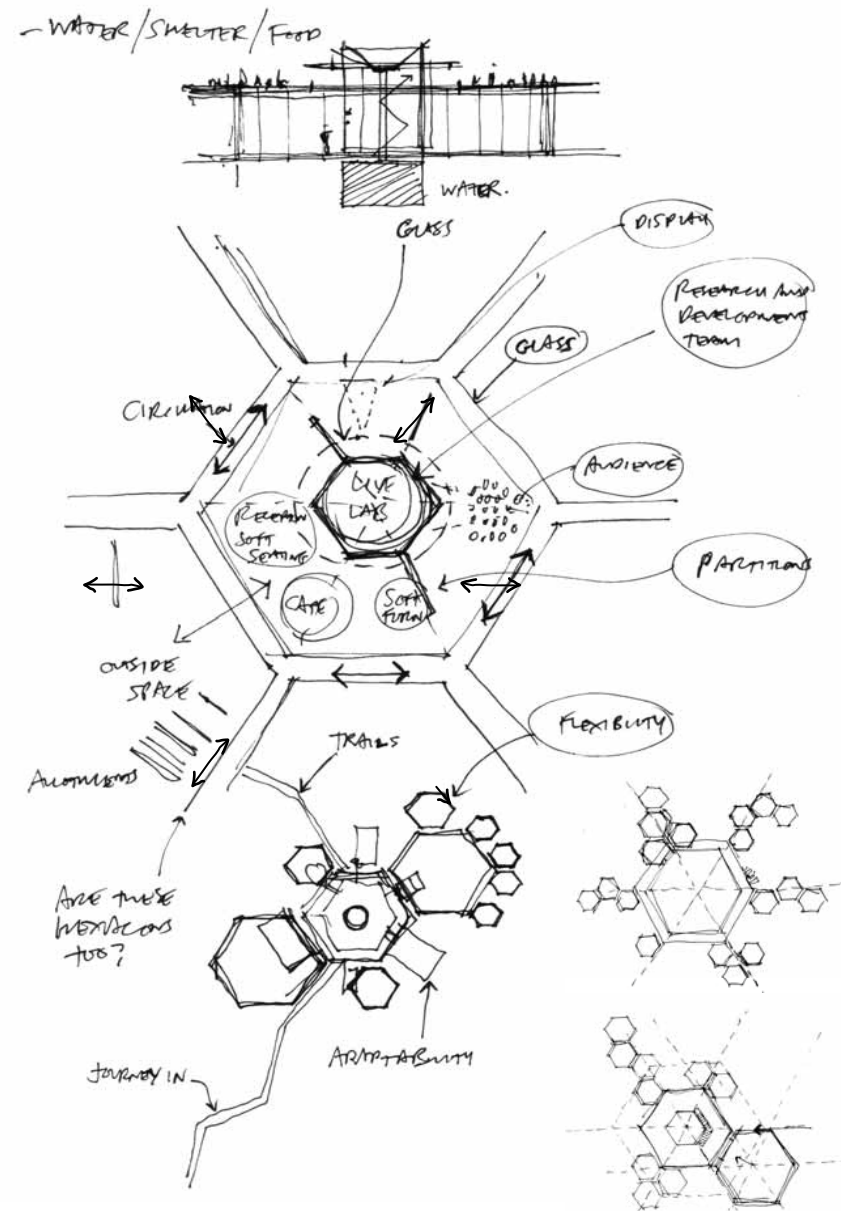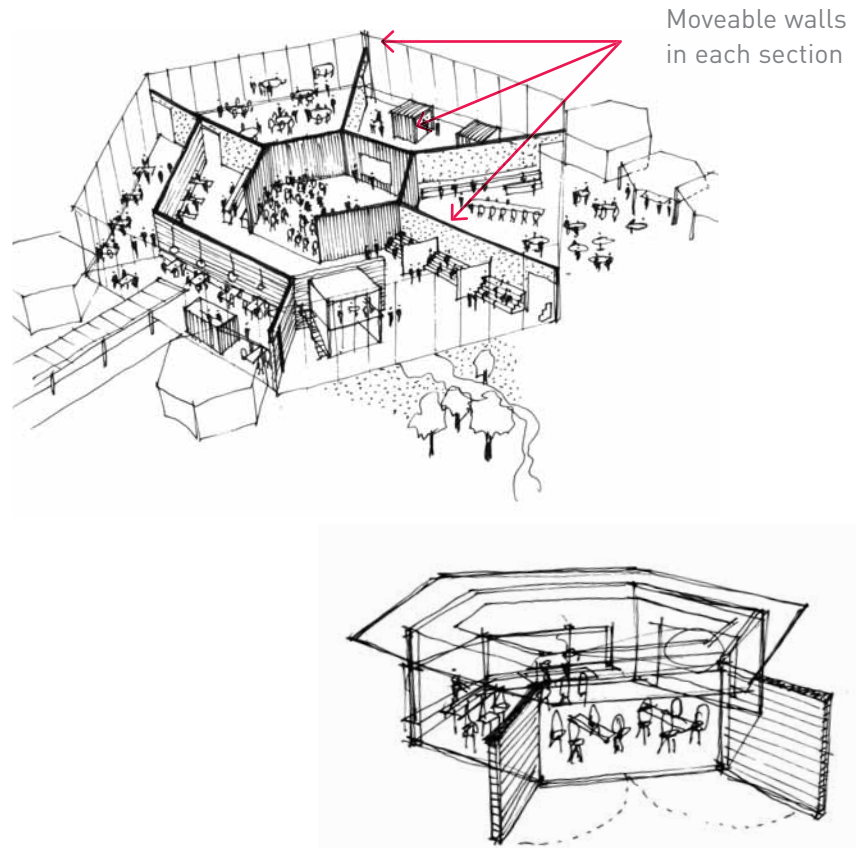
The central area (hexagon) within a large atrium is the 'Live-lab' with a small research and development team housed and working from there.
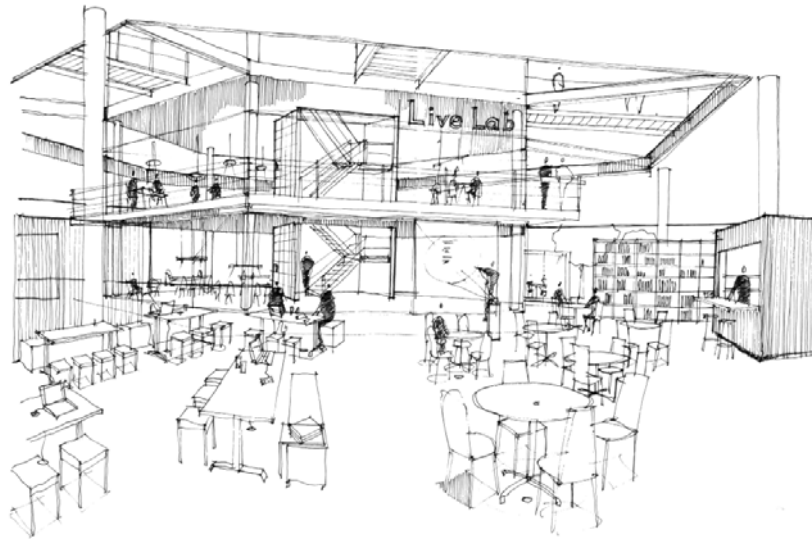
The space also includes a range of new and prototype technologies and tools for the school community to explore, such as Wii, display technologies, social networking tools, touch screens, new mobile hardware and related applications. Exploration is encouraged and rooms off the central area include video and tele-conferencing facilities, edit suits (and so forth). Also included in this area is a reception desk, soft and comfortable furnishings of various types, shapes and sizes (all easily moveable) and a cafe area. This space can be easily re-arranged and partitioned off as a multi-functional performance or play space. The outer walls of this space are glass, as is the ceiling. It has reconfigurable lighting, heating and sound installed so mood, ambience and environment can be readily changed.

Outside the inner atrium/hexagon is one green space. Each of the six segments has a different function or specialism. Some of the six spaces are covered, providing indoor gardens and features, others contain allotments, creative play spaces and a sensory garden for people to experience and maintain. The emphasis is on nurture, exploration, relaxation and health. The allotments help provide food for the restaurants and a means through which to learn, and other spaces demonstrate significant sensory aspects, ranging from natural to electronically and digitally enhanced.
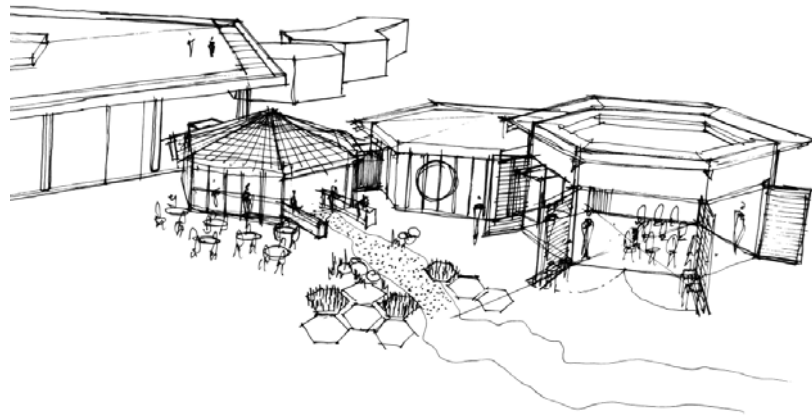
Pupils and staff have specific personal spaces for their belongings. There are spaces or pods that can be personalised and can interlock to provide collaborative spaces.

The design includes aspects that allow adaptability, flexibility and reconfiguration both in terms of the space and the overall ambience.

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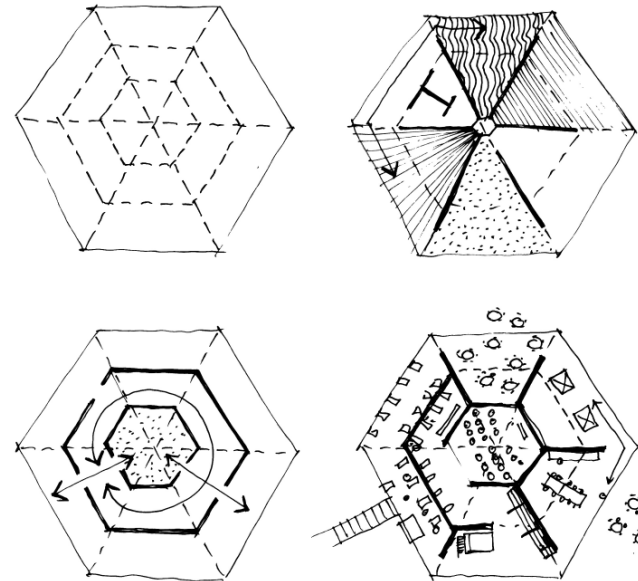
The design incorporates sustainable infrastructure and approaches, in terms of the readiness in which the space can be reconfigured to suit function. The spaces are reconfigurable and can be colonised and re-colonised, leading to a better and evolving democratisation of space.
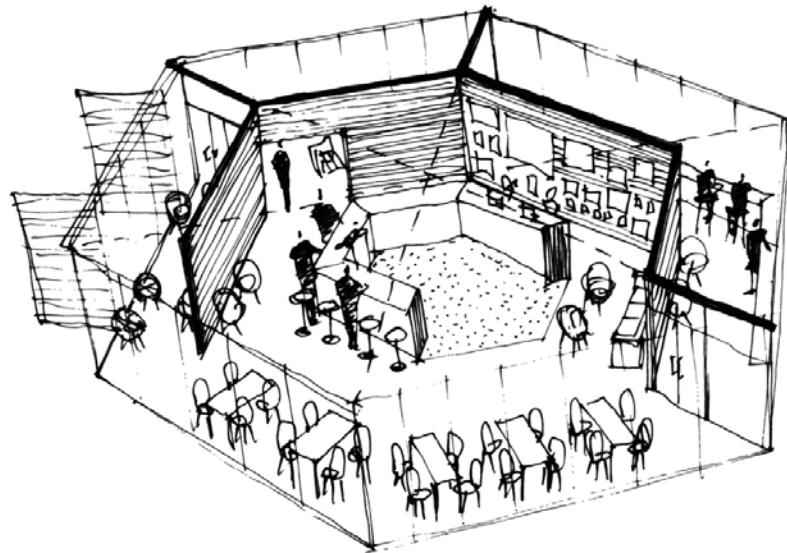
There are 'green' travel plans that encourage walking, cycling and running to the Academy. The routes are being developed and marked and in places are ongoing projects for pupils, redeveloping tracks and spaces as part of a local community regeneration project in partnership with regeneration, community and health and fitness groups and organisations.

The journey to the Academy is also a learning experience designed to promote health and learning in the outdoor environment. As well as installations and exhibitions, there are 'information ports' that can be accessed by mobile devices that make the journey interactive. The Academy has an ongoing project to maintain and develop these interactive journeys as part of a local social and cultural experience.

Other notable, specialist or specific areas within the building include:

- Parent and community rooms

- A nursery and creche

- Development and research spaces of different types, some for general research, some more specific activities relating to business, HE and FE activities

- Chill out zones

- Sleep zones/pods

The Academy is open 24 hours a day, 7 days a week, 365 days a year and plans in rich and varied use by the local community, business and other organisations and associations.

This provocation paper is available to download from the Futurelab website: **www.futurelab.org.uk/openingeducation**.